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What a time to be alive: an aretaic exploration of procreative decisions in the climate crisis

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WHAT A TIME TO BE ALIVE

An aretaic exploration of procreative decisions in the climate crisis

PHILOSOPHY RESEARCH REPORT

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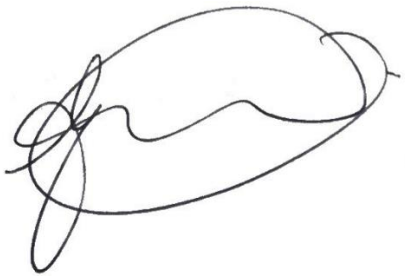
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Abstract

When considering undertaking morally-significant acts, we incur investigative responsibilities to explore their ethical dimensions thoroughly beforehand. An investigation of the ethical dimensions of procreation, specifically procreative parenting in the context of the climate crisis, reveals a highly uncertain decision-making scenario involving potentially severe harm. How to respond? I argue that answering the question in virtue ethical terms can get us further than other approaches to normative ethics. The conclusion – that a virtuous agent is under extreme pressure to forgo procreating, though the possibility is still remotely available – lacks finality. Yet it is befitting of the complexity of the specific decision-making scenario, and of the difficulty of morality in general.

Plagiarism declaration

I hereby declare that this thesis is the product of my own work and that all external resources have been appropriately referenced.



Grace Jean Garland
April 2020

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1. Introduction

Particular characteristics of the climate crisis mean that living through it is, in many ways, an unprecedented experience for human beings. Because of the vast amount of information available about it, information that raises many deep issues, the climate crisis asks a lot of us, epistemically. Because of the quantum of harm that climate change causes, and the fact that many aspects of ordinary living contribute to that harm, it also asks a lot of us, morally. What is the appropriate response to it? This question is too broad to be engaged with all at once. Instead, I hone in on one specific area of life in the climate crisis, and ask: What is the most appropriate way to approach procreative decisions in the context of the climate crisis? I employ a number of strategies to explore this question, with my conclusion resting on aretaic reasoning.

By 'procreative decisions', I mean the decision to have one's own child under circumstances free of coercion, and to parent that child. The decision-maker in mind is female, because it is a biological fact that procreation involves a woman's body in an intense way, and cannot proceed without her consent. Having said that, the sketch of the aretaic reasoning can apply to a prospective father as well, and indeed the decision is often made within the institution of a partnership. The discussion is further limited to a decision-maker of means, living in a broadly Western liberal-democratic paradigm. Again, though, the sketch of the aretaic reasoning has application beyond that small context, as the virtues identified (honesty, caution and care) are not recondite, but common human affects. Owing to limited space, I cannot explore other sorts of 'procreative decisions' such as abortion, adoption, surrogacy or assisted reproductive technology. Thus, when referring to 'procreation' I have the 'standard case' of Westernised procreative parenting in mind.

By 'in the context of the climate crisis', I mean global environmental and social disruptions, first identified in the 1970s, that result from human activities. It must be stressed upfront that the environmental and the social are closely connected, in the sense that dynamics in one are directly impacted by dynamics in the other. Human societies are housed on planet earth – there is no escaping this fact. Thus the term 'climate crisis' is neither a purely environmental crisis, nor a purely human crisis, and the term should be understood as describing a compound crisis. Furthermore, because these are *changes* in the climate, timing matters centrally, and so references are made throughout this paper to the time of writing, viz. towards the end of the first quarter of the 21st century.

On a methodological note, I aim to establish independently plausible claims in the abstract, and move from there into the practical context. Using a metaphor (adapted from Cripps 2013, 18-19), this sort of applied philosophical exercise can be illustrated thus: the exploratory rock-climber must establish two or three independently well-fastened "belays" before trusting the equipment to take her and her climbing partner's weight. Thus the first belay is to establish that agents have an epistemic and moral responsibility to investigate the potential consequences of morally-significant acts, of which procreation is an example. This is the business of chapter 2. An illustration of what such an investigation could look like follows in chapter 3. The second belay is to advocate for the strength of an aretaic framing for normative ethical issues (virtue ethics in particular) and this occupies the first half of chapter 4. With these principles fastened to the rock face, we can lean out (so to speak), in the remainder of chapter 4, exploring ways in which a virtuous agent will respond to the challenging decision-making scenario she faces.

When writing about an ethical subject, one takes a fair amount of common ground for granted. Thus I make use of collective pronouns such as 'we' and 'us' over the course of the narrative, meaning me, and you, reader. I acknowledge however that the convincing force of such statements will be limited for the reader familiar with a vastly different paradigm to mine. As I make clear in chapter 4, though, the aim of this paper is not to come down hard on a single right or wrong answer to the question asked. It is rather to show how an ethically dense subject like procreating in the context of the climate crisis places significant epistemic and moral burdens on prospective parents, and that the matter can be fruitfully explored within an aretaic framing.

2. Epistemic responsibility and procreation

Two independent points are made here: firstly, that the more morally-significant the act under consideration, the more epistemic 'work' must be done beforehand and, secondly, that procreation is a morally-significant act. Putting these two points together yields the following conclusion: that we incur and must fulfil certain epistemic or investigative obligations when considering having a child. This should land us on fairly stable footing in the abstract – stability which is needed for the foray in chapter 3 into the chaotic context of the climate crisis.

2.1 EPISTEMIC OBLIGATIONS AND MORALLY-SIGNIFICANT ACTS

I begin by observing that we are held to certain standards regarding our beliefs, and certain corollary responsibilities to meet them. It is not the case that 'anything goes' for what we believe; rather, we can do better or worse, and indeed can fail. Exploring the nature of these standards, call them epistemic obligations and responsibilities, is a central project for moral philosophers interested in culpable and non-culpable ignorance (Smith 1983, Zimmerman 1998, Rosen 2003, Guerrero 2007, Talbert 2017). Most agree that ignorance can, in certain conditions, be culpable, which affirms the observation above. In other words, if we did not have some kind of standard of knowing, which we were obligated to meet, we could not be said to be culpable – in the sense of 'morally blameworthy', the sense which predominates in the literature (see especially Talbert 2017) – when we do not do so. We seem to allude to these standards in everyday language when we censure the person who *should have known better*. Yet, while the normative pressure of the phrase 'should have known better' seems hefty, it is thin on substance. For example, are they epistemic or moral obligations driving the 'should'? I shall return to this question shortly.

Interrogating the rich subject of epistemic obligations and responsibility, and important metaphysical questions about responsibility itself, is not my aim here. Instead, I will draw out the relevant points for this paper by making use of a single demonstration case, first introduced by Michael Slote in 1982, which has occupied a number of writers since (Moody-Adams 1994, Rosen 2003, Guerrero 2007, Fitzpatrick 2008, Talbert 2013). I will rely on the version and discussion offered by Gideon Rosen (2003, 64-66), who asks us to consider a slaveholder in the biblical period who participates in all the actions associated with slavery: ownership of human beings, physical abuse, separation of families, curtailment of liberties. The man sees nothing wrong. So: what is the nature of his ignorance, and is he culpable for it? Exploring different answers to these questions enables me to establish and defend a broad conceptual position concerning the relationship between epistemic states and action. Though, granted, the treatment is cursory.

To Rosen, 'Ancient Slaveholder' (as the case has become known) is a paradigmatic example of non-culpable moral ignorance, because the prevailing historical context was bereft of cues to prompt the man to discern any evil.

> Given the intellectual and cultural resources available to a second millennium Hittite lord, it would have taken a moral genius to see through to the wrongness of chattel slavery.
>
> [I]t makes no sense to hold this injustice against the perpetrator when it would have taken a miracle of moral vision for him to have seen the moral case for acting differently. (Rosen 2003, 66)

Rosen looks for what he takes to be a necessary condition of culpable moral ignorance, viz. knowing wrong-doing, or *akrasia*, and finds that it is missing in Ancient Slaveholder. This condition describes an agent who is aware of the evil of an act under consideration, and proceeds to commit the act anyway. This is the "origin" of the culpability – to use Michael J. Zimmerman's (1998) term – and either occurs in the act in question or in a prior instance that can causally account for the present ignorance. Conversely, the agent who is fully appraised of the facts of the act under consideration and absolutely believes it to be acceptable, cannot be culpable for the act. Our slaveholder, in his slaveholding society, is such an agent. Rosen (2003, 66) suggests that we take an "objective attitude" and "condemn the act", or even "rail at the universe" that such events took place, but refrain from blaming the Hittite lord himself. Slote (1982, 72), who first devised the case, concludes similarly, that ancient slaveholders were simply "unable to see

what virtue required in regard to slavery" and that this ''was not due to personal limitations (alone) but requires some explanation by social and historical forces, by cultural limitations'' (as quoted in Guerrero 2007, 62).

A number of features of this position warrant discussion. In one way, it squares with the common idea that ignorance is a valid excuse for wrong-doing; indeed, this is Rosen's (2003) starting point. Logically, the idea is appealing, because it maintains and emphasises a strictly epistemic requirement of responsibility. How can you be responsible for something you had no knowledge of, and you were acting *from* that cognitive state[1]? It is also at work in the plea, attributed to Christ, "Forgive them, for they know not what they do". The ignorance excuse is legally recognised, too, as grounds for a verdict of innocence. On the other hand, Rosen's exculpation of a morally ignorant wrong-doer, so long as she fully believes she does nothing wrong, is at odds with other common moral practice. We rarely check that the *akrasia* requirement (viz. that somewhere along the line an act must have been committed with clear-eyed knowledge of its wrongness) is present before blaming. Sometimes, 'I did not know' just does not satisfy, for some reason: perhaps the heinousness of the act 'outweighs' the excuse, or the relevant information can be shown to have been easily available, or some shortcoming like laziness or negligence is present... Whatever the case, we want to be able to say that genuine ignorance is, sometimes, culpable.

So, our everyday moral practices pull us in different directions. We must, in any case, treat them with due caution; it is likely that judgements of 'should have known better' are less than consistently applied. Still, we have reason to assume that Rosen has not got it absolutely right. Knowing wrongdoing is certainly a safely-cordoned off site in which to locate culpability, because it preserves the Kantian instinct that intention matters, even predominates; yet, I agree with those who think that the terrain of our epistemic obligations extends beyond its boundary (Guerrero 2007, Talbert 2013, Fitzpatrick 2008).

I turn now to Alexander Guerrero's (2007) detailed re-interpretation of Ancient Slaveholder, though a full exposition is not attempted. An unsophisticated rendering (which suffices for my purposes, with apologies to Guerrero) could be: Given that the acts associated with slavery – violence, exploitation – are self-evidently 'high-stakes' moral acts, this is all the cue that is needed to reflect upon them. Guerrero (2007, 71) is aware of the dangers of presentism, worrying that a "modern mindset may obscure" the picture[2]. To avoid this, he marshals both empirical and moral arguments. On the empirical front, Guerrero points to evidence that chattel slavery was not as widely-accepted and taken-as-given as Rosen thinks (see Moody-Adams 1994), which further suggests there *were* thinking prompts available to the Hittite lord. From a moral perspective, Guerrero wants to limit the extent to which the individual is excused for engaging in an evil practice, simply because it is widespread in society; again, *because* of the evilness of the practice. Chewing gum because 'everybody is doing it' is different to treating humans as property because 'everybody is doing it'. So, Guerrero disagrees that it would take a "moral genius" – he quotes Rosen directly (Rosen 2003, 66, in Guerrero 2007, 71) – to experience moral discomfort at the sight of slaves suffering. Guerrero's aim is not to show that Rosen is incontrovertibly wrong in exculpating Ancient Slaveholder, only to discredit his assertion that it is a paradigmatic case of non-culpable moral ignorance.

Let us return to the questions asked above. What is the nature of the slaveholder's ignorance? Is he culpable for it? Whereas Rosen answers 'Moral' and 'No', Guerrero answers 'Moral' and 'Yes'. So, their disagreement is at the level of the conditions for culpability. Where Rosen requires an act of knowing wrong-doing, Guerrero foregrounds the fact that the sort of ignorance in question is *moral* ignorance and develops an account of the sort of *epistemic* obligations that spring from that fact. Failing those moral-epistemic obligations is, on his view, blameworthy. Guerrero calls this position *moral epistemic contextualism*:

[1] It must be made clear that the acts referred to are acts "from ignorance" as opposed to acts "in ignorance". The distinction is important because, in the former types of act, the ignorance plays a role in the decision to proceed with it. In other words, the agent would not have committed act Y had she known fact X. This is opposed to the latter types of act where ignorance of fact X has no causal bearing on the agent's decision to do Y. Guerrero (2007, 62-63) provides this useful clarity.

[2] Guerrero does not use the term 'presentism', but describes it exactly. All historians are taught to be wary of presentism, which is the uncritical application of a modern perspective to explain or judge past events.

> How much one is morally required to do from an epistemic point of view with regard to investigating some proposition *p* varies depending on the moral context—on what actions one's belief in *p* (or absence of belief in *p*) will license or be used to justify, morally, in some particular context. (Guerrero 2007: 69)

Moral epistemic contextualism is an appealing account of the relationship between moral and epistemic responsibilities because it seems sensible to 'hook' the stakes for being informed on what sort of harm could come about as a result of *not* being informed. These are "moral obligations to do more (epistemically)", not "epistemic obligations to do more (epistemically)", as Guerrero puts it (2007: 69). By way of illustration, Guerrero (2007, 68-99) compares Jack and Jill, both of whom are paying a visit to an apparently abandoned building. Jack is gathering census data, Jill is there to demolish the structure. According to moral epistemic contextualism, Jill incurs greater "investigative obligations" than Jack to ensure the building is empty before continuing. Why? Because demolishing a house with someone in it is far more morally serious than failing to get accurate demographics for a census; so, Jack can knock twice, yell, and move on, but Jill must do more to be sure no one is home. This conclusion is hard to dispute[3]. A further strength of the position, especially in 'applied' studies like this one, is its highlighting of contextual considerations. The extent of our investigative obligations, which can be thought of as the 'homework' to be done before doing X, derives from and is proportionate to the moral seriousness (or not) of X. Evaluating *this* (the moral seriousness) involves evaluating the features of the decision-making scenario, where the moral features pack more punch than the empirical features. This is implicit in Guerrero's critique of Rosen's position, and features explicitly in Matthew Talbert's (2013) discussion of the same. According to both, one can be non-culpably ignorant of some non-moral feature of one's actions or circumstance (for example, that my doing X causes you injury) while still being culpable for ignorance of the moral features, viz. that injuring you is wrong (this example is adapted from Talbert 2013, 226).

And here I wish to buttress Guerrero's position with some remarks about moral perception, which I think strengthen moral epistemic contextualism. Guerrero assumes, rather than argues for, the idea that the moral significance of certain acts (like slavery) are discernible. In a way, this assumes the agent has some form of awareness, if not full-blown knowledge, that the context is morally charged in some way; yet, this then calls into question whether it is full-blown ignorance. It also has something of a question-begging ring to it: the agent has to know enough to know that she has investigative obligations to find out more. I think that Lawrence Blum's (1991) discussion of individual perceptions of, and sensitivities to, the moral features of particular scenarios goes some way to stemming the second worry about circularity. However, I leave open the less important question whether Guerrero's (and Talbert's) conception of moral ignorance is, in fact, ignorance in its purest sense[4].

Blum (1991, 701) points out that one of the most important differences between people, morally speaking, is that some spot the moral features of situations, while others miss them. For Blum, this power of "moral perception" matters more than the application of abstract principles to situational particulars, which he calls "moral judgment". Blum argues that moral perception is prior to and goes beyond moral judgment: it happens first; without it, the exercise of moral judgment cannot take place; and accuracy in perception determines accuracy in judgment (Blum 1991, 701-702). More simply: if the agent perceives the moral facts wrongly, she will hardly be able to come to the correct moral judgment of what to do. Moral perception involves a swathe of faculties, including one's attentiveness to the welfare of others and one's evaluative disposition to things in the world (what matters to one). When our moral perception is finely tuned, we are able to pick up on the ethically-charged features of the particular reality facing us. When it is not, we miss these

[3] Yet the appeal of the account may not extend very far beyond moral philosophical inquiry into, say, epistemic responsibility. In other words, while the moral content of the act under consideration seems an appropriate starting point when one is interested in moral notions like harm, dignity and flourishing, the same cannot be said of an epistemological inquiry into states of mind that do not lead to actions. Virtue epistemology may be an interesting hybrid, as it connects flourishing with certain cognitive states (see Turri, Alfano and Greco 2017).

[4] In the novel *Oryx and Crake* (written by Margaret Atwood and published by McClelland and Stewart in 2003), Oryx has a vague sense of apprehension about the antics of Crake. Crake is a scientific genius who is in fact planning the destruction of the human race, but doing so in absolute secrecy. Atwood reflects on Oryx's apparently unfounded anxiety: "We understand more than we know". This is pure speculation, but I suspect the phrase captures the pseudo-ignorance these philosophers may have in mind.

and, if we are part of a particular slaveholding society, for example, will not bat an eye at the practice of slavery. This, I think, is what Guerrero observes about the ancient slaveholder (but Rosen does not) when he describes as reprehensible the man's lack of sensitivity to the brutality of the practice.

By including moral perceptiveness as a prior step, moral epistemic contextualism can thus be made more robust: we should be able to perceive, from the particular moral features of the situation, when further investigation is morally required. Recalling Jack and Jill: our demolishing expert needs to perceive that there is a risk of someone being in the house, that this could lead to their injury or even death, and that this would be a bad thing. Only *after* that point of awareness does her judgment of the appropriate investigative obligations (to go inside, search every room, every cupboard, bring a team of searchers, what have you) show up. I take it that this integration is a fair rendering of what both Guerrero (2007) and Blum (1991) are talking about, though the latter's focus is on critiquing principles-based morality, and not on exploring epistemic obligations.

It would be remiss at this point not to mention that a school of thought within epistemic responsibility, broadly termed 'quality-of-will' theory, does something like I have just done above to outline the kind of omission or failure that is involved when an agent is morally ignorant, viz. a failure of moral perception. In stark contrast to Rosen, quality-of-will theorists (see Strawson 2003; Shoemaker 2013; and Talbert 2013 mentioned already is among them) are comfortable with assigning blame for ignorance when the agent believes with full confidence that she is in the right, because she is getting morality wrong in the process. Specifically, she is paying insufficient attention to the needs of others, and this is a disposition, or a character trait – the label 'quality of will' is admittedly fuzzy (Turri, Alfano and Greco 2017) – that is an appropriate target for moral censure. Is moral epistemic contextualism a quality-of-will theory? I think not, largely because the starting point is in the content of the *act* under consideration; though, with the initial layer of moral perception added in, it starts to look a bit like one. I do not shy away from this categorisation, given that quality-of-will theories have a strongly aretaic flavour, which aligns with my broad position in the concluding chapter 4. However, I wish to retain the importance of *context*, the operative moral features of a given decision-making scenario, in shaping our investigative obligations. If too much emphasis is placed on one's will, which I take to be something that is long-standing and perennial about a person, we may conclude that it is always important to be informed. No – some contexts carry more demanding requirements of epistemic responsibility than others.

Thus I position moral epistemic contextualism (specifically a version of it that acknowledges the initial step of moral perception) as the framework for understanding the moral and epistemic issues discussed in this paper. Because of the weight it gives to contextual considerations, moral epistemic contextualism is consistent with the view that our obligations to be informed are particularly high *now*, possibly higher than they have ever been. I will not argue further for the framework's technical strengths and weaknesses, some of which are alluded to above. Instead I will briefly extrapolate the 'big picture' that emerges from it, in contrast to that which emerges from Rosen's *akrasia* requirement.

By requiring an act of knowing wrong-doing to occur, or have occurred, Rosen is radically limiting the possibility and prevalence of culpable moral ignorance. It is enough that you did not know that you did not know that X was wrong – even when X is slavery.

> It may be hard to believe that moral evil might turn out to be, in the relevant sense, no one's fault. But so long as we believe that the underlying ignorance is no one's fault, it seems to me that this is just what we should think. (Rosen 2003, 66)

This is an overly pessimistic view of human society and its ability to change[5]. Institutions, like slavery, are social constructions; unlike 'acts of God', they are the product of human creation rather than biological phenomena. If indeed it is "no one's fault" (Rosen 2003, 66), what does this leave us with to evaluate our norms, recognise failures, and make progress? Not much. Rosen (2003) would likely respond that the "objective" attitude is available for such condemnation, but that individuals are not accountable for merely being complicit in normalised wrong-doing. Again, this is a rather

[5] A general charge of scepticism is made by Talbert (2013) against Rosen, though these specific objections are my own.

cynical review of human agency, and indeed moral responsibility, at the individual level this time. The bar for being informed is low, according to Rosen, and wrong-doing is the exclusive province of those who know that what they are up to is wrong. That leaves a great number of people to act from ignorance without being considered morally accountable for their (potentially heinous) actions. Guerrero's view presents a more hopeful version of human society, though of course this is not a logical point in its favour, but rather a normative one. According to moral epistemic contextualism, we carry an epistemic burden to be informed when the implications of our not being informed could harm others. This includes participating in practices that are widespread and institutionalised in our particular historical context. From this, there is a sense in which being epistemically *proactive* – if such a phrase is acceptable – is morally desirable. This is not far from what many take to be the heart of philosophy (Halper, 2004), as famously described by Plato, which is to not live an "unexamined life" (*Apology* 37e5-38a6, Grube translation). Living an *examined* life is consistent with moral epistemic contextualism.

2.2 PROCREATION AS A MORALLY-SIGNIFICANT ACT

I take it as totally uncontroversial to describe procreation as a *significant* act. We are, existentially, in its debt: I would not be here were it not for the actions of a pair of human adults nine months before the day I now celebrate each year with cake and candles. It certainly changed my life, and they say that it changed theirs. Most parents will say the same. And indeed the brute facts of it do excite a sense of awe: the creation of a new human life through entirely biological processes that run the whole thing from start to finish. If 'significance' is roughly co-extensive with importance, or seriousness, or impactfulness, there are few acts more significant than making another human being from scratch. But is procreation a *morally*-significant act? Perhaps the question seems odd: given its 'life-changing' – and, as all of us came into the world by it, 'life-*creating*' – character, it must be! And indeed, book-length investigations into the morality of procreation and parenting imply that there is something ethically substantial about it (see, for example, Benatar and Archard 2010; Ramaekers and Suissa 2012; and Hannan, Brennan and Vernon 2015). Yet I do not want to assume the answer, for reasons which will become clearer below. Instead, I offer a working (and by no means polished) definition of what a morally-significant act might be, in order to evaluate whether procreation fits the bill.

James Rachels and Stuart Rachels' (2003, 1-14) "minimum conception" of morality, arrived at after an extensive working through of prevailing normative approaches to ethics, is a widely-acknowledged framing and useful starting point. It can be paraphrased thus: Morality is the effort to pursue one's own self-regarding interests with reasoned consideration for the interests of others (Rachels and Rachels 2003, 14). Logically, one can do this better or worse, and the way to tell is by evaluating the extent to which others' interests are considered in the self-regarding actions one undertakes. It follows that the *moral* content of acts therefore primarily concerns a negotiation between one's own interests and the interests of others. Most of us will not struggle to give weight to our own interests. Our lives already matter to us and it comes naturally to pursue self-regarding projects in the effort to live a good life.[6] Thus any minimum conception of morality must acknowledge the importance of self-value in the negotiation (the "reasoned consideration") to value others as well. This is the key question, then: how 'much' for the self, how 'much' for others? Rachels and Rachels' (2003) intention is to infuse this minimum conception with standardly important moral philosophical ideas, such as the dignity of human beings, and the importance of consequences, making it widely appealing.

For the purposes of our brief perusal of morally-significant acts, it is useful to assume that the hypothetical doer is typically self-interested, and faced with the challenge of also considering others' interests appropriately. Thus the clue of moral significance we are looking for is the extent to which others' interests are, indeed, affected by the agent's self-regarding acts. Logically, a proportional mechanism applies, and so the extent of the act's effect on others' interests informs the extent of its moral significance. In gauging 'extent', one can look at the nature of the interests affected (are they fundamental or merely preferential?) and the sort of others whose interests they are. We have, then the bare bones of a definitional framework with which to continue: Morally-significant acts are those that affect others, and the

[6] That is not to say that the presence of self-regardingness is a foregone conclusion, and it is widely acknowledged that under-valuing one's own life and only living for the interests of others is a moral failure (see Hill 1973). Virtue ethics, in particular, emphasises this self-regarding aspect of morality, as we shall see in chapter 4.

'more' they are affected, the 'more' morally-significant the act. This is far from being the only or best conception of what constitutes moral significance, because, for one, it is not just acts that are sites of moral significance. For my purposes in this early part of the paper, and given that the focus is on the *act* of procreation, it will do.

It is helpful to test this definitional framework on three examples of acts. As a start: is clipping one's toenails a morally-significant act? It would appear that it is not, given that it does not affect *any* interests of others, let alone fundamental interests, and so my interest in having manicured feet seems not to require much of a negotiation. For the act of clipping toenails to take on moral significance, the context would have to shift considerably so that somebody else's fundamental interests are benefited or jeopardised by it. A second example: Is buying bottled water a morally significant act? It also appears that it is not, given that no others' interests are competing with my interest to hydrate on-the-go. This initial assessment may be misleading, though, and it requires an expanded conception of who (and what) constitutes 'others' to see why. Assuming the bottle goes the same way the vast majority of bottles do, and ends up in the ocean (see *The Guardian* 2016), the interests of at least two third parties are potentially also involved: human coastal communities and non-human marine life. The success of the formers' fishing (and other ocean-related) activities is directly dependent on ocean health. Forgoing some details of the relationship between plastic pollution and ocean health (see UN Ocean Conference 2017), it is probably therefore fair to say that the interest that is impacted is their livelihoods, and livelihoods are fundamental interests. For the approximately 100 000 marine mammals and turtles and one million sea birds that are killed by marine plastic pollution annually (UN Ocean Conference 2017), it is straightforwardly their fundamental interest in staying alive that is impacted. So it would appear that, with this expanded conception of others, my buying bottled water – something that approximately 20 000 people do every second, or a million a minute (*The Guardian* 2016) – involves a negotiation of important interests and therefore *is* a morally-significant act.

But this might be an unfair leap, because it appears that the rules have shifted, or were not sufficiently defined before. Does the 'expanded conception of others' make sense? It needs no small amount of preliminary theoretical work to defend. Firstly, incorporating non-humans like turtles and albatrosses in the scope of 'others' involves being able to defend some view about their moral status: what considerations they are due, whether their value derives from human interests, whether it is intrinsic to them. Secondly, assigning responsibility for the impact of acts committed in the collective to the single individual assumes some valid conception of collective responsibility. Were we to go further and identify a *third* third party whose interests are affected – namely, future generations who inhabit a planet polluted with plastic – we would need a plausible conception of intergenerational justice. I flag these (viz. the moral status of non-human entities, collective responsibility, intergenerational justice) as lacunae to be returned to in due course, and proceed in the meantime to the third example: procreation.

Recall that the idea is to determine whether these are morally-significant acts. We are looking for clues primarily in their other-affecting qualities, versus our self-regarding interests in pursuing them. The analysis of the procreation example requires a more systematic approach than the analysis of the nail-clipping and the bottled water examples. Thus, below, I consider each of the possible affected third parties and their interests, in turn. Much of this commentary is informed by Sarah Hannan's (2015, 1-33) introduction to *Permissible Progeny? The Morality of Procreation and Parenting* (Hannan, Brennan and Vernon 2015).

Parents

Many adult human beings have a strong interest in parenting, valuing it as one of the most important pursuits in their lives. Parenting is an emotionally-intense, time-consuming and expensive exercise. Parents tend to allocate a substantial portion of these personal resources (emotion, time, money) to the child's initial development, and even into their adulthood. While "children are often the causal result of a choice to have sex, and not the intention to create a new human life", as Hannan (2015: 1) puts it, the child's legitimate claims to these resources obtain, regardless. Furthermore, parenting "usually results in irrevocable lifelong shifts in parents' priorities and motivations" (Hannan, 2015: 1) and "is a central component of most people's conception of the good" (Gheaus 2016, 488).

Child

A child, as each of us starts out as, is "summoned into life" (Arendt 2016, 182) by their parents. The cultural, political, social and economic context into which we are born, and the manner of our upbringing, have a "profound impact" (Hannan, 2015: 1) on the sort of lives we live. Even if we often take our own existence for granted, a moment of reflection reveals that our lives matter to us more than anything else. We did not choose to have life, but the fact that we do have life is a result of procreation, and once we have that life it matters overwhelmingly to us.

Human third-parties

We can with confidence describe the planet's resources as finite (IPCC 2019; IPBES 2019). When a new child is born, another consumer of resources enters the scene, which "unilaterally alters the resource entitlement of existing people by adding another mouth to feed, another body to house, and so on" (Hannan, 2015: 19). The severity of the resulting trade-offs depends on the quantity and quality of the resource claims of others, which partly involves how many others are also procreating. Also affected by current procreative and consumptive practices are the interests of future human beings, who vie for a share of the same finite resources from their present position of non-existence.

Non-human third-parties

All current and future non-human creatures of the biosphere vie for these same resources, that new children "unilaterally alter", in order to live.

Notice that we already had all we needed to conclude that procreation *does* fit the bill of a morally-significant act at the point where we considered the fundamental interests of parents and children[7]. Others' interests are affected when the adult person pursues their personal interest in procreating, and in significant ways. A major negotiation of interests is involved, and thus much material for moral reflection is available. Whether the interests of the latter two considered parties (human and non-human third parties) strengthen this conclusion has not yet been shown. We are still short of clarity on the three conceptual lacunae mentioned above. At the very least, we cannot rule out that the resource entitlements of those others, beyond parents and child, add to the moral significance of procreation.

2.3 INVESTIGATIVE OBLIGATIONS OF PROCREATION

I hope to have established two independently plausible positions: firstly, that our epistemic responsibilities are sensitive to, and proportional to, the moral significance of the act we are considering undertaking in the moment; and secondly, that procreation is an example of a morally-significant act, given that it impacts the fundamental interests of a number of others. Putting these two together yields the conclusion that there are significant epistemic responsibilities attached to the procreative act, and that the fulfilment of these responsibilities is obligatory. More systematically:

P_1 – We incur investigative obligations when considering undertaking morally-significant acts.

P_2 – Procreation is a morally-significant act.

C – We incur investigative obligations when considering procreating.

To the best of my knowledge, Guerrero's (2007) "moral epistemic contextualism", which is written into the first premise, has not been applied to procreation[8]. Given that a thorough working through of what exactly constitutes a 'morally-significant act' is absent from his account, bridging work is needed, of the sort provided above in the form of Rachels and Rachels' (2003) "minimum conception" of morality. Rendered as it is above, we thus have definitional consistency in the references to 'morally-significant acts' in both premises and, logically anyway, the conclusion can largely be trusted.

[7] The relationship itself, *between* parent and child, is considered by some to be a locus of moral significance, one that can even have over-riding moral importance in ethics (a claim that Christine Overall 2012 spends a book, *Why Have Children?: The Ethical Debate*, exploring).

[8] Guerrero (2007) certainly does not do so, as the ethics of killing for food is his chosen subject.

Let us agree, then, that there is 'homework' to do before having children. And, because we are more like Jill the demolisher (recall Guerrero's (2007, 68-69) abandoned house), it might be a lot of homework. We must do more than knock and yell before razing. The actual investigation of possible impacts is undertaken in chapter 3. Before proceeding to it, I explore, and try to undermine, possible reasons for calling the investigation off. I give these reasons colloquial titles, imagining how a critic would phrase them.

You're not going to get anywhere.

It can be objected that moral questions are hard to resolve at the best of times, but that going near contested concepts like intergenerational justice and collective responsibility is a fool's errand. Accepting this involves assuming the investigation is doomed to fail because it will yield so many 'unknowns' as to be pointless. I have sympathy for this worry, and indeed highlight it very conspicuously in the investigation in chapter 3 (where the 'unknowns' outnumber the 'knowns'!) Yet we should recall what the business of a philosophical life is: to examine. I offer one example here (and explore a few more chapter 4) of when conceptual fuzziness is not a get-out-of-jail-free card exempting us from reflecting harder. Consider the stark asymmetry of power between ourselves and future generations: our actions directly impact the sort of world they are born into, yet "our quality of life is not affected at all by their decisions" (Mulgan 2006, 21). Just the fact of this asymmetry should be a red flag for anyone with "moral perception" (Blum 1991) to pause and reflect on intergenerational ethics, irrespective of how widely accepted is the practice of bringing new generations into being. I concede, though: when the response to 'you're not going to get anywhere' involves a reference to the ethical desirability of a reflective life, irrespective of the scarcity of satisfying answers, a large portion of the audience might already have been lost. It is to the remainder, those who accept that progress (but not perfection) is possible, that this paper is addressed.

You're wrongly assuming the decision is rational.

On the one hand, this concern can be read as directly questioning our ability to make such a profoundly future-oriented decision rationally. L.A. Paul (2015, 152-170) argues in the article "What You Can't Expect When You're Expecting" that we cannot. According to Paul, we simply cannot imagine "what it is like" to have a child until we have had one, and yet imagining this is precisely what guides our decision-making. The experience is too "epistemically transformative" (Paul 2015, 155) to grasp through cognitive processes prior to an actual phenomenological encounter with it, so it is incorrect to talk about procreation as a rational decision. The appeal of the argument is that it acknowledges the epistemically impoverished position we inhabit in all instances of trying to make decisions about hitherto-unexperienced phenomena. Yet, as Meena Krishnamurthy (2015, 170-183) shows in her extensive response to Paul's position, this does not equate to *irrationality*. Given that we have a wide array of phenomenological resources to draw on – largely through interacting with other people's children – we have enough to go on. Krishnamurthy (2015, 180) worries that Paul's position in fact logically entails that all future decisions, including "many of our daily decisions", are irrational. I agree with Krishnamurthy that Paul's argument rests too much on the claim that the procreative experience is so unique as to have its own set of epistemological rules outside of the "standard model" of rationality, a model which they both reference (Paul 2015, 151; Krishnamurthy 2015, 175). It leads to a conclusion that seems too strong. Paul would probably say to me, you haven't had a child, what would you know? Still, there are at least two other reasons to resist the conclusion that the only people who have access to the experiential resources necessary to decide to have a child rationally are those who have *already had* children: firstly, because it shuts down contributions from those on *this* side of the "transformative" divide; and secondly, because if we can't say 'one can choose whether or not to have a child' (as L.A. Paul wants to outlaw) then our moral inquiry is pulled up short, in obedience to *ought-implies-can*.

On the other hand, the concern can be read as suggesting that the emotional content of the decision is so great that it drowns out the rational dimensions, along the lines of 'this is something you *feel*, not something you think'. Angela Smith (2012, 581), writing about the epistemic condition of moral responsibility, observes that "our cares for our children and our loved ones do not, in general, seem to be based on evaluative judgments" and that they are "typically immune to reason-based demands for justification or modification". This observation is hard to deny. Our inclinations to recognise special obligations to our near-and-dear seem instinctive, even when there is a cost to others that would

otherwise be considered unjustifiable[9]. Yet there are ways of acknowledging the intensely emotive content of the subject of procreation, while at the same maintaining that rational inquiry is not only possible, but merited (Ramaekers and Suissa 2012; Overall 2012; Hannan, Brennan and Vernon 2015). And indeed there are everyday precedents to draw on in saying so; for example, the accused who flew into a blind rage and killed his wife is not exempt from having to rationally account for his behaviour, simply because he was experiencing very strong emotions. Furthermore, there is a non-negligible portion of the procreative act that is not so emotionally charged but is still morally considerable, such as, for example, whether the parents have enough money to send the child to school. So it would be a mistake to write the whole thing off as *only* a matter for the heart.

Having children is natural – your investigation is inappropriate.

There are at least two ways to understand what we mean when we want to say that procreation is 'natural'. Firstly, we might mean that procreation is a biological process that occurs in nature, which makes it exempt from human-constructed conceptions of ethics, rationality, and so on. Yet, to draw from Hannan's (2015, 10) swift treatment of this, there are many things that "occur in nature" and are the upshot of "certain natural drives" that we do not think are immune to moral evaluation. Her example is killing. One could add infanticide and rape to the list of behaviours we share with certain non-human animals but which we do not hesitate to condemn in our own species. When this inconsistency in the appeal to 'natural' is made clear, it starts to look like its deployment in support of procreation is, at best, the result of a lack of reflection, and at worst a Trojan horse for conservative (heteronormative) values.

The second use of the 'it's natural' reasoning is harder to refute. This is when procreation is understood as a self-evidently good thing that plays a primary, even central, role in living a good life. Evaluations of what constitutes a good life tend to be unavoidably culturally informed and subjective, in defiance of moral philosophy's millennia-long attempt to pin down the objective necessary and sufficient conditions. Still, it is fair to say that in *most* cultures, a positive association with procreation pervades. In the broadly Western, liberal-democratic paradigm with which I am familiar, the expectation to become a parent is widespread: "Having a child is just what you do, unless you cannot, which is regarded as regrettable" (Hannan 2015, 3). If you can, but do not, you must provide an explanation; if you can, and do, an explanation is seldom asked for (paraphrasing Overall 2012, 2). Defending the obligation to investigate against the normative force of the 'self-evident good' objection can take a number of forms. As a start, the asymmetry of justification required among parents versus non-parents should, at the very least, raise a philosophical eyebrow. Relatedly, when we refer to parenthood only ever as a good and manageable exercise, we "displace rather than confront the possibly limitless depth of the enormity of the reality of 'being a parent'" (Ramaekers and Suissa 2012, 126). We might also appeal to liberal conceptions of autonomy, which involve rational decision-making among options, in this case options of how to live well. Or finally we might commandeer and re-deploy 'natural' and say that rational engagement and reflection is natural to human beings, that we would be less-than-human without it. Taken together, these are good reasons to proceed with an investigation, though more remains to be said about procreation and the good life. I return to this in chapter 4.

Having children is a private matter – your investigation is inappropriate.

The exploration above (2.2) into the third parties impacted by procreative decisions goes some way to nipping this concern in the bud. Nevertheless, it is common, and worth describing briefly: Given that the procreative act generates a personal relationship between parents and children that is one of the most intense connections that human beings ever experience, the decision is the parents' to make, and nobody else's. It is seen as "fundamentally private and pre-political", as Corey MacIver (2015, 110) puts it. It is certainly true that, in the standard family set-up, parents are the parties that are most actively involved in raising the child, and it is a straight biological fact that they are causally responsible for the child's existence (MacIver 2015, 115). Yet to stop at this point, cordon off the area as 'private', and frown on those who trespass is short-sighted. The fact remains: others *are* affected by the creation of the new person, through their resource demands, and potentially in fundamental ways. We can also reach for some of the arguments that defined second wave feminism – which saw women drawing connections between their intimate relationships and

[9] Peter Singer's "Famine, Affluence and Morality" (1972) comes to mind. Singer presents a logical argument why our preferring the interests of those near and related over those far and unrelated is irrational and indefensible on utilitarian ethical grounds.

broader socio-political power dynamics and calling for scrutiny at both levels – and assert that "the personal is political" (see Hanisch 1969, 2006).

Yet we are not done. There is a second, more compelling, worry contained in the 'it's private' concern: public, or state, interference in procreative decisions. This should give us pause, given the historical record of eugenics programmes, forced sterilisation programmes, even China's One Child Policy and the resulting female infanticide. These programmes, aside from their bigotry, were licensed at base by a lack of respect for certain people's privacy. However, worries about the potential for abuse of a certain subject matter should encourage us to engage in "careful" (Hannan 2015, 11) philosophical inquiry, not shut down inquiry altogether. I agree with Hannan (2015, 11) that doing so could even lead to better-informed policy choices that "help us to avoid the imposition of future harms in these areas". I do not take a stand here on how 'much' influence (public) third parties should have in procreative decisions at the policy level, as the focus of this project is on the character of the individual decision-maker considering the interests of others.

Having children is a human right – your investigation is inappropriate.
By far the predominant theme in the theoretical discussion of the morality of procreation is that of the rights and duties of parents and children (Ramaekers and Suissa 2012, McLeod 2015, Botterell and McLeod 2015, Gheaus 2016). This is not surprising, given that so much of our moral lives are framed in these terms. Article 16 of the Universal Declaration of Human Rights (United Nations, 1948) states that all adults "have the right to marry and to found a family". The spirit of this right seems to enshrine unlimited procreative freedom[10]. However, legal frameworks notwithstanding, most philosophers do not think that an unlimited right to procreation is defensible on ethical grounds, given the avoidance-of-harm constraint on all rights. As Benatar (2010) puts it, "[I]f there would be no right to impose risk X of harm Y to some other person in non-reproductive contexts, then there should be no right to do so in reproductive contexts". In this spirit, I lean on the work of Anca Gheaus (2016, 487-508), who (following others) grounds parental rights in human adults' fundamental interest in parenting, but with the proviso that it is "just" parenting that their interest consists in. So, when they cannot parent justly – in other words, if the child will not have access to sufficient resources to live an adequate life – the right to produce that child is void (Gheaus 2016). Details aside, this conclusion, along with the child's undeniable claims to care, demonstrate that the procreative right is, at the very least, *not* unlimited. Raising a question that involves investigating its contours is not, as the objection suggests, 'inappropriate'.

Having got past these sources of reluctance, or at least weakened their rhetorical force, nothing now stands in the way of the investigation into the morally-significant dynamics of procreation in the very specific, even unique, context of the climate crisis. At this stage, we are *not* like the Ancient Slaveholder, blissfully unaware that there is something ethically important about a practice that is normalised in society. Instead we are like Jill (from Guerrero 2007 again, 68-69), who has realised that the stakes are high, morally, and pauses to investigate before proceeding. It is time to go inside the rooms, open every door and check under every bed, to ascertain whether it is safe to knock down the house.

[10] Though 'founding a family' does not *necessarily* involve procreation, as parents who adopt children also 'found' a family in the relevant sense.

3. Procreative parenting in a climate crisis

The proceeding investigation into relevant features of procreation in the climate crisis marks a change from the foregoing discussion, which took place at a high level of abstraction. We now look at the world as we find it in the first quarter of the 21st century, specifically as the phenomenon known as 'climate change' increasingly affects human and non-human life on earth. Consulting the reality of the present moment is vital. Yet the act under consideration has a distinctly future-oriented component as well, given the span of time the new person will be alive. By global life expectancy standards, children born around the time of writing will likely live into the 2090s (United Nations World Population Prospects 2015). 'What is happening?' and 'What is going to happen?' are our guiding questions.

Such an investigation yields a vast dossier of data, only a tiny selection of which is reported here. Some we can feel fairly certain about, others much less so, hence the blunt categories of 'knowns' and 'unknowns'. Both of these categories include both general and idiosyncratic information. For the 'general' investigation, the 'big picture', so to speak, only open-access sources in the public domain are referenced. This is first-page-of-Google territory, which is a deliberate methodological strategy to model the informational resources available to the ordinary person, not requiring that they be a "moral genius" (recall Rosen 2003, 66). Yet the dossier must also include 'idiosyncratic' information that only the decision-maker has access to, regarding her personal context and parental prospects. The decision-maker does not need to consult the internet to identify these, only the contents of her own life.

3.1 KNOWNS

After a couple of hours' desktop review, one can know that empirical indicators which describe the health of the climate, biodiversity and society are worrying researchers and journalists. Put differently: one does not have to understand or believe the indicators themselves to know, beyond a doubt, that the specialists who do understand and believe them are concerned by them. We rely on 'specialist' sources of this sort in many areas of life, so if we are to be sceptical of their authority in this instance, we must have particular reasons. Defending such a contrarian position would need thorough working through, against stiff opposition on logical and normative grounds. I am content to assume that the specialists' concerns are legitimate. Again, far more could be said, but the selected list below is enough to go on.

> That the climate is changing as a result of high quantities of greenhouse gases released into the atmosphere by human activities is the story of *Survey finds 97% of climate science papers agree warming is man-made*[11].
>
> That the temperature will rise dangerously by 2050 from a pre-industrial baseline is explained in *Could climate tipping points lead to collapse of human civilisation?*[12].
>
> That such an increase renders many densely-populated parts of the world hazardous for humans to inhabit, given that humans suffer and can die in temperatures above 35°C, is clear from *Climate change to cause humid heatwaves that will kill even healthy people*[13].
>
> From *Stop biodiversity loss or we could face our own extinction, warns UN*[14], one learns that not all animals and plants on land and in the oceans that are key to human food systems are able to adapt to these changes.

[11] *The Guardian* (2013) reporting on findings published in *Environmental Research Letters* by Cook, Nuccitelli, Green, Richardson, Winkler, Painting, Way, Jacobs and Skuce (2013).
[12] Vaughan (2019) for *New Scientist* reporting on findings published in *Nature* by Lenton, Rockström, Gaffney, Rahmstorf, Richardson, Steffen and Schellnhuber (2019).
[13] *The Guardian* (2017a) reporting on findings published in *Nature* by Mora, Dousset, R. Caldwell, Powell, Geronimo, Bielecki, Counsell, Dietrich, Johnston, Louis, Lucas, McKenzie, Shea, Tseng, Giambelluca, Leon, Hawkins and Trauernicht (2017).
[14] *The Guardian* (2018) reporting on comments from the executive secretary of the UN Convention on Biological Diversity.

That we have good reason to believe the science is the subject of *'There are no excuses left': why climate science deniers are running out of rope*[15].

Finally, *Climate crisis is greatest ever threat to human rights, UN warns*[16] explains the relationship between resource scarcity and social justice, specifically that the former severely jeopardises the latter.

The decision-maker can also be fairly confident about certain idiosyncratic features of her life that are relevant to the decision to have a child. She can assess the extent to which her resources (time, money, accommodation, health) are sufficient to provide for the needs of the child, at least in the immediate future.

3.2 UNKNOWNS

At the level of generality of the information above, we can feel confident in the findings so far. The 'headline' stuff is clear. Going into the finer details takes us into less certain territory. This dynamic can be summarised as: we know it is going to be bad, but we don't know *how* bad (IPCC 2019; IPBES 2019, Vaughan 2019; Lenton, *et al.* 2019; Mora, *et al.* 2019; Wallace-Wells 2019). There are at least two decisive factors that could make things go better or worse, both of which are plagued by uncertainty: (1) unpredicted and unpredictable climatic tipping points; and (2) what the human species does in the next few decades. Note that in each of the articles from the desktop review above, either one or both of these factors is mentioned, so there is no barrier to our 'ordinary' investigator being aware of them.

(1) Tipping points

Climate 'tipping points' are certain natural thresholds that, if passed, could have cascading and possibly irreversible effects (IPCC 2014). The metaphor explains itself: if you lean forward gradually, there is some precise point that is 'too far' forward, and you cannot stop from falling, even if you suddenly jerk back. When initially identified, the prevailing view was that climate tipping points will be triggered if global temperatures reach 5 °C above the pre-industrial baseline. Yet more recent studies (IPCC 2018, 2019) argue that some are much more likely than previously thought, and possible at 1°C and 2°C (Lenton, *et al.* 2019). Globally, we are currently at 0.8°C (NASA 2019). At the time of writing, the most recent commentary on the state of possible global tipping points comes from Lenton, *et al.* (2019), who are among some of the original group who first identified them. I defer to their phrasing and expertise:

> We argue that cascading effects might be common. Research last year analysed 30 types of regime shift spanning physical climate and ecological systems, from collapse of the West Antarctic ice sheet to a switch from rainforest to savanna. This indicated that exceeding tipping points in one system can increase the risk of crossing them in others. Such links were found for 45% of possible interactions.
>
> In our view, examples are starting to be observed. For example, Arctic sea-ice loss is amplifying regional warming, and Arctic warming and Greenland melting are driving an influx of fresh water into the North Atlantic. This could have contributed to a 15% slowdown since the mid-twentieth century of the Atlantic Meridional Overturning Circulation (AMOC), a key part of global heat and salt transport by the ocean.
>
> Rapid melting of the Greenland ice sheet and further slowdown of the AMOC could destabilize the West African monsoon, triggering drought in Africa's Sahel region. A slowdown in the AMOC could also dry the Amazon, disrupt the East Asian monsoon and cause heat to build up in the Southern Ocean, which could accelerate Antarctic ice loss. (Lenton, *et al.* 2019)

Perhaps reading this induces a feeling of anxiety, or perhaps something else. The metaphor of the accelerating climate crisis as "a Rorschach test, with everyone responding differently to the inkblot of planetary trauma" is apt (Riederer 2019). What the decision-maker, who is attempting to fulfil her investigative obligations, will notice is the highly

[15] *The Guardian* (2019b) reporting environmental journalists' multi-year experiences in the House of Commons.
[16] *The Guardian* (2019a) reporting on comments from the chief of the UN Convention on Human Rights.

speculative nature of the commentary. For example, one of the more immediate tipping points identified is the "dieback" of the Amazon rainforest, which would happen at "between 20% and 40% loss of forest cover" (Lenton, *et al.* 2019). Given that, at the time of writing, the current level of loss is about 17%, the difference is "crucial" (Vaughan 2019). It is also irksome that the scientists dramatically revised their earlier predictions from a 5°C to a 1°C to 2°C trigger scenario. What did they get wrong before? Are they wrong now? These are the questions that occur to the decision-maker pondering the world in, say, 2050, when her potential child turns 30, and the earth potentially passes 3°C.

(2) Human activity

Reducing emissions to prevent global temperatures from surpassing a 2°C increase by 2050 is what the 197 countries that have signed the 2015 Paris Agreement are officially committed to doing (*Britannica* 2019). More than anything else, achieving this requires moving away from fossil fuels; in other words, transitioning to means of powering and electrifying that do not involve releasing greenhouse gases into the atmosphere. So far, the track record is mixed, at best. On the one hand, the transition to alternative sources of energy is being treated as a priority issue in a number of countries and is the common cause around which millions of activists are rallying (Barclay and Resnick 2019, Reuters 2019). On the other, based on the current *actual* reduction strategies at the national level, 3°C by 2050 is what we are on track for, even in the best-case scenario of perfectly execution (Lenton, *et al.* 2019). So there is a gap between the commitments made by world leaders in Paris and the policies developed back home. Indeed, the world burned 80% more coal in 2018 than in 2000 (Wallace-Wells 2019). Furthermore, the country with the largest carbon footprint, the United States of America, withdrew its participation from the Paris Agreement in 2019 (US Department of State 2019). Then, in December of the same year, the United Nations Climate Summit (COP25), which was convened to iron out the implementation strategy of limiting carbon emissions, was described as a "staggering failure of leadership" (*New Scientist* 2019). All in all, there is very good reason to doubt the existence of the sort of political will (in the *status quo* of current geopolitics at least) required to bring about the radical changes which scientists like Lenton *et al.* are calling for. Yet, sudden shifts cannot be ruled out. Given the massive environmental footprint of a few of the biggest polluting nations, radical national shifts in their emissions would have a significant effect on the global picture. The same goes for multinational corporations whose wealth and footprint are greater than that of some countries. In other words, the 'big players' have huge sway and it is not impossible that they may sway in the direction of reductions.

Unknowns at the level of consumption (people's everyday lifestyle choices based on their desires and values) abound, and such consumption raises deep questions about the optimal population size of the world, as I shall demonstrate below. Lifestyle choices shape the demand for the very same greenhouse-gas intensive activities that governments have promised to wean their countries off of. Take plastic, for example, a material made from oil, a fossil fuel. Almost half of the world's plastic has been made since the year 2000, demand is rising steadily, and the impact of the resulting pollution is a "crisis" (*National Geographic* 2018). Recall the statistic above (2.2) that approximately 20 000 plastic bottles are bought every second (*The Guardian* 2016): what is the significance of the number? It *sounds* like a lot, but is it? Dividing the sum figure of 480 billion bottles among the 7.4 billion people in 2016 (World Bank 2019) equates to 64 bottles per person. So, that's everyone on earth buying a drink in a plastic bottle every 5.7 days. Now *that* sounds less shocking than 20 000 a second. There is a puzzle here: Is there a problem because individual people are at fault for buying single-use plastics on a roughly weekly basis? Or is it that seemingly harmless choices are rendered deadly because so many others are making them too? Studies based on Westernised lifestyles show that having a child is, by a colossal margin, the most environmentally consumptive act a person can undertake (reported on in, among others, *The Guardian*[17]). Yet the Westernised lifestyle is not ubiquitous: an American person's impact is approximately 50 times that of an Indian or Chinese person, and as much as 300 times that of a Ugandan or Laotian person (Young 2001, 184). Most academic writers (see McKibbon 1998; Young 2001; and MacIver 2015) think that the crux of the population question has more to do with consumption patterns than with a total figure[18]. And consumption, as has already been said, is a matter of human values. If we aspire to live American-type lifestyles, there will not be enough to go around for the

[17] *The Guardian* (2017b) reporting on a study published in *Environmental Research Letters* by Wynes and Nicholas, (2017).

[18] Bill McKibbon (1998: 262) writes that humans don't really take up that much space; it is "the balloons above our heads, our hungry shadow selves, our sperm-whale appetites" that make us such a heavy burden on the earth.

almost 8 billion of us (World Bank 2019); if we aspire to have the environmental footprint of a Ugandan, there might be.

So the big picture is not all that clear. And there is at least one other major unknown at the idiosyncratic level, unique to the decision-maker. She cannot know whether her decision to procreate, or not, will make her happy. She can consult friends and family who are parents to find out what it is like for them. She can go online for more anecdotal evidence from parents who blog, vlog and podcast about their lives. Also available to her online is the extensive media coverage of past and more recent social scientific studies into human happiness and parenthood – which are worth exploring briefly here. While results have been mixed, the majority indicate that parents are less happy than non-parents, according to standard self-reported life satisfaction indicators. Yet the mixed nature of the results has been shown to be a function of factors extrinsic to the experience of parenthood, rather than an indication of its intrinsic contribution to happiness. Remove these factors and there is, according the latest research "very little" (Deaton and Stone 2014) statistical difference between the happiness of parents versus the childless. People's financial stability, the stage of life they are in, whether they live in a country that provides parental support, what religion they believe, the status of their health, among other things: these determine whether they enjoy their lives as parents, not whether or not they are parents. So it seems that, above all, it is the context that matters. This takes us back to the big picture. What now?

3.3 WHAT NOW?

It seems that, just when we were trying to be epistemically responsible, we are more epistemically impoverished than before, and morally paralysed, in a sense, as to what to do. Why is this all so hard to get to grips with? Here the framework of Stephen M. Gardiner's (2006, 2011) "perfect moral storm" metaphor is helpful. Gardiner thinks that a number of peculiar features, unique to climate change, together make it almost impossible for us to respond appropriately – so, ethically – to it. Some of the reasons why the investigation has yielded more unknowns than knowns become clearer when the substantive findings are categorised into the 'global' storm, 'intergenerational' storm and the (cross-cutting) 'theoretical' storm.

Global storm

The key feature of the global storm: "The world's most affluent nations, and especially the rich within those nations, have considerable power to shape what is done, and to do so in ways which favour their own concerns, especially over those of the world's poorer nations, and poor people within those nations" (Gardiner 2011, 7). The harms of climate change are geographically dispersed over the entire planet, and so it is quite possible to live in a part of the world that contributes significantly, yet experiences minimal effects, and vice versa. And even in places where changes are more apparent, there are ways of making them less disruptive, ways that invariably involve money. The obvious example is the rich who can buy air conditioning to escape dangerous outside temperatures, despite the onerous environmental cost of air conditioning. And so the global nature of climate change generates a profound asymmetry between those whose lifestyles contribute the most greenhouse gases and pollution, and those who suffer the worst effects. All that we discovered about climatic tipping points, the threat to human rights, the gap between political statement and economic action, unsustainable levels of consumption at current population levels – these are features of the global storm. How 'much' should this big picture matter to the decision-maker, within the particular conditions of her life?

Intergenerational storm

The key feature of the intergenerational storm: "The current generation has similar [to the global rich], but more pronounced, asymmetric power over the prospects of future generations" (Gardiner 2011, 7). Not only are climate-harming actions, and the resulting harms, spatially dispersed, but temporally dispersed as well. For example, atmospheric carbon has a delayed effect on the weather, so present levels are like visitations from the Ghost of Emissions Past, and the carbon we emit today will only have an effect in years' and even decades' time. Relatedly, plastic can takes thousands of years to break down. So again it is quite possible to live a full adult life, contributing more or less to the problem, and experiencing minimal effects directly. Notice the way in which the asymmetry is more profound than the global storm: while the world's poor may be able to advocate a political case for considering their plight, there is literally no way that future people can defend their interests in the present. Notice also that the changes required to

reduce greenhouse gas emissions (such as the commitment to transition to renewable energy in the Paris Agreement of 2015) involve some sacrifices to current people. And so the intergenerational big picture question is: How 'much' do the interests of current people weigh against the interests of future people? And closer to home: How 'much' do the interests of the potential parent weigh against the interests of the potential child?

Theoretical storm

The key feature of the theoretical storm is that it underpins and aggravates the first two storms. It essentially describes our impoverished epistemic position with regard to critical issues raised in the global and intergenerational quandary. "Existing theories are extremely underdeveloped in many of the relevant areas, including intergenerational ethics, international science, scientific uncertainty, and the human relationship to animals and the rest of nature" (Gardiner 2011, 7). I would add another that is implicit to these relevant areas: the ethical dimensions of the relationship between the individual and the collective. Recall the three lacunae which appeared to contribute to the moral significance of procreation in chapter 2, though in inconclusive ways (the moral status of non-human animals, collective responsibility and intergenerational justice): they are children of the theoretical storm. The efforts of philosophy in these areas have yielded a plethora of good questions; yet, despite some progress, the answers column remains messy, "extremely underdeveloped" (Gardiner 2011, 7). Unfortunately, time for deliberating is running out, and our lack of clarity has profound consequences, globally and intergenerationally.

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Thus, we have fulfilled our investigative obligations prior to the morally-significant act of making a new human being. We noticed the plethora of 'cues' around us that there is something ethically important going on and cannot now claim ignorance in whatever actions we undertake from here. Unfortunately, the decision-making context yields very little certainty. To recall the analogy with Jill, the potential demolisher: in the search of the abandoned house, our vision is obscured, much is in darkness, and it is impossible to tell for sure if the place is empty. Is it safe to proceed? The question is less of an epistemic one – we've covered that part – and is now decidedly an ethical one: what should one do, given the information?

4. An ethical question

The seriousness of the theoretical storm notwithstanding, normative ethics is not completely bereft of tools for proceeding after the question, 'what should one do, given the information?' is asked. We can, at least, make progress, and are in a strong position to do so if we approach the problem with an aretaic framing, as I hope to show in this chapter. Two other approaches to normative ethics – consequentialism and deontology – illuminate certain important points about the quandary, but miss some of the (potentially unique) insights yielded from an aretaic inquiry. I isolate four features of, particularly, virtue ethics, features which are good grounds for considering it well suited for the task. Because a great deal of discussion has to take place to identify these four features, they are summarised for ease of reference at the close of section 4.1. Finally I provide a sketch of what I take to be a virtuous response(s) to the quandary of procreation in the climate crisis, identify a few objections, and conclude.

4.1 APPEAL OF AN ARETAIC FRAMING

Note that 'consequentialism' and 'deontology' are very broad labels that overlook the nuance of different versions of the theories. At this general level, they are easier to interview and find wanting, and would undoubtedly fare better in more sophisticated formulations. And indeed both yield important insights that have a bearing on the project at hand.

Consequentialist ethics seems well-suited as a decision-making guide because it considers one variable – the results, outcomes or consequences – to be of primary relevance to the moral content of the act. A weighing of potential good and bad consequences, drawn from the particular context of the considered act, is required to ascertain whether it is permissible. It sounds straightforward: our dossier of findings from chapter 3 can be split according to these two categories, the columns tallied and the quandary resolved. 'Overall, there is more good than bad that would result from having a child in the climate crisis: proceed', or 'overall, there is more bad than good that would result from having a child in the climate crisis: do not proceed'. In reality, the theory requires some interim steps to get to that point. Firstly, there is the issue of what 'unit' to measure the good and bad consequences (welfare, happiness, sustainability?) and from whose perspective they are deemed good and bad consequences (the child's, the parents', third parties', all of them together?). Secondly, a workable demarcation of what can be considered consequences of *this act* is necessary. The consequences of procreation live long, very long, if we consider that the parents are causally responsible for the child's existence, which may be 90 years. A step further, and anything the child does (including having her own children) can be traced to their decision to reproduce. Whether or not we entertain the second, stronger thought, it is clear that more needs to be done to identify, demarcate and calculate the relevant consequences. David Benatar is one philosopher who has tackled the challenge. In *Better Never to Have Been* (2006), he isolates harm as the relevant unit of measurement, surveys the quantity of harm involved in living, and concludes that existence always involves more bad than non-existence, so, considering the child's interests, it is always wrong to procreate. Thus consequentialist logic is be able to yield a clear 'yay' or 'nay', and in Benatar's case, it is a 'nay'. I return to this below.

Deontological ethics also seems well-suited to decision-making, though in a different way. These approaches hold that the consequences are secondary to the moral features of the act itself. Determining whether these features conform to or violate predetermined principles is required to ascertain whether the considered act is permissible. We do not need to pay too much attention to our dossier, because the context is less important; the quandary can be resolved by ascertaining whether procreation is permissible according to predetermined principles. 'No principle is violated: proceed', or 'A principle is violated: do not proceed'. Again, there is an interim theoretical step to be made first. Naturally, a set of principles is required, one that is grounded in a plausible conception of ethics, which includes what sort of things have moral status. And indeed, as an example, we *do* have an existing set of such agreed-upon existing principles – the Universal Declaration of Human Rights – and find permission therein to "found a family" (United Nations, 1948). Here again is a clear answer of whether or not to procreate. In the language of universal human rights, in this case the rights of parents, it is a 'yay'. It is worth noting that rights-based theories are just one sort of theory that fall under the umbrella 'deontology'. Others differ in the nature and content of the principles identified, but all involve having a set of principles to guide conduct in real life. Even animal rights, which differ by having non-humans as the holders of moral status, follow the structure of this logic.

We may, as a start, worry that the elements these two approaches leave out, or under-emphasise, could be important. Consequentialism gives weighty consideration to the harms and benefits of the likely consequences of an act, but it has less to say about the act itself. Yet the act in focus here is the creation of a new human life, so it seems unlikely that it is bereft of morally-significant features and that all that matters is what comes after. Consequentialism is also forced to be acutely selective in order to make its calculation. In the case of Benatar's (2006) argument, for example, it is harm to the child that matters, and so this functions as the unit of measurement. Yet we can think of other sorts of consequences that may merit inclusion in the sum: ecological harm resulting from the natural resources burden of the new person, for example. Indeed this is the unit of measure that Corey MacIver (2015) isolates in his argument for the moral equivalence of consumption and procreation, based on their similar ecological consequences. Immediately, however, we want to say to MacIver, 'what about the experiences of the child?' Thus, shining the light of inquiry onto one type of consequence for the purpose of a clean measurement excludes other consequences that may also be important.

Deontological approaches have blind-spots, too, though less general ones. Firstly, there are cases where a principle cannot be found that is obviously relevant, where the particular features of the act fall outside the ambit of the predetermined set. The deontologist may, for example, struggle to explain what is disconcerting about the person who spits on someone's grave. No right has been violated, nobody (living) has had their dignity violated, yet the act remains morally troubling (Thomas' Hill's 1991 example). Similarly, and more relevant to the topic of this paper, the deontologist may have to reach for less familiar language to describe their unease on hearing someone vow to 'enjoy it while I still can' and increase their meat intake, for example. Secondly, deontological approaches are in a difficult position when an apparently permissible act will, in the specific circumstances, have very bad consequences, as in the so-called 'catastrophe' cases. Either the principle must be applied, with disastrous outcomes, or an exception must be made, which then weakens the principle. Words like 'crisis' and 'catastrophe' are used abundantly in relation to climate change: to what extent are principles, permissible in a non-crisis context, still applicable? Long-held (Lockean) views related to land ownership are being challenged, for example. Despite their connection to the hallowed liberal principle of autonomy, the pressure of dire ecological imperatives is mounting for an exception to be made (see Monbiot 2017). Will deontological principles survive the potentially manifold exceptions asked to be made of them in the climate crisis? Skirting giving this question the thorough discussion it warrants, I merely seek to weaken the idea that a set of predetermined principles will always have a bearing on circumstances in the here and now. In other words, the aim is to undermine their universality.

On the face of it, then, we have reason to have less than full confidence in the decision outcome, yay or nay, yielded by either straightforward consequentialist or deontological approaches to ethical questions in general, and to the question of procreation in the climate crisis in particular. They both seem to leave important things out, and the brief outline above is only a tiny sample of the extensive literature discussing and defending what those things might be.

Yet there is another, deeper sense, in which they may fall short of illuminating other crucial aspects of the subject at hand, and this is potentially something that even a more sophisticated rendering of either would not be able to escape. As different as they are, these two approaches share a starting point: they assume that moral theories need to provide a decision-making procedure for ethical action. And embedded in *that* assumption is the thought that all situations are resolvable, that there is always a 'right' way available. To find that 'right' way, consequentialists weigh up the potential outcomes, and deontologists consult principles. When one gets the procedure correct, one can be assured that the recommended action is the right thing to do. One can get this procedure incorrect and be puzzled by the dilemma at hand, but this happens as a result of a misapplication of the theory, not because the situation is, in fact, irrevocably puzzling. More precisely, the operative paradigm shared by most straightforward consequentialist and deontological approaches assumes that

(1) every situation has a single, 'right' solution[19], and
(2) the purpose of a normative ethical theory is to show that it was there all along.

Thus, in the examples above, Benatar can, by the lights of utilitarian reasoning, defend his conclusion that procreation is wrong, and the human rights advocate can, by the lights of deontological reasoning, defend the conclusion that procreation is right. To disagree with either may involve disagreeing at the level of these assumptions (1 and 2 notated above). And this, at base, is what an aretaic *re*-framing of the problem requires. Thus I engage with it in some detail.

The assumption contained in (1) is what G. E. M. Anscombe (1958: 7) thinks ethics could "do without", as it relies on insufficiently nuanced notions of right and wrong which make "no reasonable sense outside of a law conception of ethics". Her feisty rejection of the legalistic binary, so deeply embedded in normative ethical thinking at the time, is credited by some writers with having initiated the resurgence of modern 'virtue ethics' (Slote 2010; Gardiner 2005; Hursthouse and Pettigrove 2016). This third sort of approach to normative ethics is aretaic, focusing on the character of the decision-making person, and accepting of a much broader range of reasons and motivations, including emotions, that contribute to that person being more or less 'virtuous' or 'vicious'. The terms 'right' and 'wrong' are avoided for being too absolute. With that broad introduction, we are beginning to see that virtue ethics is at odds with other normative approaches. The following features, in particular, mark a fundamental difference: virtue ethics entertains a broad range of factors as morally relevant (including emotions), it admits of degrees in virtuousness and viciousness, and it avoids the right-wrong binary. I hope to show that these features together are a strength of virtue ethics, and that the critic who considers them a weakness does so out of an inadequate appreciation of the complexity of morality in real life. In support, I rely on the work of Rosalind Hursthouse (1991, 1999), who discusses in detail the distinctions between aretaic (virtue ethics) and act-based (consequentialist and deontological) approaches. Her book, *On Virtue Ethics* (1999) – described by Michael Slote (2010: 482) as "the most influential work of neo-Aristotelian virtue ethics" – provides the basis for much of the foregoing discussion in this chapter.

Hursthouse agrees with Anscombe's rejection of (1) and does not think that every situation has a morally right solution, or indeed that 'right' is the appropriate descriptor. She is wary of the "unconscious assumption", which "runs very deeply in everyday thought", that "one side must be unqualifiedly morally right and the other plain wrong" (Hursthouse 1999, 46). This is not to say that virtue ethics holds that moral life is an intractable morass where anything goes and that forgoing the use of absolutes like right and wrong leaves no room for moral assessments. On the contrary, agents can behave virtuously or viciously, and to a greater or lesser degree in both cases. To describe behaviour as 'very kind' is just as much a moral assessment as to describe it as 'right', and indeed reflects subtler shades of meaning. And, when the virtuous agent behaves in a characteristically virtuous way, many of the moral situations she faces, including apparent dilemmas, will be resolvable. Many, but not *all*. It is simply a fact of life that there will also be times when behaving virtuously will not lead to a totally satisfying outcome. Specifically, and using virtue ethical terms: some situations are resolvable only 'with remainder' (you feel terrible, or owe someone an apology), some are 'irresolvable' (the available options are all vicious), and some are 'tragic' (the experience causes lifelong trauma) (Hursthouse 1999, 25-87). Sometimes all one can do is act 'virtuously' and feel wretched by, say being honest enough to express a hard truth, and hurt a friend's feelings. Virtue ethics thus *is* equipped to make moral assessments, by determining how virtuously or viciously the agent behaved, given the (potentially irresolvable or even tragic) circumstances. A wider range of factors are relevant to the assessment, too, including, as demonstrated above, the emotions, which play an important role in how we negotiate difficult situations. Feeling wretched afterwards is part of being virtuous! Yet this subtlety is lost in other accounts, where it is enough to get it 'right'.

The assumption contained in (2), namely that all normative ethics approaches must have a codifiable decision-making procedure to reach the right solution, is closely linked to the assumption contained in (1), namely that there is always a right solution. Both jar with the virtue ethical approach. We have already ascertained that virtue ethics conceives of

[19] This is not totally accurate, as some deontologists think that true dilemmas do exist, in which two principles indicate practically incompatible behaviour, though this is a matter of controversy; consequentialists also allow for more than one 'right' action in instances where they will have equally beneficial or equally terrible results. With thanks to Samantha Vice for prompting this amendment.

moral life as something highly complex and multidimensional; the theory is therefore internally consistent by being reluctant to codify how to live it. To the critic, virtue ethics' apparent inability to point to the 'right thing to do' is disqualifying of its claim to be a normative ethical theory deserving as much attention as the other approaches. In its defence, virtue ethics is not totally without conduct guidance, which comes in the form of the so-called "v-rules" generated by the virtues (kindness generates the guidance 'be kind' and 'don't be unkind', for example) (Hursthouse 1999, 37-39). Yet such guidance is hardly a recipe of what to do, and it is up to the agent to figure out what being kind looks like in the circumstances. So, there is a code of sorts to follow, but one that requires a great deal of interpretation by the agent in context, which is why their character matters centrally in the account. Yet this is not the sort of code that will satisfy the critic who is looking for a counterpart of 'maximise happiness', the overarching directive of utilitarianism. Granted, it is dissatisfying to be told that some situations are without solutions, or that behaving well does not always come with the glow of righteousness, or that some situations will ruin your life, even when you try your best. When this dissatisfaction is the result of accepting the often uncertain, sometimes agnostic, and occasionally tragic, nature of the ethical experience, it is consistent with virtue ethics' operative paradigm. When this dissatisfaction is the result of wanting one's normative frameworks to guide one to always getting ethics right, it is starkly at odds with virtue ethics' underlying conception of reality. Hursthouse (1999., 67) and her peers who draw their inspiration from Aristotle's conviction that ethics is not codifi-*able*, think that a useful normative ethics should show *why* morality is difficult, not try to make the difficulty go away. Such a person, who disagrees with this (virtue ethicists say, somewhat chidingly) lacks wisdom.

To return to the subject at hand. Some writers have demonstrated their comfort with using the terms 'right' and 'wrong' in relation to procreation (Benatar 2006, Rachels 2014, MacIver 2015). I am instead drawn to conceptions of ethics that allow philosophers to explore a subject for signs of the virtuous (considerateness, honesty, care), and vicious (selfishness, dishonesty, recklessness), and to admit of degrees in the presence of both. And, relatedly, de-emphasising the importance of a decision-making procedure makes room to focus on the whole 'point' of making good decisions in the first place, viz. living well (more on this below). These strengths apply for all ethically interesting subjects, but seem all the more relevant for an analysis of an intimate, emotionally-charged and culturally-loaded subject like procreation. Simply put, the language of virtue ethics allows one to explore with due nuance and sensitivity, unburdened by the blunt instruments of 'right' and wrong'. Thus we arrive, after some convolutions, at the first of the four reasons why virtue ethics is appealing as a strategy for tackling the ethical question at hand.

It may seem odd to favour an *aretaic* framing of the procreative 'act', when consequentialism and deontology are purpose-built *act-centred* frameworks, and yet the case for doing so is based on the thought that the act is *something that a person does*. This applies to 'procreating in a climate crisis' as much as to any other act. I submit, then, the second of the four reasons for favouring a virtue ethical framing: by focusing on the character of the decision-maker in the decision-making moment, a wider range of considerations become relevant to the ethical analysis of the considered act. To paraphrase Hursthouse (1999: 83), the most appropriate "focal concept" of ethics is the virtuous agent moving through moral situations, as opposed to the moral situations themselves being the focal concept. Once this is accepted, the agent's emotions, attitudes, patterns of attention, value orientation (and more besides) figure in the virtue ethical analysis. This is largely what Anscombe (1958: 1) was calling for when she pointed out the need for a "philosophy of psychology", and so started the modern neo-Aristotelian trend of focusing on people rather than actions.

It is useful to look further into the idea that 'virtues' open the window to a broader moral landscape than consequences or principles. *The Stanford Encyclopedia of Philosophy* entry for Virtue Ethics (authored by Rosalind Hursthouse and Glen Pettigrove) provides the following definition of a virtue:

> A virtue is an excellent trait of character. It is a disposition, well entrenched in its possessor – something that, as we say, goes all the way down, unlike a habit such as being a tea-drinker – to notice, expect, value, feel, desire, choose, act, and react in certain characteristic ways.
> (Hursthouse and Pettigrove 2016, 4)

Perhaps, reviewing the above, this is less of a definition and more of a bundling together of features. But, such is the nature of a virtue: it is not easily described. Hursthouse (1999, 10-12) goes to great effort in her book to paint a "thick" picture of an honest person, and later (1999., 58) reflects on her own description, saying it is "packed with details" but still "could have been a lot longer". So, virtues are complicated and multifaceted. Pause on the range of the verbs listed in the definition above (*notice, expect, value, feel, desire, choose, act*, and *react*) and observe that they cover the before, during and after of a moral action. It is the "in characteristic ways" part that does a lot of the bundling work, as those verbs refer to different manifestations of the same underlying virtue. The "labyrinthine" (Hudson, 1986, quoted in Hursthouse, 1999: 12) nature of virtues equips virtue ethicists to draw from them as motivating reasons in a myriad ways when assessing a moral situation. When the moral situation in focus is procreation, virtue ethics can from the start embrace its highly emotional and emotive content. *Feeling, desiring*. It can also give weight to the epistemic component of the potential parent's situation, surrounded by a huge amount of potentially relevant information that they may or may not pay attention to. *Noticing. Expecting*. So, before anything is *done,* a great deal goes on in the hearts and heads of the people involved – and virtue ethics acknowledges this explicitly. It also acknowledges the person in the post-decision moment, where whatever virtues drove them to notice, expect, feel, desire, choose and act in a certain way, will also be present in the way they digest their decision afterwards. *React*. Procreation has a very long post-decision moment – the child's lifetime, at least – so it seems particularly sensible to include it (reacting) in the picture.

A third feature of virtue ethics, which makes it well-suited for an analysis of the ethics of procreation in the climate crisis, is its accessibility to the non-specialist. There are a number of reasons for describing it as 'accessible'. Firstly, recall the suggestion that virtue ethics gives guidance (not a decision-making procedure or strict code, but certainly guidance) in the form of the virtues themselves. The virtue of kindness is not a recondite concept and, while its corresponding v-rules 'be kind' and 'don't be unkind' may require some interpretation, they are not impenetrably oblique. Compare with, say the concept of maximisation, or the principle of universalizability, which Hursthouse (1991, 235) thinks require "fancy philosophical sophistication" to grasp.[20] The second reason is applicable in instances where it is particularly hard for the agent to figure out what to do, and so they need to look to a moral exemplar for guidance. This is not a trivial point, for it reminds us that human beings are social creatures who are not born with perfect moral sense, who rely on others for cues on how to behave, and so develop wisdom over time (Hursthouse 1999, 35). Perhaps the staunch advocate of consequentialism or deontology will describe the deferment to moral exemplars as a 'cop-out', and such a reaction might be motivated by a firm belief in the strict autonomy of moral agents. Virtue ethicists think it is more likely that we are not, in fact, "utterly self-determining" (Hursthouse 1999, 35), and many of our value judgements are strongly affected by those we call 'role models'. This is almost certainly the case with procreation, where we rely so much on the experiences of others to gauge what it might be like. Thirdly, on a methodological note, the fact that virtue ethics' lexicon would likely be familiar to a non-philosopher aligns well with the approach taken in chapter 3, where the investigation drew only from sources in the public domain that the average person has access to. And finally, I am inclined to prefer a normative ethics that permits the use of everyday terms to explore a subject that everyone encounters at some point: thinking about, and/or having, babies.

Lastly, to the fourth and final feature of virtue ethics highlighted here as a strength of the approach, though it will take some discussion to get there. Virtue ethics is grounded in the concept of *eudaimonia,* which manifests when the virtues are correctly applied with the help of *phronesis*. Oh dear, it would appear that, just after extoling virtue ethics' quotidian terminology, the neo-Aristotelian version of the theory foists two strange new words upon us. Yet, while the words themselves are alien, and difficult to translate directly, they describe intuitive concepts. Following Hursthouse (1991, 1999, 2016) and others, *eudaimonia* can be understood as a 'flourishing' life, while *phronesis* is the 'practical wisdom' necessary to live such a life by correctly applying the virtues to real situations. The 'correctly' is important to virtue ethicists. They maintain that a virtue is an "excellent trait of character" (Hursthouse and Pettigrove 2016, 4), so one needs to be *good at them* – one needs to be practically wise – if one is going to live well. What does it mean to be 'good

[20] I stop short of calling the virtues 'self-explanatory', though, given that something like justice is far from straightforward. For example, we may consider 'justice' a virtue, but the corresponding v-rules 'be just' and 'don't be unjust' need theoretical tethering to make sense. This is something Hursthouse (1999, 5) readily accepts as a gap. Here lurks the seed of a potentially serious objection to virtue ethics, that its plurality weakens it, even making it vulnerable cultural relativism, which I return to in the objections at the close of the chapter.

at' the virtues, in straightforward terms? It means that what one pays attention to, feels, thinks, hopes, and does, is a direct result of, and internally consistent with, one's deeply-held views of what matters in life. These three concepts (virtues, flourishing and practical wisdom) are difficult to describe in an itemised fashion. The following is an example of how they work together, adapted from Hursthouse (1991, 231): When one gently tells someone a hard-to-hear truth, it is not because one is crass, or selfish, or something else; it is because, deep down, one believes that honesty is important, and it is clear from the particular situation that the person would be better off knowing than not knowing. Approach all situations in this fashion, over and over, and one is truly honest, and likely to flourish.

Not all virtue ethicists accept the strong connection between flourishing and virtue that Hursthouse's (and therefore my) account relies on. Hursthouse's strategy in *On Virtue Ethics* (1999, 164-191) is to dispel the idea that possession of the virtues *guarantees* flourishing. She claims rather that the virtues are the "only reliable bet" (Hursthouse 1999, 171) for living a flourishing life. In other words, being virtuous is to experience human life in typically beneficial ways (for example, enjoying psychological harmony from internal consistency, or interpersonal harmony from that same consistency) and, while genuine alternatives are viable, they are confined to non-typical conditions. Hursthouse draws an analogy with health. Eating well and abstaining from smoking (for example) are not guarantors of health, they are rather the only sensible lifestyle choice one can make if one wants to be healthy. There are cases of fit adults who never smoked in their lives getting very ill or even dropping dead, yes, but it is still the case that fitness and avoiding smoking are typically beneficial to health. So, while it is possible that properly actualising a virtue will indelibly mar one's life, as in the tragic dilemmas discussed above, this does not detract from the idea that virtues typically benefit their possessor over the course of long patterns of consistent behaviour. It is in this slightly weaker sense that I understand the connection between flourishing and virtue: it is not a necessary and sufficient relationship, but the virtues are the only character traits that can be reliably expected to contribute to their possessor flourishing, and so to exercise them must always be Plan A for the reasonable agent.

The logic of first emphasising the importance of flourishing, and then shaping the virtues according to their consistency with it, isn't trivial, nor is it circular, though I mount only a brief defence here (see Hursthouse 1991, 225-228 for elaboration). The defence involves pointing out that any normative ethics must root its practical conclusions in some grounding notion of what is worthwhile, or "what really matters in human life"[21]. This is what virtue ethics is doing with *eudaimonia* (flourishing). Otherwise, such conclusions are likely to be somewhat shallow, or lacking relevance, or simply uncompelling. Each of the three approaches to normative ethics has such a grounding (for example, 'flourishing' for virtue ethics, 'happiness' for utilitarians, the 'kingdom of ends' for Kantians); that is the 'whole point' of their methodologies (why be virtuous? flourishing; why maximise? happiness; why respect others? the kingdom of ends). If virtue ethics is found to be circular, then so must they be. As Hursthouse puts it:

> A normative theory that any clever adolescent can apply, or that reaches practical conclusions that are in no way determined by premises about what is truly worthwhile, serious, and so on, is guaranteed to be an inadequate theory. (Hursthouse 1991, 232)

This explication was necessary to get to the point of being able to describe what is so appealing about the concept of flourishing for the philosopher embarking on an analysis of a difficult ethical subject. It is this: a flourishing life is achieved by living *in a virtuous way*, so the actual 'manifestations' of a flourishing life (activities and events that mark the passing of days) can vary widely. When we describe someone as virtuous, including the practical wisdom implied by that descriptor, we are hailing her for her correct conception of what is worthwhile, not of the particulars of her life. To speak in Aristotelian terms, we are "ascribing to her a love of the noble" (Hursthouse 1999, 136). Her life story may be radically different from another's, but both can be described as virtuous, if they have lived in a way that manifests character traits rooted in a correct conception of what matters. To examine this in the light of our question about

[21] Hursthouse does not, in the discussion cited here, acknowledge that some deontological approaches do not have a prior evaluative theory of what is good from which they derive what is right. Yet it is possible to imagine Hursthouse's response, which I agree with but will not say more about here: the absence of an initial grounding conception of what matters in a moral framework renders it comparatively insubstantial to frameworks that are so grounded. With thanks to Samantha Vice for prompting this amendment.

procreation, I again draw on Hursthouse, whose article "Virtue Theory and Abortion" (1991) brushes against several relevant themes.

> [That] procreation of a new human life connects with all our thoughts about life and death, parenthood, and family relationships, must make it a serious matter. (237)
>
> People who are childless by choice are sometimes described as 'irresponsible', or 'selfish', or 'refusing to grow up'. But one can hold that having children is intrinsically worthwhile without endorsing this, for we are, after all, in the happy position of there being more worthwhile things to do than can be fitted into one lifetime. (242).

This is an elegant summation of the ambiguous relationship between the act of procreation and the idea of a flourishing life. The flourishing life is constituted by the presence of virtues, not by a checklist of acts. One's attitude, thoughts and feelings regarding such a serious thing as procreation are what matter most: we are in "the happy position" to be able choose whether or not to include it in our actual life story, and still have a chance to flourish. In other words, to live well, one must parent virtuously, not simply *be* a parent – conversely, to live well, one must live a virtuous childless life, not simply *be* childless.

*

To bring together threads from the above discussion, there are four primary features of virtue ethics that I consider to be strengths, and which make it a particularly well-suited framework for approaching the question of 'what should one do, given the information?' They are:

i. Virtue ethics allows for a subtle exploration of the messiness of reality by using the language of *more* or *less* 'virtuous' or 'vicious', rather than simply 'right' or wrong'.

ii. By focusing on the character of the decision-maker in the decision-making moment, a wider range of reasons become relevant to the ethical analysis of the considered act, including emotions and cognitive states.

iii. The concepts and language of virtue ethics are accessible to the non-specialist and do not deny that a significant portion of our moral growth and development takes place in social settings.

iv. The presence of the virtues is constitutive of living a flourishing life; the practical manifestations of those virtues (the activities and events that mark the passing of days) will vary from person to person.

In the sketch that follows, I draw implicitly on these principles to illustrate what a virtuous response to the question, in light of the findings from the preceding investigation, might be. Two caveats apply: Firstly, unavoidably, it falls short of rendering a full "thick picture" because, like Hursthouse (1999, 58), I maintain that there is always more to be said about a virtue. Secondly, the sketch can only capture a limited range of possibilities, given that the envisaged decision-maker is a person of means, living a broadly Westernised lifestyle, and under no coercion (recall introductory comments in chapter 1). The sketch of a decision-maker in a vastly different set of circumstances would have a lot in common with the analysis at the level of the virtuous reasoning described, but the application thereof may be very different. Anticipated objections to the sketch, some of which will be objections to the virtue ethical framing itself, are addressed briefly at the close of the chapter.

4.2 SKETCH OF A VIRTUOUS RESPONSE(S)

The agent in my sketch has always maintained a level of ambivalence toward the idea of parenthood, neither being strongly in favour nor against, trusting that she would know what to do 'when the time comes'. She has always been

open to the idea, and listens carefully to the anecdotes of peers, friends and colleagues who have gone through it, and those who have not, paying special attention to their reasons. It is their reasons, she knows, that give the clearest indication whether they connected the decision to a deeper conception of what they think life should be like. She listens hardest to people who do so, and knows that she too will need to have good reasons for whichever course of action she takes.

Now the time has come – in other words, she is confident that the 'knowns' of her immediate life circumstances would accommodate a child comfortably – and she has undertaken the wider investigation seriously. The investigation describes a changed and changing world where the quantum of harm involved is potentially very high. How high, though, and how close to home, the agent cannot discern for sure. She is used to there being unknowns in life, and accepts that it is part of being human to have imperfect knowledge. Does she get stuck at this point, or does she have to become a climate-scientist-philosopher extraordinaire, able to ascertain for herself whether the modelling is reliable, while simultaneously solving intergenerational ethics, international justice and environmental axiology? That is a lot to ask.

Fortunately, such effort is not required, as a virtuous agent in fact has all the resources required to make an appropriate decision, even if doing so is difficult. The first knot to unpick is (1) *how to relate virtuously to uncertainty, in the circumstances*. Given that this involves uncertain impacts on others, we immediately encounter a second knot, (2) *how to relate virtuously to others, in the circumstances*. The two dimensions are intricately connected. Over all, the importance of one further consideration bears heavily: (3) *living a good life, in the circumstances*.

Uncertainty, and others (1 and 2)

After executing their investigative obligations and generating a dossier like that in chapter 3, a person might think that interpreting it all sounds too much like hard work, and throw in the towel and push on with having a child, trusting in the immediate knowns and hoping for the best. This is straightforwardly a reckless move. Another person might experience 'analysis paralysis', and shut down any further consideration of having a child; if this person deeply believes that parenthood is the *sine qua non* of a good life, but can't summon the intellectual and emotional grit to deliberate upon it thoroughly, she will likely never be comfortable with her decision to forego it, and so will not flourish. These are just two examples of inappropriate responses, because the reasons for action in both cases are too shallow, relative to the import of the subject. They are both inappropriate, but not equally so, as the ramifications to others of unreflectively having a child far exceed those of unreflectively *not* having a child. Thus we can admit of these degrees in viciousness to capture this important distinction, while still admonishing both.

The virtuous agent will not be put off, though, aware that the stakes of doing so are too high, and gleaning that there *is* enough information available, short of enrolling for degrees in climatology and philosophy. One does not have to be an expert to be confident in the findings of experts, and such confidence is all the more reasonable when a majority of them agree. Our relationship to the future has changed; it need not be the black hole of impenetrability it may have been prior to the development of scientific modelling. The agent perceives that there is very little wiggle room available to disagree that the climate is changing, with potentially significant implications for human and other life on earth. She is not tempted to agree with the counter-views of a minority of scientists and some politicians, though doing so would certainly be less disruptive to her. She knows that one must always be prepared, at the very least, to believe a new piece of information, even if it has inconvenient implications, or is at odds with how one viewed the world before. In short, she is honest, and intuits that accepting the reality of the climate crisis is consistent with being (intellectually) honest.

Many get this far. Many accept that 'it's bad'. Appropriately responding to the question of 'how bad?' requires a further step. The virtuous agent perceives that this is not an ordinary question of future probabilities, where one must simply apply some reasonable risk threshold to get to a fairly firm 'most-likely' scenario. For example, planting a tree today contains unknowns for the longer-term future: how tall, how wide, how heavy the leaf-fall? With some statistically-sound risk thresholds and measurements, it is possible to narrow down those unknowns, make an estimation of the most-likely scenario, and plant just the right distance between house and pool. The question of 'how bad' climate change is going to be mirrors this scenario in form but not in substance: probabilities are involved, but the quantum of harm attached to those probabilities is vastly greater. If the tree grows a little taller, or drops a few more leaves, no one

is harmed, so it is appropriate to make plans for its planting in accordance with a belief in a most-likely or even best-case scenario. Meanwhile, *there is harm in every climate change scenario*.

Perceiving this, the virtuous agent recognises that it is highly reckless to make plans based on a belief in a best-case scenario, and that it is also reckless to assume a most-likely scenario of climate change. Certainly, the former is *more reckless* than the latter – again, we can admit of degrees of viciousness – yet neither is an acceptable option. Why? When such extreme harm is involved, in *all* scenarios, making plans based on a belief in the worst-case scenario is ethically required in order to limit suffering as much as possible, and personal projects are under pressure to re-align in service of this end. If that seems too strong, recall that we are focusing on actions that the agent is able to take *now*; so, in a sense, the question of which future model *turns out* to be correct is of limited relevance[22]. In short, an appropriately prudent agent intuits that, given the reality of climate change, being cautious is appropriate. Prudence looks different when the stakes for harm are so high, and manifests as caution.

We can arrive at the virtuousness of caution in the context of the climate crisis without referring to tipping points, yet when they are included, the case for caution is strengthened. The predictions related to tipping points introduce even greater uncertainty into the future climate picture, and even greater harm. There is also the alarming trend of scientists updating their previous predictions with more, rather than less, dire futures. Tipping points therefore give us greater reason to assume the worst, and do the most. Indeed a return to the general empirical picture painted in the investigation in chapter 3 suggests that this is a decision-making scenario unlike any other in scale and complexity and, unfortunately, loss.

All of this makes sense to the honest and cautious agent. So far, she is fairly comfortable that she has identified the most appropriate relationship to have with uncertainty in the climate crisis: accept its reality, and base your plans on a belief that the worst will come to pass. Doing this means you can be assured that present actions cannot possibly contribute to making things worse, because they will turn out to either have been exactly measured, or to have contributed for the better. To the virtuous agent, this sounds like the makings of a good life, and she is driven to continue the reflection for her own benefit as well. Now it seems that all that remains to do is identify the actions she must take (or *not* take, by deliberately omitting certain actions) that will qualify as worthwhile pursuits in the context of the climate crisis.

And yet, a gaping hole remains before we can do so, because we have not yet connected these 'big picture' problems with the particulars of the agent's life. If she can plausibly use her means to avoid harm to herself and possibly her prospective child, at least in her immediate circumstances, why does she have to go to the trouble of taking mitigating actions? In other words, why does the acknowledgement of the climate crisis in general become a matter of identifying how to limit one's own 'contribution'? This I have not shown yet. An important dimension still needs to be explored before the virtuous agent can be fully comfortable that she has indeed arrived at an appropriate relationship with uncertainty. That dimension is: the connection between an individual's actions and a collective harm to others.

'Collective harms' are phenomena in which others suffer as a result of the actions not of one person, but of many people acting simultaneously. There are just some things that human beings cannot do alone. A choir is an example of a collective activity where the participants are all knowingly and willingly contributing their part (individual voices) to the collective outcome (the song). In a small choir, it is easy for the individual chorister to perceive that she plays a causal role in the choir's sound, yet the contribution of one voice becomes less and less perceptible as the size of the choir increases. Imagine a globe-sized choir, where it is impossible to perceive the contribution of any individual's voice, but a song can still be heard. Climate change is such a global song created by such a global choir. Global warming, deforestation, sea-level rise: these are phenomena that result from the millions upon millions of individual actions that constitute our daily lives in the current economic, societal and institutional paradigm.

[22] I have in mind a now-famous cartoon by Joel Pett (2009), where an audience member calls out during a presentation on climate change mitigating actions: 'What if it's a big hoax and we create a better world for nothing?' Thus, the maximal efforts to reduce harm are required in conditions of crisis.

The conundrum of the collective is pronounced: on the one hand, an individual is not responsible for the entire climate crisis, and indeed it is virtually impossible to *perceive* the connection between this little thing I do here and that big thing that happens out there. Yet, on the other hand, it is simply not that case that *no one* is responsible, otherwise there would be no climate change, no 'song'. This conundrum of climate change is part of what Gardiner (2011, 301) thinks makes us vulnerable to what he calls "moral corruption of the understanding", where we can wilfully choose to interpret the conundrum in the way that suits our personal interests. The affluent individual, especially, faces a temptation to only pay attention to the first part of the conundrum which says that she is not responsible. Believing this, she continues to pursue a lifestyle that contributes to collective harms, and in so doing "passes the buck" (Gardiner 2011, 301) to the poor, the environment, and future people. The extreme version of this is the activities of the wealthy today who are building underground bunkers, or investing in space travel, as strategies to buy their way out of the worst effects of climate change.

This kind of avoidance strategy does not occur to the virtuous agent, and when she hears of it, she is uncomfortable with it. To her, it is intellectually lazy to ignore the second half of the conundrum. She is convinced that the correct response is to be found by considering the conundrum as a whole. So, because it matters to her *not* to be intellectually lazy, but rather to be consistently honest, she reviews what she knows. The agent has learnt enough about climate change to understand a bit about the things that have caused it, including carbon emissions. She has learnt that various consumer activities emit carbon, and recognises some on the list as part of her life. Driving. Air conditioning. Eating meat. This is all the evidence she needs to resist "corruption of the understanding" and interpret the conundrum thus: no individual contributes the full quantum, yet the harm is still occurring, so everyone is contributing *something*.

So the virtuous agent's contribution is not, she realises, nil. In getting to this point, the agent is implicitly accepting what Judith Lichtenberg (2010, 558-559) calls the "new harms" of 21st century living, where seemingly ordinary actions have negative impacts on others far out of sight, and far in the future. How we classically understand harm – as "discrete, individual actions with observable and measurable consequences for particular individuals" (Lichtenberg 2010, 558-559) – is not a sufficient rendering for collective harms, of which climate change is a paradigmatic example. 'Some of the harm over there is because of what I am doing right here,' the virtuous agent accepts. This is a further manifestation of her honesty, to ensure she has as clear a picture as possible, despite the opacity of the conundrum, and the temptation to misinterpret it.

Recall that we are exploring whether it is correct to say that the individual who takes the step of accepting the truth of the climate crisis (despite uncertainty about the details) is immediately under pressure to plan her life in a way that limits her contribution to it. So far, it is fairly clear that the individual contributes to collectively-produced harms that cause others to suffer. Does that entail a responsibility to reduce individual contribution? The virtuous agent responds without hesitation in the affirmative – and I will get to why shortly – yet there are at least two other, logically plausible responses.

Firstly, it may be inconsistent to acknowledge, as we have done, that the individual's contribution is infinitesimal, and then to proceed to place pressure on her to undertake remedial actions, which may be burdensome, the results of which are surely guaranteed to also be infinitesimal. If your harms are a drop in the ocean, so will the outcome of your efforts be: what is the point? Surely the burden of action *to me* outweighs the tiny benefit *to others* of taking it. Secondly, the interests of these others can be plausibly subordinated in favour of one's own interests, including the interests of one's closest relations. According to this view of morality (close to ubiquitous in everyday practice), taking care of friends and family is the extent of duty, and so any duty to 'limit' contribution starts and ends at the point of their interests, not the more distant others I have in mind. So, getting your loved ones a ticket on the first space ark out of here is the morally right thing to do.

There are theoretical resources available to challenge both of these positions, though exploring them is beyond the scope of this sketch. Suffice it to acknowledge that we would need to do much more theoretical before speaking about the climate crisis *entailing* individual responsibility to reduce contributions.

Let us return to the virtuous agent, then. She is not concerned that the pressure to reduce her contribution falls short of having a logically watertight grounding, because the more salient matter for her is the presence of others' fundamental interests and her self-regarding interests in maintaining internal consistency and a clear conscience. The headlines from her investigation disturb her, because of the suffering they describe, and now she is aware that she plays a tiny role in that suffering. This disturbs her more, because contributing *anything*, no matter how small, to suffering, is to be complicit in evil.

Yet the pressure comes from an additional source as well, one that is more serious than complicity: her own power. In other words, interpreting the dossier thoroughly reveals that there is a glaring asymmetry of power between the agent and those harmed others (the poor, the environment, and future people). They contribute less, but lack the means to escape harm. She, on the other hand, is one of the affluent, currently alive bloc of human adults, one of "those with a duty to act" who "suffer little or no negative consequences from their failure, but also stand to benefit from it" (Gardiner 2011, 311). Yet, to the person who cares about others, personal negative consequences are not the only motivating reasons for acting. To the person who cares about others, the existence of the asymmetry of power to cause harm is enough evidence of the existence of an asymmetry of responsibility to reduce it. She accepts the burden, because she cares. Gardiner captures this virtuous response precisely, and so I quote him at length here:

> Our reasons for acting on climate change are not (or at least not primarily) that doing so will be good (or at least not bad) *for us*; they are deeper and more morally serious than that. In my view, seeing this should make it easier for us to act. To dither when one might prevent moderate harms to oneself by taking modest precautionary actions is folly to be sure, but its moral import is limited. By contrast, to engage in wilful self-deception and moral corruption when the lives of future generations, the world's poor, and even the basic fabric of life on the planet is at stake is much more serious business.
> (Gardiner 2011, 11)

We may want to describe this response as benevolent, or magnanimous, because these characteristics involve placing the interests of others at the centre of moral motivation. Yet I think the impulse can be captured better in the more everyday concept of being *moved to care* – about others, and about the impact one has on them. Some of those others will be people she already cares about now, younger people she knows who face a bleak future, and so she has straightforwardly self-concerning grounds as well for going to great lengths to assist. The foul nature of the asymmetry is motivation enough; the fact that some of those others are out of sight, some are not human, some do not even exist yet, is virtually irrelevant. This kind of care runs deep (as virtues do) and extends to not wanting to be involved in activities that are care-*less*. Being complicit, even infinitesimally so, in something that is at odds with her caring nature, is disturbing to the virtuous agent. She does not ring-fence her own morality by conducting her affairs as if in isolation from others; she knows that her own morality is not isolated but connected to the collectives of others of which she is a part, even remotely. After all, as much as the virtues are something an individual person possesses, one of the ways they are actualised is through long-range patterns of interactions with others. The virtue of care is a particularly potent demonstration of the other-related dimension present in all virtues.

In sum, the most appropriate relationship between uncertainty (1) and others (2) in a context of crisis can be reduced to the following formulation: *the virtuous agent is committed to avoiding participation in causing harm to others, and is not deterred by the lack of an incontrovertible causal relationship between her own actions and said harm to others.* In short: she gives others' interests 'the benefit of the doubt'. To give one's own interests the benefit of the doubt in a potentially dangerous situation is to be intellectually lazy, self-centred, or careless. This applies generally, but it is even more acute when the 'doubts' involve a potentially significant quantum of harm, as they do in the particular circumstances of the climate crisis. To give other's interests the benefit of the doubt in the context is to be honest, cautious and caring.

The good life (3)

At this point, the virtuous agent accepts that what is required of her, as a responsible person living in the circumstances of the climate crisis, is limiting her contribution to harming others. Her honest, cautious (prudent) and caring nature have led her here. All her personal pursuits and affects now orientate around this worthwhile end. 'What an extraordinary time to be alive!' she thinks, marvelling at the actions she feels pressured, by the force of her own character, to undertake, or forgo undertaking. What are those actions? This question cannot be answered without placing the agent's conception of the good life squarely in the foreground. Her life matters to her, and matters primarily. The questions of how to relate to herself, to uncertainty, to others… all of these matter *because* she wants to live well. So, what actions (or omissions) to take is a question of how to live well, in the circumstances.

Yet there is no single way to live well, and no single life can include every virtuous action. Reducing one's contribution to the harms of climate change involves certain virtuous actions, yet there will be other virtuous actions in one's life that have nothing to do with the climate crisis. A truly honest person abhors lying, the cautious person checks before crossing an intersection, the caring person is a good friend – whether or not the ice caps are melting. The true challenge for a virtuous person living in the climate crisis, then, is figuring out what precedence to give to virtuous actions related to climate change versus 'ordinary' virtuous actions, so that, overall, one's life still constitutes a virtuous combination, in the circumstances. And *this,* viz. getting to the right combination, will look a little different for each person. No two people have exactly the same character. No two people live exactly the same life. Even having the virtues we have identified in common, and getting to the point of accepting some responsibility for climate change, there is room for divergence in what the 'final' virtuous combination looks like.

An illustration is necessary to make this potential for 'divergence' clearer. In the discussion above, caution is identified as the appropriate response to climate uncertainty, where one ought to assume the worst and do the most. Let's review two (A and B below) possible manifestations of this virtue:

> To the virtuous person (A) who thinks climate-mitigating responsibilities overshadow all other responsibilities, doing the 'most' will involve making radical alterations to her life. To her, this is not a sacrifice, because taking *maximal* action is what it means to live a good life in the circumstances, and all her motivations and feelings are already attuned to doing just that.
>
> To the virtuous person (B) who weighs other 'ordinary' responsibilities *anywhere above nil*, the 'most' will be the maximal alterations and sacrifice she can live with, while also pursuing other worthwhile actions. By 'whatever she can live with', I am not being trite. I refer to the strict internal consistency a virtuous person demands of herself, without which she falls short of her own conception of the good life.

Verdict(s)

For the virtuous person (A), whose personal projects, in pursuit of a good life, centre around responding to the climate crisis, procreation is not an option. Some of the actions required to parent virtuously have nothing to do with the climate crisis, and so will fall outside of this agent's conception of worthwhile pursuits. She is responding to the 'worst' with her 'most', and would not be comfortable with any other arrangement. Furthermore, having a child, and thus creating a new consumer of resources, is contributing to third-party harm, irrespective of how 'climate-sensitive' the child is brought up. The child would also be exposed to harm throughout their life, either directly through the experience of climate-related shortages and suffering, or indirectly through hearing about others' experience. These considerations reveal procreation to be an action that does not belong in the picture of 'worthwhile pursuits in the climate crisis', an action that instead carries a high risk of harm. Or, to present this same conclusion in the inverse: *omitting* to procreate in the climate crisis would, for (A), be a worthwhile 'pursuit' because it involves responding to it in a way that does not contribute to further harm. Either way, this agent will not be able to live with having a child.

For the virtuous person (B) who weighs other 'ordinary' (non-climate-related) pursuits anywhere above nil, the option to procreate remains, with one condition: if and only if procreation is indeed one of those virtuous pursuits that she connects correctly with living well. Far from giving her licence to proceed, this condition is in fact quite stringent. It is

stringent because we have already revealed that this person is honest, cautious (prudent) and caring, and will only undertake actions that manifest these characteristics in context. Such is the demand of internal consistency, in service of living well, that makes virtuous agents virtuous. The presence of prudence, manifested as cautious decision-making in a crisis, may itself be a significant obstacle, given that having a child is something that one cannot 'take back', so there is an extremely high premium on *correctly* valuing procreation as constitutive of living well. Yet no person is defined by caution alone, and a single-track cautious life is not *eudaimon*. So it is possible to imagine a virtuous agent who correctly connects parenthood with her own interest in flourishing, has a child, and parents that child with excellence. Those aspects of the role that incur climate-mitigating responsibilities, such as the child's environmental footprint, she will respond to with characteristic honesty, caution and care. Those aspects of the child's lifetime that she can control, such as his or her exposure to suffering, she will respond to with characteristic honesty, caution and care. Her 'most' will be doing what she can to mitigate the negative consequences of her decision for others (including the child), and to pursue a life that she can live with.

There is a further challenge for (B), one that (A) is less exposed to. The virtuous agent has reason to pause at the thought of 'what a time to be alive', the thought that occurred to her following a lengthy investigative and reasoning process. She glimpsed her life against the backdrop of the 'big picture' of the climate crisis. Having life, and living it well, is not easy, in this picture. Excellently manifesting a virtue, such as care, is necessarily curtailed by the sheer quantum of suffering. And, given that the suffering is going to grow, living well is going to get harder. The coming decades *may simply not be a good time to be alive*. For the agent, it is too late to avoid it, short of committing suicide, but it is not too late for the not-yet-born. So, for the person who thinks of parenting as partly constitutive of living a good life (as Rosalind Hursthouse (1991, 242) herself does), serious consideration of *the child's* limited shot at living such a good life in a climate breakdown may in fact be a strong reason to leave one's own interest unfulfilled[23]. I raise this as a question here to add further stringency to the sort of reasons required before virtuous agent (B) will be comfortable with procreating at this moment in history. This moment, when the negotiation of self-regarding and other-regarding interests is unfolding in unprecedented conditions, calling for unprecedented sensitivity to others.

4.3 OBJECTIONS

A number of objections to the sketch above could be made. I give them titles I imagine the critic would use and briefly respond to them.

The conclusion is a damp squib

In forgoing to declare a 'right' or 'wrong' verdict, and in fact equivocating between two 'virtuous' verdicts that describe different responses, I disappoint one of the basic expectations of what monistic philosophical ethics is supposed to do. To convince, through argument, that *this* or *that* is the only answer. Here, Cora Diamond's (1982, 26-28) paper, "Anything but Argument?" is relevant. The aim has not been to strip the subject matter down to an "operation of causes" that appeals only to the "head", compelling the reader to accede to the demands of logic. To do so would be to leave out far too much, especially in a subject matter with so much "heart". I agree with Diamond that this should not be the aim of philosophical ethics, and defer to earlier comments that the binary of right and wrong is insufficiently nuanced to describe our moral lives. Again: philosophy should show *why* morality is difficult, not make that difficulty go away. What may seem like a 'damp squib' may instead be a faithful reflection of the high degree of plurality in real life. The critic may go further, though, and be concerned that the pluralism of virtue ethics makes it vulnerable to cultural relativism, where the 'good' is relative to cultural context and so any conclusions made in pursuit of it are flexible and therefore weak. In response, I echo Hursthouse (1991, 228-229) in saying that relativism is something that all normative theories are threatened by, because all are 'guilty' of defining the 'meta' standard and then determining what ethics looks like by its lights. So, this is not to deny the weakness, but rather to point out that it is not unique to virtue ethics.

[23] As mentioned, Anca Gheaus (2016, 487-508) uses the words "just parenting" to describe this intergenerational negotiation, but it is structurally similar reasoning to the trade-off referred to here. She concludes that such a sacrifice would be tragic, and bases this view on a description of parenting as a "fundamental interest". I suspect that Rosalind Hursthouse would agree that such a sacrifice would be tragic when the agent in question does in fact believe that parenting is a constitutive of *eudaimonia*.

The identification of honesty, prudence and care is arbitrary

It may seem that I have just plucked out these particular virtues, and interpreted them as I have done, in support of a rhetorical narrative. If other virtues were identified, or interpreted differently, the application thereof would be different to my sketch. (For example, it may be objected that somebody going to great lengths to be informed is hardly a manifestation of *honesty*, but something else). There is a related concern that, if they are described in just the right words, *any* acts, thoughts or feelings could be presented as virtuous. This is the familiar linguistic worry that verbal descriptions of philosophical concepts by default manipulate reality, yet it seems to afflict virtue ethics more than consequentialism or deontology. My strategy is to respond at two levels. Firstly, it important not to under-play the fact that virtue terms like 'honesty' or 'care' take on vastly more layers of meaning in a virtue ethical analysis than when they are used in everyday conversation. When one has this proper understanding of virtue terms, it becomes very unlikely that one will mis-identify vicious acts as virtuous. Secondly, having said that, I accept the spirit of these criticisms, which is a worry about losing meaning when so much of it is packed into the virtue terms. My 'care' may not be your 'care'. This is the challenge for the virtue ethicist: not to write about the virtues in a way that only she understands properly. The corresponding strength of this weakness is that it allows for a deeply textured discussion. The writer can explore all the facets of the identified virtues, thereby illuminating important details about the subject which may otherwise have been overlooked. When she does this properly, the specific virtue terms become less important than what they reveal about the topic under discussion.

This is just the precautionary principle dressed up as virtue

It might be objected that moral epistemic contextualism reduces to the standard precautionary principle, which requires acting cautiously so as to avoid liability for causing harm to others. Yet this is to misunderstand moral epistemic contextualism, a framework which does not extend beyond the requirement to take the time to be informed before undertaking a morally-significant action (Guerrero 2007). This requirement is what got us to the point of performing an investigation, but we then needed something else to decide what to *do* with that information. We chose an aretaic framing, because of the complexity of the information, but it may equally have been the case that the information was *not* complex and the act could take place without further ado. Take Jane, for example: if she thoroughly investigates the house and finds it empty, she can proceed with a ton of dynamite. Is it perhaps the virtue ethical framing, then, that reduces to the precautionary principle? Granted, the virtue ethical analysis yielded caution as one of the appropriate responses. Yet there is far more to the virtue ethical conception of 'caution' – encompassing the elective acceptance of individual responsibility for collective harms, and a particular way of valuing and being moved to care about the interests of others – than the legalistic harm-avoiding logic of the precautionary principle. So, while the outcome, in this particular case, is structurally that of the precautionary principle, the virtue ethical approach does not 'reduce' to it.

The non-human is surely a different kind of other

A lacuna was raised and then never addressed: how to relate to non-human entities. They are categorised in this paper under the broad term 'others', which also includes (current and future) humans. To do so may then be a category error. I concede that there are good grounds to treat non-human beings as a separate category of others, with its own specific motivating reasons. The omission here is, on the one hand, a practical matter of limited space. Yet there is a further sense in which we can comfortably house non-human entities in the general 'others' category, at least at a high level of abstraction. The climate crisis has demonstrated that the welfare of humans and that of other beings on earth is interdependent in profound and complex ways. So there is a straightforwardly anthropocentric sense in which our concern for the environment is a derivative concern for ourselves. By 'anthropocentric' I mean that this way of understanding our relationship with environmental entities upholds the pre-eminence of our own species' interests: they must thrive because *we* need them to. Environmental ethicists have shown that there are other ways to understand our relationship to the non-human, in which their intrinsic value is recognised (Schweitzer 1923, Sylvan 1973, Taylor 1981, Rolston 1994). In other words, this is a 'biocentric' view where their thriving is a good thing in itself, not because it is good for us. This paper has adopted an anthropocentric view, in the interests of having wider appeal, though the biocentric version of the argument could be worth exploring. Rather than doing so here, it suffices to say that, when the non-human is valued from a biocentric perspective, the virtue of being *moved to care* for others will put further pressure on the agent to reduce her contributions to the climate crisis.

5. Closing remarks

We have subjected this part of life – procreation – to examination, not allowing the widespread acceptance of the practice to deter us from questioning it. It turns out that how we feel and act towards this basic human experience demonstrates, whether we are aware of it or not, our ethical positioning in relation to ourselves and all the others out there, now and in future. When procreation is viewed as voluntarily signing up for a colossal ethical undertaking with future-oriented effects that we can hardly grasp, the realisation should give us pause. This applies for all time, but is all the more critical when the decision-making context is one of crisis.

The agent's process of reflection, which began with recognising the moral significance of procreation and accepting investigative responsibilities, reveals much that is relevant *to her,* not only to the potential child. She finds herself alive at a time of destruction and of institutional failing, and of abundant informational resources describing both. A lot is being asked of her, epistemically and morally, and her responses will be a reflection of her character.

The picture of the first virtuous agent (A), who understands her responsibilities as deriving from the urgency of the climate crisis, is not fantastical. A number of writers have described how the climate crisis is *the* moral issue of our times, notably James Garvey (2008), Elizabeth Cripps (2013), Dale Jamieson (2014), Naomi Klein (2015) and George Monbiot (2016, 2017). Perhaps the true moral exemplar of the early 21st century is such a person who, after taking all into consideration, subordinates other pursuits in favour of addressing the emergency, and carries out a truly *eudaimon* life, by her lights.

Yet most of us are like the virtuous agent (B). We have other worthwhile projects outside of our concern for the crisis that is climate change. When one of those projects is having a child, we must be sure that the reasons for doing so are good enough. As long as the circumstances allow that procreating can be part of a life lived virtuously, there remains a window for finding such good enough reasons…

Whether this window has already closed, or whether it remains open, is a question that cannot be answered scientifically. We must interpret it. How each of us does so, how each of us responds to the intense pressure to consider others' interests in a crisis situation, will be determined by what we can live with. And *that* – what we can live with – will be a function of the particular combination of characteristics that makes us who we are.

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