

# *Paris in a Stormy Climate: Reflections on Ongoing Moral Failure*

Stephen M. Gardiner

*Ilsa: "Play it [Again], Sam" ...*

*Rick: "If she can stand it, I can. Play it."*

## **1. On the State of the Climate Debate**

### 1.1. An Emerging Consensus?

The commentators are generally sympathetic to the perfect moral storm analysis ('PMSA') and the pessimistic assessment I provide of the UNFCCC process in 'We Never Had Paris' (Gardiner 2026). Michel Bourban says, "Gardiner clearly shows ... the [Paris Agreement] and the political process that led to it are morally and politically flawed"; Matthias Fritsch has "long been convinced by the significance of the perfect moral storm analysis"; Marion Hourdequin calls the analysis "important and apt"; and Daniel Shahar and David Schmitz declare the case "convincing".

At this point in history, this convergence may seem unremarkable. Yet such a high level of consensus was not preordained. The PMSA was a bold hypothesis that could have been falsified by events. For years, many resisted it, some forcefully (e.g., DeSombre 2004; Moellendorf 2014, 201-2), while others projected confidence in Paris and the UNFCCC (e.g., Light 2016). If the PMSA provides a strong account of climate failure, this is not because it was "obvious" from the beginning that things would go poorly in the ways it predicts. A point strongly in favor of the PMSA, then, is its explanatory success over the past quarter of a century.

One reason to highlight "standing the test of time" is that being roughly right should count for something, even in philosophy and international relations. A more important reason is that the past successes of the PMSA are not merely of historical interest. Looking forward, they strengthen the case that the barriers highlighted by the analysis must be taken seriously, especially in governance and policy. If genuine progress is to be achieved on

climate and other global, intergenerational and environmental challenges, confronting the PMSA is a good place to start.

## 1.2. Engaging the Climate Mainstream

Some in the climate mainstream continue to vigorously defend Paris. For example, the latest *Emissions Gap Report* from the United Nations Environment Programme: (1) regards the current climate situation as very serious; (2) makes adjustments that respond to criticisms of the process; but (3) still pushes back against the charge that Paris is a failure (UNEP 2025). In some ways, then, UNEP might be taken as a fifth, more skeptical commentator. Since UNEP may be taken as indicative of an influential strand of thought amongst climate policy professionals, this skepticism is worth some discussion.

### *UNEP's Prognosis & Adjustments*

Let us begin with (1), UNEP's basic prognosis. As noted in 'We Never Had Paris', previous UNEP reports decry the overall situation, the shortcomings of existing climate commitments, and gaps in implementation. The 2025 version largely continues in the same vein. Entitled *Off Target*, it states that global emissions reached a new high in 2024, showing a substantial uptick of 2.3% over 2023, about half of which comes from land use change and a third from fossil CO<sub>2</sub>. UNEP also says: the G20 are collectively off target; of the six largest emitters, only the EU decreased its emissions in 2024, with substantial increases being seen in China and India; and recent updates to national contributions "have limited effect on narrowing the emissions gap by 2030 and 2035 leaving global warming projections well above the Paris Agreement's temperature goal" (UNEP 2025). Put in perspective, UNEP says that the shortfall implies that a 55% cut is now needed by 2035 to align with a 1.5°C pathway. Consequently, it shifts its focus to "limiting overshoot" of the 1.5°C target. Even allowing for an overshoot, the speed and scale of the transition needed is striking: "to limit overshoot to about 0.3°C, with a 66 per cent chance, and return to 1.5°C by 2100 ... would require cutting 2030 emissions by 26 per cent and 2035 emissions by 46 per cent, compared with 2019 levels"; moreover, even a 2°C pathway requires a 35% cut by 2035 (UNEP 2025, XI). In short, humanity is currently very far from meeting mainstream climate goals.<sup>1</sup>

Turning to (2), UNEP's report makes several important changes.<sup>2</sup> Several implicitly respond to criticisms I make elsewhere, in previous versions of my critiques of Paris (Gardiner 2021,

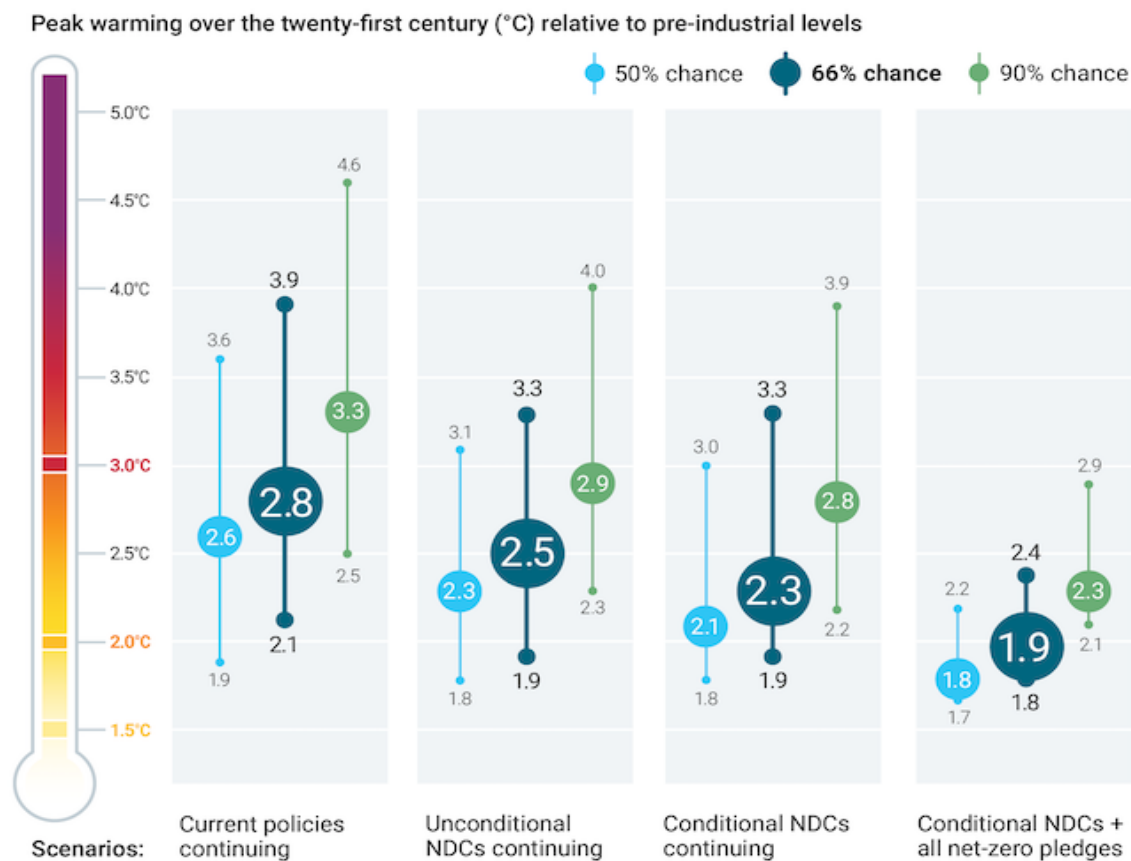
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<sup>1</sup> One striking projection from UNEP is that on the current path there is a 21-33% chance that warming will already exceed 2°C as early as 2050.

<sup>2</sup> The UNEP authors do not explain why the changes have been made, nor to which critics they are responding. This is not uncommon in climate reports and other parts of the policy literature. Unfortunately, this culture renders the process much less transparent. It also makes it harder to assess responsiveness to specific criticisms in detail, to put changes in approach in context, and to track the evolution of the debate. Moreover, it masks the contributions of

2022), mainstream climate targets (Gardiner 2023ab), and the UNFCCC process (Gardiner 2024).

The most notable change is that the 2025 report highlights a wider range of probabilities in assessing what counts as being “on track” (Gardiner 2023ab). While the UNEP authors continue to focus on a 66% probability estimate for their main, benchmark projections, they now include a 90% probability estimate and promote it onto a main graph, alongside the two more standard numbers of 50% and 66%.<sup>3</sup> The graph is:



In my view, the move to provide the numbers for 90% and compare them with the more traditional 50% (e.g., Climate Action Tracker 2024) and 66% (used by UNEP) is a major ethical improvement. It is also morally appropriate to highlight the 90% projections by

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other actors in the climate realm, such as community groups, nongovernmental organizations, and academics. This situation is suboptimal but could be improved quite easily. Increased transparency should be encouraged in subsequent adjustments.

<sup>3</sup> Notably, Climate Action Tracker also mentions the 90% projection in its 2024 update as well, saying: “our knowledge of the climate system tells us that there is a 33% chance of it being 3.0°C or higher and a 10% chance of being 3.6°C or higher” (CAT 2024).

adding them to the main graphs, since this makes the update in methodology responsive to the ethics of public communication. I hope other reports follow suit (and add 95% as well).

UNEP's revised approach draws our attention to some highly salient considerations. For instance, in foregrounding the projection that on "current policy" there is only a 90% chance of staying below 3.3°C, the report highlights the corresponding *10% chance of exceeding 3.3°C*. The graph also draws attention to the fact that the top of the error bar for the 90% projection goes as high as a whopping 4.6°C.

In my opinion, allowing a 10% chance of exceeding 3.3°C - with an error bar all the way out to 4.6°C - hardly seems a morally responsible benchmark.<sup>4</sup> Consider, for example, that 3°C is associated by some with regional collapse and 4°-5°C with catastrophes at the global level that threaten human civilization as we know it (e.g., Gardiner 2011a; McKinnon 2012; Lynas 2020; Kemp et al. 2022; see also Burgess et al. 2022). A set of policies that put the planet at risk of entering those ranges seems clearly deficient. It is likely to face criticism from most ethical perspectives, including those emphasizing precautionary principles, protecting human rights, and enhancing well-being (e.g., prioritarianism or expected utility theory).

Moving on, it nevertheless remains unclear how (or whether) the UNEP report responds to criticisms of other background assumptions that ground mainstream diagnoses of what it would take to be "on track", including conventional assumptions about climate sensitivity, linear change, and carbon dioxide removal (CDR) (e.g., Gardiner 2023ab). For instance, evidence is accumulating that low climate sensitivities do not account for observed trends (e.g., Hansen et al. 2023; Myhre et al. 2025) and that some "tipping points" may be close by (e.g., Lenton et al. 2019; Armstrong McKay et al. 2022). In addition, while UNEP itself expresses skepticism about the viability of massive-scale CDR, it appears not to pursue this in its main graphs. Thus, additional clarifications and changes seem to be needed.

My positive proposal is that future reports should highlight the array of concerns about what would count as being "on track" by producing graphs that show what happens when the mainstream assumptions are relaxed or removed.<sup>5</sup> Such graphs would be useful given separately, through revealing the effects of relaxing particular assumptions taken in isolation. Potentially, it would be even more illuminating to make clear the *cumulative* impacts of varying *multiple* mainstream assumptions. If policy analysts could provide graphs that clearly communicate what the evolving situation would look like if we

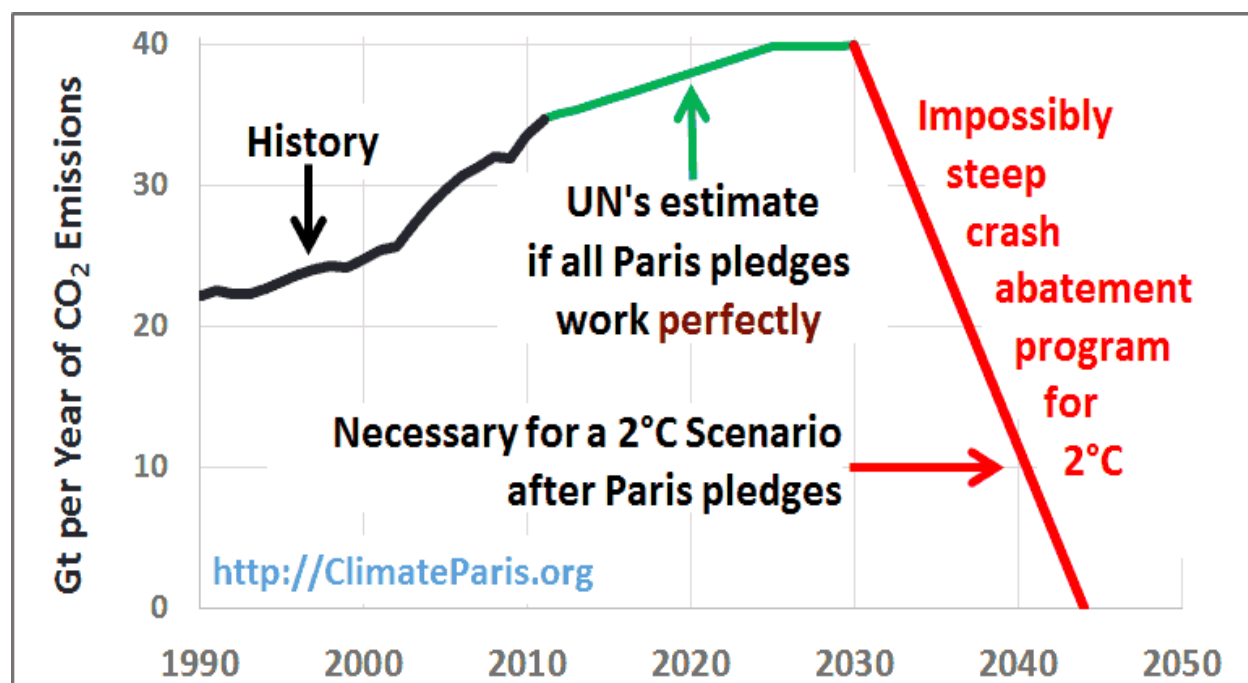
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<sup>4</sup> The other projections for 90% are also notable. Adding unconditional NDCs still gives a 10% chance of exceeding 2.9°C and an upper error bar at 4.0°C, while including conditional NDCs merely reduces those numbers by 0.1°C each (to 2.8°C and 3.9°C). Only the addition of the net zero pledges pushes the temperatures associated with a 10% chance down substantially, to exceeding 2.3°C (although with 2.9°C for the upper error bar). Yet, of course, that is not overly encouraging, since those pledges are questionable given the history of international climate policy.

<sup>5</sup> I also suggest that the relevant graphs show the effects on the different probability projections (e.g., 50%, 66%, 90% and 95%). That would be a helpful improvement in the service of ethical decision-making.

combined a range of pessimistic yet realistic background assumptions, we could then compare that analysis to the much more optimistic picture painted by the approach that is currently mainstream. A more thoroughgoing approach to modeling less optimistic assumptions – going beyond simple error bars – would be a significant contribution to wider understanding, especially among decision-makers and the general public.

Of course, one notable risk is that such graphs will look like this one —produced by an activist organization around the time of Paris— which signals the impact of taking out the optimistic CDR assumptions:



Highlighting such graphs might prove disturbing to many. Nevertheless, it is essential that ethical policy analysis communicate the situation clearly to the public and decision-makers even if – or perhaps especially if – the news is disturbing.

### UNEP's Defenses of Paris

Despite UNEP's longstanding concerns about the inadequacy of mainstream climate action, the current report inserts a staunch defense of Paris and the UNFCCC. It states: "it would be *wrong* to interpret the inadequacy [of current climate action] as a *failure* of the Paris Agreement or multilateralism"; and that it is "*indisputable*" that the Paris Agreement "has been a pivotal driving force for global climate ambition and action in key areas over the past decade" (UNEP 2025, 2; emphases added).

UNEP lists four reasons for saying that charges of failure are mistaken: (i) reductions in projected emissions; (ii) progress on net zero pledges; (iii) advances in governance and accountability; and (iv) the accelerated adoption of renewable energy technologies (UNEP 2025, xii; 2-3). I have addressed most of these responses elsewhere (e.g., Gardiner 2024; 2025; 2026). So, here I revisit them only briefly.

As we have seen, I am skeptical about [(iii)] the (alleged) “advances in governance and accountability”. For example, in my view Paris imposes notable obstacles to progress and has absorbed massive amounts of time and energy. I am also concerned about the weak overall impact of [(iv)] the “accelerated adoption of renewable energy”: for example, while changes in “climate intensity” are notable, these are currently being swamped by economic growth (e.g., Jiang et al. 2025). Furthermore, I am resistant to relying on (ii) “progress on net zero commitments”. While these may look appealing in the abstract, in context there are major worries that climate policy is (once again) being pursued through very long-term voluntary commitments, where the risks of moral corruption are high (e.g., through “shadow solutions”, “smokescreens” and “dangerous illusions”). To *assume* that net zero commitments will evade these pressures seems like a triumph of hope over experience. Moreover, chances are that, even if countries end up converging at net zero in 2050, it will not be because of Paris but for other reasons.

This leaves us with [(i)] the reduction in projected future emissions since 2015. As I write, the declining projections argument is the main reason being invoked by politicians and analysts defending Paris. Nevertheless, there are reasons to be skeptical.

The first central problem with the declining projections argument is that the framing seems biased in the direction of *climate optimism*. One issue is that, as we saw above, mainstream projections continue to show serious exposure to high climate risks — in the zones of 2.8°-4.6°C — and the projections themselves rely on concerning assumptions about climate sensitivity, linearity, and CDR. In context, then, whatever progress may have occurred has been *insufficient to move us out of very dangerous territory*.

A second issue about optimism bias concerns underlying assumptions about how the future will unfold. Notice that a potent framing effect of the UNEP graphs and other mainstream analyses is that they present the continuation of “current policies” as if this is the worst climate trajectory remaining on the table. Yet this framing is seriously misleading: clearly, there are scenarios where “current policies” are reversed, and humanity pursues fossil fuel *expansion*. The standard UNEP graph (above) does not model these possibilities; thus, it effectively removes them from view. This seems a clear failure in terms of effective and ethical climate communication. As one authority states:

“It is crucial to recognize that current policies and commitments are not necessarily the upper limit on future emissions. There are reasons to expect climate-policy ambitions to increase over time. But as current events show, it would be a mistake to rule out a future characterized by resurgent nationalism that strains global cooperation and leads to increasing reliance on domestic fossil-fuel resources and a corresponding rise in emissions.” (Hausfather and Moore 2022)

More specifically, this issue should invite questions about how confident Paris' defenders are entitled to be when they assert that Paris has reduced overall climate risk *in the long-term*. If the political risks to "current policies" are rising, claims about reducing risk in (say) 2100 are fragile. This line of criticism is amplified if Paris provides insufficient resources for managing political fragility or indeed encourages fragility, as I argue elsewhere (e.g., Gardiner 2011a, 2022, 2026).

The second central problem with the mainstream's declining projections argument is that it relies on *contentious and morally-inappropriate baselines*. Most generally, the declining projections argument can be read as implicitly suggesting that if there has been *any* improvement in *any* respect in the general climate situation then Paris and the UNFCCC have succeeded, at least in part. Yet this baseline seems a clear mistake, for several reasons.

The first reason is that typically failure should be measured *against the overall objective*. The central aim of the UNFCCC process is to prevent dangerous anthropogenic interference with the climate system, understood in terms of the 1.5°C and 2.0°C thresholds. Yet a decade after Paris, UNEP's own analysis tells us that breaching 1.5°C is more-or-less inevitable and 2.0°C is under severe pressure. Moreover, UNEP projects that there is a 10% chance of exceeding 3.3C by 2100 and the error bar stretches out to 4.6C. In addition, what is required to meet those objectives has become ever more demanding, and perhaps even socially and politically impossible. Consequently, it is difficult to see the overall situation as anything other than a clear failure.

To underline this thought, consider an analogy. Imagine a professional sports coach who declares at the start of the season that, after many years of support, investment and underperformance: "we've done it"; "our preparations have been a monumental success"; "we've put in place the right infrastructure"; and "we are now unstoppable and ready to win it all". Later, with only a few games to go in the season, the team has no chance of making the playoffs. It also has a very low win percentage and a dire points differential. Nevertheless, the coach declares: "It is wrong to call our strategy a failure. We have won a couple of games against the weaker teams. We claim credit for that." When pressed, they add: "Looking forward, we are making high-risk investments that, if they pay off, might lead us to the playoffs eventually." Typically, such pronouncements inflame supporters. Such coaches rarely last long.

Drawing on this analogy, one might say that, after many years of underperformance, Paris and the UNFCCC continue to lose the climate game and badly. In addition, the opposition do not seem to be running out of steam, and in some ways seem to be gaining momentum. Moreover, there is no serious plan for doing better. Consequently, this is not a good moment to claim credit for not losing more heavily. Indeed, to refuse to admit the failure seems dangerously complacent and short-sighted. A new strategy is needed, and probably a management overhaul too.

The second reason for concern about baselines is that "any improvement in any respect" is not particularly salient for pushing back against the perfect moral storm analysis.

Specifically, proponents of the declining projections argument cannot defeat the PMSA simply by claiming that Paris has prompted some kind of action over the last decade (or that the UNFCCC has since Rio in 1990). Most notably, the PMSA predicts that climate responses will *evolve* over time, so it anticipates both action and change (e.g., Gardiner 2011a, chapter 10). In particular, (i) the PMSA does *not* assume that *complete inaction* is the only or most relevant baseline for comparison; instead, (ii) it puts more emphasis on (a) *protecting older generations and (b) especially the elite*, and (c) on *providing an appearance of progress*. Consequently, the more relevant baselines for assessing the PMSA are ones that aim at protecting the older generations of decision-makers (especially the elite) and that manifest or encourage moral corruption.

Here the PMSA appears to be on solid ground. In particular, it is highly plausible to think that the reductions in projected emissions lauded by defenders of Paris in support of the UNFCCC *reflect* the PMSA baselines, rather than providing evidence *against* the PMSA. In other words, the alleged “success” of the UNFCCC process may merely be in *promoting shadow solutions*. Yet obviously this is the wrong baseline of ambition for an ethical climate policy. Moreover, the PMSA predicts moral corruption, including through smokescreens and “dangerous illusions” of progress. Awkwardly, showing *some* “progress” against the baseline of any improvement may serve this purpose well. One might say that limited action functions in part as “a piece of cheese on a string” for the climate mice (cf. Gardiner 2024). It does enough to keep the climate-concerned engaged in the process - and distracted from what is going on elsewhere - even as it does not really respond to the core issue. It also provides further cover for those who wish to continue overexploiting the climate by suggesting that “change is coming (eventually)” (cf. Gardiner 2011a, chapter 9).

The third central problem with the declining projections argument is that the claim that Paris and the UNFCCC are responsible for reducing overall climate risks *needs to be argued for* rather than simply assumed. First, one issue is the problem of misattribution. Correlation is not causation. Progress on reducing climate risk may be driven by other factors, not Paris itself. For example, past climate commitments have often been better at signaling what countries were *already* doing or planning to do (typically for other reasons) rather than reflecting any real increase in climate ambition. Similarly, earlier UNEP projections explicitly speak of a “lost decade” between 2009-2019 and claim that 2019 emissions were more-or-less as projected under UNEP’s business-as-usual scenario in 2009 (UNEP 2019; Gardiner 2026).

Second, and more broadly, context matters. For instance, while a more recent study credits Paris for progress on reducing “carbon intensity”, it also emphasizes that “in spite of these positive developments, *the overall news is not good*”, in large part because “mitigation efforts to reduce carbon dioxide emissions and meet the Paris Agreement have been *offset* by economic growth” (Jiang et al. 2025; emphases added). If “the overall news is not good”, then repeatedly saying “Paris is working ... just not fast enough” looks myopic and liable to mislead the public.

Third, there is some risk that “not fast enough” is actually “as good as it gets”. For one thing, it is possible that most of what has happened so far amounts to the picking of low-hanging

fruit. Moreover, some argue that we should not expect a transition away from fossil fuels even in the long-term, but instead the addition of renewables to a rapidly expanding pool of energy resources (; see also Thombs 2026). If so, perhaps any slowdown in emissions growth will turn out to be short-lived.

To conclude, mainstream defenses of Paris and the UNFCCC are too quick, especially in the face of the PMSA. The climate establishment would do better to be less defensive and more realistic about the situation humanity finds itself in. Otherwise, it risks facilitating institutional denial about the climate threat (cf. Gardiner 2024).

## 2. On the Nature of the Perfect Moral Storm Analysis

Let us turn to the status of the perfect moral storm analysis.

### 2.1. A “Normal” Failure?

Shahar and Schmitz agree with the fundamentals of my analysis and with the claim that Paris is highly deficient. Nevertheless, they question the label ‘a perfect moral storm’. Specifically, they say:

“... calling the failure of Paris a “perfect moral storm” implies that, but for factors analogous to the kind of freak meteorological conditions that make for perfect storms, effective global cooperation would be within reach.” (P. 66)

Against this, they assert:

“Gardiner’s actual conclusion is more dismal than his borrowed metaphor suggests, though, because what Gardiner describes as a perfect storm in the arena of global diplomacy is business as usual. The Paris Agreement’s breakdown is not a freak outlier. It is not a rare convergence from multiple directions of singularly bad luck. Global diplomacy failing to solve this difficult problem is *normal*. It is not preordained ... But it is predictable. Indeed, Gardiner predicted it. ... We never had Paris: Gardiner warned us. But we were never going to have Paris.” (P. 66)

SS raise a reasonable worry. Still, my view is more complex than their framing of the “perfect storm” metaphor suggests.

### *The Unusual*

I begin with a general observation. Over time, I have changed the way I talk about the perfect storm metaphor and its relation to my analysis. In early work, I included the term ‘unusual’ in the description of the general idea of a perfect storm and sometimes in the description of ‘a perfect moral storm’ as well (e.g., Gardiner 2006, 2011a). Nevertheless, I do not regard it as critical to the analysis and in subsequent writing I have tended to drop

the reference to ‘unusual’. For example, I did not include it in the paper that is the subject of this symposium (Gardiner 2026), nor in its predecessor (Gardiner 2022), nor in other work applying the PMSA in different settings (e.g., Gardiner 2023a).

One reason I dropped that language was because it encourages confusion. In particular, the concept of ‘unusual’ is ambiguous in unhelpful ways: one meaning is ‘not routine or everyday’; another is ‘unlikely’. These senses often go together but can come apart. Sometimes we use ‘unusual’ to refer to something that is not routine or everyday but nevertheless is not particularly unlikely. For example, you might say that it was unusual for your favorite sports team to win the championship (in the sense of *not being routine*), without meaning that it was *unlikely* that they would do so. Similarly, while instances of the perfect moral storm such as climate change are not “routine” or “everyday” issues, that does not necessarily imply that they are unlikely to arise. (The same applies to the closely related concept ‘normal’, to which I return below.)

To be clear, I continue to believe that manifestations of the PMSA are “unusual” in the sense of not being “routine” or “everyday” (see below). Therefore, I could have decided to keep pressing that as the primary sense of ‘unusual’, while regarding it as a secondary (and more contingent) matter whether instances of the perfect moral storm were also unlikely to arise. However, I tend to think that debates about these questions are far from the heart of the PMSA, so I have generally chosen to leave them behind instead.

### *Freaks, Outliers, and Bad Luck*

Nevertheless, there remain questions to discuss in relation to SS’s comments. An initial set of issues concern related terminology. I am uncomfortable with the phrases “freak outlier”, “freak conditions” and “singularly bad luck”. To be clear, I do not think that the PMSA is grounded in such concepts. Let me offer some points to illustrate this.

My first point concerns the fact that the terms ‘freak’ and ‘outlier’ are typically reserved for extremes. Importantly, they pick out something that goes far beyond the *merely* “unusual”. Common dictionary definitions of ‘freak’ refer to “something that is *extremely* unusual or unlikely, and *not like any other* of its type” or that which is “*very* unusual or *unexpected*” or “*strange*” (Cambridge Dictionary 2025; emphases added), or that which is “not natural, normal or likely” or is “*odd, unexpected* or *extremely capricious*” (where ‘capricious’ means “governed or characterized by sudden, irrational and *unpredictable* impulses or whims”) (Mirriam-Webster 2025). Similarly, ‘outlier’ typically refers to “an extreme case or exception” that “exists outside or at an extreme of a category, pattern, or expectation” (American Heritage Dictionary 2025) or “a place that is *far* from the main part of something”, something “*very* different from other ... things ... so that it *cannot be used to draw general conclusions*” or “*very* different *from all the others* in a set [that] does not seem to fit the same pattern” (Cambridge Dictionary 2025; emphases added).

I do not think of climate change as *extremely* unusual in the senses typically implied by

‘freak’ and ‘outlier’. One sign of this is that I believe the PMSA has broad application and so covers a much larger range of cases than climate change alone. For instance, in the book *A Perfect Moral Storm*, I am clear that: (i) the PMSA is directed toward global environmental change in general; (ii) climate change is only one instance of global environmental change; (iii) we should expect other environmental manifestations to arise; and (iv) the PMSA will have purchase for other, nonenvironmental problems too (e.g., Gardiner 2011a, chapter 1, which is entitled ‘The Global Environmental Tragedy’). Elsewhere, I list numerous relevant examples of plausible manifestations, including: nuclear proliferation, long-term nuclear waste, intensive agriculture (e.g., soil erosion), artificial intelligence, financial deregulation, and ocean acidification.

Another sign that I do not see the PMSA as extremely unusual, in the sense of being about “freak” conditions or “outliers”, is that a prominent part of my view is that we *are likely* to see challenges of this form emerge much more regularly, perhaps in more or less degenerate forms, as humanity continues to develop. Indeed, far from being “freak outliers”, I suspect that problems with the general shape of a perfect moral storm will become *central features of our experience* over the next few centuries (e.g., Gardiner 2011a).

My second point calls on the fact that I describe core features of the PMSA as constituting *basic standing threats*: threats that are fundamental, persistent, “*built into the fabric*” of things — and so to be expected. Therefore, we should not describe these core features of the PMSA as resulting from “singularly bad luck” (or even “freak conditions”).

My main focus in talking about basic standing threats has been on the intergenerational storm and the problem of intergenerational tyranny. Still, I also believe that similar basic standing threats are to be found in other dimensions of the PMSA. One example is the tyranny of humanity within the ecological storm (e.g., the “kick the dog” dynamic). Another example arises within the global storm, in the buck-passing behavior of nation states and other collectives, especially given exacerbating factors such as background injustices, skewed vulnerabilities and unholy alliances against the future. Similarly, threats of moral corruption are also persistent, especially in intergenerational settings. They merely become extreme within a perfect moral storm.

My third point is that, when it comes to the real world, I am not focused on pure instances of the PMSA, but rather on *degenerate* cases. By this I mean cases that reflect the basic dynamics in impure but recognizable ways. Moreover, I believe there are plenty of cases where some storms are present but not all, and again in degenerate ways. Plausibly, SS and I would agree that these partial and degenerate cases help to explain many dysfunctions of global diplomacy in our time. Notably, even if pure cases were rare, it would not follow that degenerate cases are.

Summing up, I would not describe my view as resting on claims about “freak outliers”, “freak conditions”, or “singularly bad luck”. On the contrary, I am thinking of basic standing threats that are built in the fabric of things and likely to be fundamental features of human life moving forward. In one sense, then, I am on board with SS in thinking that the situation

is more “normal” than some understandings of the metaphor of ‘a perfect storm’ may suggest. My analysis exposes some *standard features of our predicament*.

Nevertheless, I do hold some related views that may give rise to the confusion. In particular, I would not claim that the PMSA identifies problems that are “normal” in the sense of being “routine” or “everyday” issues.

First, on the contrary, I maintain that cases like climate change challenge conventional institutions, theories and concepts, where this is in part because the latter were not designed with these kinds of problems in mind. Thus, we are not talking about the “routine” or “everyday” from the point of view of conventional institutions, theories and concepts.

Second, this departure from the “routine” and “everyday” is not a mere accident of history. Instead, it arises in part because most issues facing human societies do not involve a *strong convergence* of the global, intergenerational, ecological, theoretical storms, together with a lurking problem of moral corruption. Plausibly, (i) many issues that humans need to address do not involve any of these challenges, while (ii) some involve some storms but not others, (iii) some implicate them only in a minor or moderate way, and (iv) further cases that involve all of them nevertheless display only a weak convergence. Therefore, while not “freak outliers”, it remains true that instances where the PMSA applies in a robust way are also not “routine” or “everyday”, and so in that sense *not* “normal”. This is especially true when it comes to questions of institutional competency and design.

To this, we might add three further quick points about the appropriateness of the language of “perfect storms”. First, *historically-speaking* it remains true that the strong convergence highlighted by the PMSA is “rare” and “may be unprecedented” (Gardiner 2011a). So, it would make some sense to continue to speak of “a perfect moral storm” even if one insists that the metaphor is bound up with the (statistically) unusual. Nevertheless, second, we are now entering an age where both strong convergence and degenerate cases are likely to become much more commonplace — a “new normal”, if you like. Still, third, even in a new normal, the challenges are hardly “routine” or “everyday”. For one thing, the depth of the challenge to humanity is profound — as it is deep and structural — even as it is also entirely predictable. For another thing, the issues radically transcend the “everyday”.

Consequently, to my mind, it remains appropriate to use the metaphor of “a perfect moral storm”.

### *Global Diplomacy*

With those general points in mind, we can turn to SS’s more focused concern. SS refer to what they think of as the “normal” failures of global diplomacy.<sup>6</sup> Does this observation

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<sup>6</sup> Let me clarify a couple of issues that may be a distraction. First, SS claim that failures of global diplomacy are normal and indeed “business-as-usual”. The PMSA neither affirms nor denies this claim. It is aimed at providing part of the explanation of failure in a range of cases. Second, SS assert that the perfect storm metaphor *implies* that effective cooperation would be “within reach” but for the obstacles recounted in the PMSA. I do not believe the

undercut the PMSA?

Concern about the failures of global diplomacy could be taken to signal a skeptical view of the current international order that is common, especially in the United States. Nevertheless, it is worth noting that not everyone agrees with this skepticism, and especially on the very strong claim that the international order always fails or is doomed to fail on all questions (cf., Cross 2024). More importantly, SS themselves do not appear to endorse such strong skepticism, since they cite with approval the Montreal Protocol on ozone depletion. Instead, SS's view seems to be that global diplomacy can be successful under the right kind of conditions, where the incentives of various actors are aligned or can be made to align. Moreover, they appear to agree that something like a set of adequate global institutions — possibly emerging from my GCC proposal — would be a good thing, even if they believe it to be not particularly likely to come into being at present.

To be clear about my own position, I see global diplomacy as one site for talking about the PMSA, but not the sole or even necessarily the most important site. Global diplomacy is only one vehicle through which the PMSA is manifest. Arguably, it is also not fundamental in any case. Rather than being characterized as meaningful negotiations by governments focused on national well-being, many see the UNFCCC and other international institutions as largely a front for other, much more partial interests, in effect even if not in intent. On this picture global diplomacy as currently practiced is closer to a *symptom* of disfunction than the primary cause.

Nevertheless, there remains a more general issue of whether climate failure should be understood as “just another example” of wider geopolitical disfunction and whether this undermines the *explanatory* appeal of the PMSA. (I am unsure whether SS intend to make this objection, since they are generally convinced by the PMSA; still, I raise it because others may be less sympathetic.) Given what I said above about the nature of the PMSA, answering this question becomes complicated. Notably, the PMSA already contributes to a broader understanding of diplomatic disfunction than is captured only by the climate case (e.g., through its coverage of many other real-world challenges, identification of basic standing threats, highlighting of degenerate cases, and so on). Among other things, this implies that we should regard some expansion of coverage as in its favor, not as necessarily constituting an objection. If so, the main issue turns to one of distinguishing those failures of international diplomacy accounted for through the PMSA from others that are more “everyday” or mundane. In the climate case, I have already offered multiple lines of evidence for the salience of the PMSA by describing the specific explanatory relevance of central concepts (such as intergenerational tyranny, moral corruption, shadow solutions, unholy alliances against the future and so on) to Paris, Kyoto and the UNFCCC (e.g., Gardiner 2004, 2011a, 2026). So, I will not repeat them here, especially as my current set of commentators seem convinced. More generally, I leave an analysis of the PMSA in the

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PMSA is committed to such a claim.

broader context of global affairs for another occasion, or perhaps for other authors.

## 2.2. Economic Corruption

Matthias Fritsch raises three general questions. First, although persuaded by its significance, Fritsch wonders whether the PMSA should be seen as providing only a necessary part of the explanation for climate failure, a sufficient explanation, or something in between. He settles on “something in between”. (P. 73)

Second, Fritsch argues that the PMSA could - and should - be usefully augmented with explanations that highlight the role of economic structures and specifically capitalism in both driving climate change and undermining successful climate action. Helpfully, he does not – for the most part – see this augmentation as in conflict with the PMSA, but he does wonder why a critique of capitalism does not play a central role, and perhaps *the* central role.

Third, Fritsch questions the place of what I call “background injustices” in the PMSA. These include factors such as inequality, class, race, gender, disability, the legacies of colonialism and feudalism, and so on (Gardiner 2011ab). MF repudiates the word “background” and instead insists that these factors should be seen as *foreground* injustices. In general, MF’s worry seems to be that the PMSA risks giving too minor a role to factors in climate failure that others regard as not only as necessary features of the problem but as central.

I appreciate MF’s sympathetic approach to the PMSA. I also note that he is not alone among writers focused on capitalism in believing the analysis has much to offer: for example, Andreas Malm and Wim Carton refer approvingly to *A Perfect Moral Storm* as “the greatest classic of climate ethics” (Malm and Carton 2024, 76). Nevertheless, I suspect that some whose central concern is to critique capitalism will adopt a more negative stance. Plausibly, they will consider their critique more-or-less sufficient for a proper grasp of the situation and so regard the PMSA as unnecessary, or at best on the periphery. Some may also regard it as counterproductive, in that they will hold that in practice the PMSA serves to *obscure* what they see as the crucial issue of the destructive power of capitalism. They may even believe that this obscuring amounts to a major distortion of our understanding that facilitates moral corruption. Similarly, writers who wish to center other factors – such as colonialism, indigeneity, race and gender – may also be skeptical of the PMSA. Given this, in my responses to MF, I will try to keep both positive and negative perspectives on the PMSA in mind.

On Fritsch’s first question — the role of the PMSA — let me clarify that I see my account as providing a *necessary and central* part of a proper diagnosis of the climate crisis (and other global, intergenerational and environmental problems); however, I do not see the PMSA as a sufficient explanation. Some evidence for this is that elsewhere I say: “If political inertia is the key problem, what causes it? ...I have been arguing that *a good part of the explanation* is that climate change constitutes a perfect moral storm” and “As climate change is a

complex phenomenon, *I cannot hope to identify all of the ways in which its features cause problems for ethical behavior*" (Gardiner 2011a, 346 & 23; emphases added).

On the second question my basic response is that I do not think that the existing PMSA ignores economic structures. In general, much of the analysis is targeted at institutions and includes many socio-economic structures under that heading, including markets. Three more specific comments may be helpful.

First, one issue may be linguistic. The term 'institutions' sometimes gets used in a broad way to include socio-economic structures, but it can also be used in a narrower sense to refer to administrative bodies or systems.<sup>7</sup> So, perhaps we are simply talking past one another.

Second, I maintain that both socio-economic structures and the kinds of mainstream economic thinking that inform them play a *key role* in driving the perfect moral storm surrounding climate change under current conditions. For example, I consistently use conventional (and highly imperfect) markets as one central example of the kinds of institutions that facilitate the perfect moral storm (e.g., Gardiner 2011a, 231 & 239; cf. Gardiner 2006, 40). Similarly, my central example of *theoretical inadequacy* is standard neoclassical economics and its treatment of climate change. This has not gone unnoticed. For instance, in his review of the book, Steve Vanderheiden calls the relevant chapters "perhaps the finest sustained normative critique of economic value theory since Mark Sagoff's *The Economy of the Earth*" (Vanderheiden 2012). Less kindly, Joseph Heath says my discussion exhibits a "hypertrophied aversion to [conventional] economics" (Heath 2022). While Heath's claim suggests a strange reading of my approach and the wider literature, it underlines the fact that it would be odd to see my work in this area as *avoiding* criticism of mainstream economic thinking or socio-economic structures.

Third, nevertheless, MF may be pointing to something significant. Specifically, it is true that I worry about an *overemphasis* on contemporary economic structures or on capitalism specifically. While these structures typically play an important role in how the perfect moral storm plays out, they are not the only plausible contributors. If we focus too much on one mechanism, we risk missing the bigger picture painted by the PMSA.

One concern is that we should avoid rhetoric that is overly simplistic. Most obviously, it is not true that the climate crisis is currently being driven *only* by capitalist institutions, such as traditional corporations and firms. The global system is complex, containing an array of actors of different kinds. For instance, some of the most powerful actors in the global economy are state-owned enterprises, many of which are also fossil fuel companies or closely connected to them. Indeed, some countries are often described as "petrostates", signaling that fossil fuel production (and often consumption) plays a primary role in explaining their behavior. These actors should not be obscured from view by too heavy a reliance on the term 'capitalism'.

More generally, at a higher level of abstraction, many opportunities for intergenerational

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<sup>7</sup> Probably, I have used 'institution' in each way in different contexts.

buck-passing, ecological buck-passing, and so on, can be realized within economic structures and systems that are not exclusively or primarily market driven. Historically, for example, the former Soviet states employed “command-and-control” systems that were well-known for performing poorly on environmental protection (for humans and nonhumans). This suggests that it would be a mistake to turn swiftly away from markets towards (say) old-fashioned state socialism. Similarly, important questions need to be answered about newer visions of socialism. We should ask for a careful theoretical account of how ecological success is to be achieved - ideally, with good empirical evidence to it back up. Plausibly, repudiating *only* conventional capitalism might take us “out of the frying pan into the fire”. A global revolution could occur, but the perfect moral storm might continue to roll on within a different system, utilizing other economic structures.

This point underlines the fact that, vitally, the PMSA is not wedded to a *specific* critique of the status quo. It is realizable in multiple ways. I believe this is an advantage of the analysis, not a failing. So, I would push back against critics less sympathetic to the PMSA than MF who would claim that the PMSA should be retired or supplanted in favor of a more specific critique of contemporary capitalism. I would also resist the criticism that the PMSA is itself obscuring and thereby encourages moral corruption. Indeed, I would counter that, arguably, to focus only on a critique of contemporary capitalism would itself be distortionary. Our diagnoses of failure need to be more capacious. So, I reject the radical rejection of the PMSA.

Stepping back, a couple of more general points are also worth bearing in mind. The first point is that, in our context, there is a real risk that framing the climate debate in the language of ‘capitalism’ versus ‘socialism’ is not particularly helpful.

One issue is that for some the argument for rejecting “capitalism” turns out to be trivial. They believe that the current system is not delivering progress on climate change and other issues. They then label the system ‘capitalism’. Thus, criticism of the current system becomes synonymous with criticism of “capitalism”. Yet criticism of the current system is extremely popular and takes place across ideological lines. So, this deflationary use of the term ‘capitalism’ as simply ‘the system’ obscured much more than it reveals.

A second issue is that for most of the public – and many academics - the terms ‘capitalism’ and ‘socialism’ are primarily grounded in the debates of the twentieth-century. They are also wedded to different forms of ownership of the means of production: ‘capitalism’ refers to a system of private ownership and ‘socialism’ to ownership by the state.

One problem here is that this division does not fit the contemporary world very well. There are no purely capitalist or purely socialist states or societies. Contemporary systems of ownership are more mixed, and control over productive assets is more complex than a simple ‘private vs. state’ account reveals. It is also not clear that the distribution of ownership in a traditional sense is the only consideration that matters in thinking through issues of power.

For these and other reasons, *the old concepts and theories may not meet the moment.*

Even within a Marxist orientation, it is not clear that they are the most useful. I note, for example, that the noted left-wing economist Yanis Varoufakis calls his latest book *Technofeudalism*. This is to invoke a different phase in the classical Marxist story of human development than either ‘capitalism’ or ‘socialism’ (namely ‘feudalism’). Indeed, Varoufakis claims that “capitalism is dead, in the sense that its dynamics no longer govern our economies” (Varoufakis 2024, x). Perhaps then we need new concepts, based in new theories, and that is a central part of humanity’s challenge.

A further problem with the historical embeddedness of ‘capitalism’ and ‘socialism’ is that the framing encourages prejudices. Those familiar with the terms ‘capitalism’ and ‘socialism’ from the older contexts have often already formed strong views based on the history and are primed to defend those views in newer contexts. This is a barrier to progress and to mutual understanding. Perhaps almost all agree that the current system is defective, but they will fight to the death if they think they are being asked to accept historical forms of social organization that they regard as deeply repugnant. Thus, the terminology tends to stoke division rather than focus on areas of potential agreement.<sup>8</sup>

More positively, I am open to MF’s introduction of the term ‘economic corruption’, so long as it is understood in a more capacious way (than merely as referring to ‘capitalism’). Like MF, I agree that economic structures are prime drivers of the perfect moral storm and of moral corruption. They provide much fuel to the fire, often in straightforward ways and sometimes indirectly too.

I would add that the door is open for introducing a number of similar concepts, such as ‘cultural corruption’, ‘anthropocentric corruption’, ‘gender corruption’ or ‘racial corruption’ under moral corruption (or perhaps alongside it). Indeed, I take many of these ideas to be either already lurking within, or natural extensions of, the PMSA. Thus, I am happy for them to be made more explicit and explored in more detail as and when people find them useful.

Nevertheless, I want to register a concern that other, more familiar lines of analysis do not overwhelm appreciation of the PMSA. We should take care not to assume that because

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<sup>8</sup> The last point – about stoking political division – strikes me as important. Assume that one aim is to generate successful cooperation, in part through mobilizing a range of agents at multiple levels to act (e.g., individuals, communities, businesses, and governments). This vision is poorly served if one begins by demanding that those you disagree with on other topics must cooperate on terms that are deeply controversial for them, especially if they are controversial to the point of being provocative and seriously confrontational. Asking a traditional right-wing person to accept socialism would be one example; asking a traditional left-wing person to accept capitalism is another.

The broader thought is that one should not start out on the pathway toward a cooperative venture by demanding that those with whom one disagrees accept the equivalent of “a poke in the eye”, especially in terms of their core commitments. That does not seem like a good faith effort. Notably, this issue is not confined to the ‘capitalism vs socialism’ framing. Arguably, it arises when some begin by insisting to traditional liberals that climate action requires a huge curtailing of individual freedoms. Plausibly, it also comes up if one insists that traditional environmentalists must accept a radical expansion of conventional nuclear power (via nuclear fission). Surely, we should start by at least trying to accommodate the core concerns of disparate parties. Even if in the end serious compromise is required from everyone, it is unhelpful to *begin* by insisting that the main options on the table are those that involve major sacrifices of values that one’s normal opponents cherish. It is especially unhelpful if this is not necessarily true, or if creative solutions might be found that minimize or at least moderate the sacrifices.

there are a number of traditional hammers, every problem must be a nail. This too can amount to a form of moral corruption.

I am particularly worried about neglect of the intergenerational dimension. For instance, I remain skeptical of claims that most writers – including both anti-capitalists and mainstream economists - are already appropriately engaging with the intergenerational storm and the more specific issues of intergenerational tyranny and intergenerational moral corruption. For example, MF helpfully cites three authors who register the point that climate change has an important intergenerational dimension. Nevertheless, there is a significant gap – indeed a deep gulf – between simply acknowledging that problems such as climate change could fuel intergenerational injustice and making the collection of claims that I do. For instance, my claims include: (i) that intergenerational tyranny is a deep structural problem that (ii) amounts to a basic standing threat to human societies (and humanity as a whole) that (iii) is iterated over time and (iv) reveals a serious governance gap that (v) demands an institutional response that (vi) is best approached at the global level. Notably, one might say that mere mention that there is an intergenerational issue is another candidate for the objection of far too much “backgrounding”. Therefore, I encourage other theorists to foreground a richer account of intergenerational tyranny and moral corruption in their analyses.

### 2.3. Foregrounding or Backgrounding Injustice

Let me turn now to the worry that my own account is wrong to use the label “background injustices” to refer to a range of problems that are highly relevant to the climate crisis. To some extent, I understand and even sympathize with this criticism. The word ‘background’ *might* (misleadingly) be taken by some to imply that the issues identified there (e.g., inequality, class, race, gender, the legacies of colonialism, imperialism, and so on) are somehow unimportant or on the periphery.

Nevertheless, this is clearly not my intent. Instead, it reflects an ambiguity in the word ‘background’. Consider the use of the phrase ‘background condition’ in other contexts. For example, one might say that “the existence of oxygen in the atmosphere” is a background condition for life on Earth, or that “keeping the daily temperature below the wet bulb temperature – where humans cannot survive for long without assistance” is a background condition for habitability of certain areas of the globe. In neither case, does the phrase “background condition” imply that what is at stake is unimportant. Indeed, the point is exactly the opposite: that these conditions are essential, including to our understanding of the basic facts of what is going on.

Something similar can be said about understanding the role of background injustices in the current global system. To call something a background condition is not to marginalize it. Often, as with the wet bulb temperature, it is to *highlight its importance*. Notably, we see this in mainstream political philosophy too. For example, when John Rawls draws attention to his (and Hume’s) circumstances of justice as “background conditions”, his intent is to

signal that factors such as moderate scarcity are fundamental parameters for his theory, not that they are of only marginal relevance (Rawls 1999, 109).

I have some sympathy with the critics if they are saying only that we should *change our language* to make this point clearer in all contexts – for example, if the idea is that we should refer to oxygen as a “foreground condition”. In principle, I’d be happy with that. However, then I’m not sure why the PMSA is being singled out for criticism. Instead, we should be emphasizing that the problem is both quite general and that it is more a linguistic issue than not.<sup>9</sup>

### 3. What to Do Now

I turn now to questions about what we should do moving forward, given the failures of Paris and the UNFCCC.

#### 3.1. Localism

SS suggest that global cooperation is not particularly likely, and we should instead fall back on “what works”. In their view, this is some version of “think globally, act locally” which foregrounds ideas about “decentralized forces of entrepreneurship, innovation, and reform”. (P. 69)

I am not against local action. I am also in favor of innovation, creativity, and thinking about frameworks, institutions and social settings that encourage and facilitate them. Not undermining such efforts should be a central concern of climate action and indeed of socio-economic arrangements in general. One way in which climate change threatens the future is through undermining the conditions under which human societies can experience security, freedom and prosperity (whatever that is by their lights). This is one reason that I would be deeply concerned about proposals to empower a climate dictator (or indeed any kind of dictator).

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<sup>9</sup> Some might respond by taking a different tack. Perhaps they will say that there is strong evidence that I do not take the “background injustices” seriously enough, because (they say) I do not spend many words on them. I resist this line of argument. Word counts and importance do not strongly correlate.

Perhaps I should spend more time on the “background injustices”. Some of the reasons I do not are pragmatic. For instance, others already do, and they are often particularly well-qualified. In our context, there are many who can - and some who do - stand up for communities affected by climate change. Arguably, the risk of neglect is less high than it is for future generations, especially those further off in the future. This is one reason I tend to focus on intergenerational ethics.

In addition, I have theoretical reasons for not getting too embroiled in the details of the background injustices. For one thing, I think the PMSA operates primarily at a more abstract level. That is part of its point and its power. For another thing, it would miss a lot to *background the PMSA*, and to focus exclusively on more specific critiques instead, whether those involve what I call background injustices or other things. There are risks on each side. Phenomena such as *Unholy Alliances against the Future* underline this.

Nevertheless, I am suspicious of what I sometimes call “climate localism” or “climate anarchism”. For instance, I see no particular reason to think that humanity will be able to protect the future *simply* through the spontaneous, uncoordinated action of individuals or local communities. Instead, I maintain that institutional responses are likely to be required in order to correct for misaligned incentives, to provide good frameworks for successful coordination, and to do other necessary things too.<sup>10</sup>

More specifically, there are ample reasons to think that incentives are especially likely to be *misaligned* when the PMSA applies or most of the storms are relevant. When a problem is genuinely global, profoundly intergenerational, has major impacts across species, is subject to theoretical inadequacy, and renders us extremely vulnerable to moral corruption, there should be a strong presumption that the problem is a poor candidate for resolution through action primarily at the level of individuals or local communities without wider institutional support.

Notably, we already do not entrust many serious matters to anarchism or localism, such as basic security or national defense. Moreover, this is why many (including most philosophers and political theorists) are not very sympathetic to anarchism in political philosophy. Perhaps they should be. However, I hesitate to make issues such as climate change the test case. I imagine that SS and I agree on this, but the subject may require further discussion.

### 3.2. Supplanting vs. Complementing

Michel Bourban offers three main options for responding to the failures of Paris: “(1) repurposing; (2) supplanting; or (3) complementing the existing regime”. (P. 87) His own position has shifted over time: having previously advocated for (1) [“repurposing”], he now accepts that more radical reform is needed. Nevertheless, he claims to diverge from my position, saying: “Gardiner supports option (2)” [“supplanting”]; “I support option 3” [“complementing”].

As a preliminary, let me propose an alternative framing. Imagine the possibilities for responding to the current climate regime as being on a spectrum which includes (at least) the following zones:

- (A) *Wholehearted endorsement*: regards the current regime as fit for purpose and fully functional.<sup>11</sup>

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<sup>10</sup> For instance, even well-functioning markets require appropriate background conditions, such as respect for appropriately defined property rights, understandings of conditions of exchange, and so on.

<sup>11</sup> For example, some suggest this when they speak of Paris’ “fabulous architecture”.

- (B) *Minor tweaking*: holds that the current regime is largely appropriate but requires (only) modest adjustments or supplements.<sup>12</sup>
- (C) *Moderate internal reform*: accepts that some mechanisms within the existing UNFCCC framework are flawed and proposes sizable structural changes to fix them.<sup>13</sup>
- (D) *External bolstering*: maintains that the flaws of the current regime are best addressed via bringing external mechanisms to bear on the climate problem.
- (E) *Repurposing*: advocates reorienting the regime as a whole in a genuinely new direction.
- (F) *Supplanting*: proposes deep reform where an alternative approach takes the place of (or substitutes for) the current climate regime as the focal point of climate action (and so largely pushes it aside).
- (G) *Total Repudiation*: envisions a comprehensive rejection of the current climate regime in favor of a fresh start untainted by the legacy of previous failures.

Notably, each of these zones covers a range of possibilities within its own part of the spectrum. Consider, for instance, different versions of repurposing: (i) a *substantial repurposing* might redeploy the UNFCCC architecture within a broad international structure focused on environmental security; (ii) a *radical repurposing* might embed this within a global trade regime featuring strong external sanctions for noncompliance and grounded in norms of justice; (iii) a *dramatic repurposing* might add to this by giving climate governance a central role within a reconstituted global institutional architecture.

Similarly, supplanting covers a range of possibilities. For instance, some elements of Paris might be preserved to play a minor role, or they may retain merely symbolic significance, or the UNFCCC might be ignored altogether. One example of supplanting would be if a successful global constitutional convention for future generations put in place new intergenerational institutions that then become the real center of climate action. These institutions would deliberate about which aspects of the UNFCCC to retain or whether to shun the whole process. Plausibly, they might decide to keep a few remnants of Paris (e.g., high-level temperature targets; some reporting mechanisms) but otherwise reject the UNFCCC architecture on the grounds that it institutionalizes barriers to effective climate action.

With this spectrum as background, I will now argue that framing the debate between myself and MB as “supplanting vs. complementing” is unhelpful. The first main point is that the

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<sup>12</sup> For example, the Club of Rome suggest this when they call for changes to Paris but frame the remaining tasks as “moving” to “implementation”.

<sup>13</sup> One proposal in this spirit would reconstitute the stocktaking process to mandate country-by-country assessments made by an independent scientific body in accordance with concrete standards for assigning responsibility.

framing miscasts my view. One reason is that it is misleading to *reduce* my view to “supplanting”. For one thing, I introduce ‘supplanting’ in two places (Gardiner 2026), and in each place it is to describe one of *two* possibilities that I take to be on the table, where the other is radical repurposing. Notably, I do not claim that supplanting is the *only* option or the only one I endorse. I merely say that I see it as “more likely” what is needed. Thus, it is not true that my view is simply “supplanting” (alone).

More generally, the two possibilities I highlight are best seen not as two rigid, rival and so mutually-exclusive strategies, but instead as (rough) markers on the spectrum of possibilities. The key thought then is that *this part of the spectrum* – repurposing to supplanting – is “where the action is” in terms of our response to Paris. In light of the more fleshed out spectrum elaborated above, let me add (as a clarification) that I do not rule out total repudiation, which I see as simply pushing supplanting to the extreme. Thus, it is better to describe my view on where the action is as in the range from radical repurposing to total repudiation (i.e., (E)-(G)).

A second reason why the “supplanting vs. complementing” framing miscasts my view is that it encourages confusion about my attitude to the current climate regime. In particular, it would be misleading to present my position as *distinguished or characterized by its opposition* to “complementing”. (I do not think Bourban himself does this; but it would be an easy mistake for a reader to make.)

Let us pause for a clarification. Bourban does not directly define the word ‘complementing’ or explain why he is using it to describe his framing. So, I will consider a couple of options. The first (weak) option embraces a commonsense understanding of ‘complementing’: two or more approaches are complementing if and only if they can co-exist and contribute towards the achievement of the same general aim in a mutually supporting way. With this understanding of complementing in hand, let me make two comments.

The first comment is that I am not categorically opposed to “complementing” the current climate regime (in the weak sense). For instance, elsewhere I explicitly allow for “parallel tracks”. Specifically, I say: (i) that the two strategies of continuing with the UNFCCC process and pursuing new institutions through the GCC are not inherently in conflict; (ii) that, if one sees some value that can still be achieved through the UNFCCC process, one might pursue both “tracks” in tandem<sup>14</sup>; and (iii) that allowing parallel tracks might even increase the chances of success of each track (Gardiner 2017, 47; Gardiner 2019, 212).<sup>15</sup> In short, I allow for multiple tracks, for retaining the UNFCCC in some form, and for the possibility of their playing mutually supportive roles. Consequently, my general approach is

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<sup>14</sup> For instance, it is plausible to think that the various reporting mechanisms and annual meetings are useful for tracking progress and building community.

<sup>15</sup> Most obviously, knowing that serious intergenerational institutions are coming (through the GCC) could give extra impetus to a process committed to making the UNFCCC more effective and just. Less obviously, a radically restructured Paris agreement might also provide momentum to the GCC. If people can see a way forward - an agreement on climate that might actually work reasonably well if appropriately designed and empowered through new external institutions - they may be much more inclined to support the global institutional reform needed to make it properly functional.

in principle compatible with “complementing” the current climate regime (on the weak sense of ‘complementing’). Therefore, it is misleading to speak of “complementing” as if it is simply an *alternative* to my view.<sup>16</sup>

My second comment responds to the fact that, while Bourban introduces ‘complementing’ in the context of complementing the current climate regime, we might add that it is sometimes useful to refer to complementing in a broader context, where the issue is whether an approach complements other contributions to climate action. The comment is then that I also view my approach as complementing in this broad context. One sign of this is that I emphasize that “a spectacular mobilization of genuine political will at multiple levels” is required *alongside* institutional reform. Therefore, I am on board with the necessity of action from multiple sources, including the ones that Bourban highlights, namely those at the national and subnational levels. My view endorses “complementing” in that context. (Bourban agrees and helpfully notes this toward the end of his paper.)

Summing up, it would be misleading to cast my view as simply “supplanting” and especially as (therefore) in opposition to “complementing”.<sup>17</sup> Among other things, that framing risks encouraging a misconception: that my view seeks to push aside all other drivers of climate action and so is one-dimensional and exclusionary. By contrast, in fact my view does not reduce to supplanting but covers a range on the spectrum from radical repurposing to total repudiation. Nor is my view categorically opposed to complementing (in the weak sense) the current climate regime: instead, it allows for the possibility of continuing with multiple tracks (including the UNFCCC) and straightforwardly accepts (and highlights) the need for political mobilization at multiple levels.

The second main point I want to make against the ‘supplanting versus complementing’ framing of our debate is that ‘complementing’ also seems an unhelpful term for describing Bourban’s view. The first reason is that, while Bourban clearly states that his idea “is to complement the global and international levels with the national and the sub-national levels, *not to supplant them*”, he says other things that seem in tension with this idea.

To begin with, consider two central passages where he describes his position. The first occurs when he introduces ‘complementing’ in identifying his “third way”. Bourban says:

“Is there a third way? The ... option I explored above is to shift the focus from the international and the global levels to the national and sub-national levels (*complementing*). Much more could be said – and has been said – on this topic, but the general idea is to show that national and sub-national climate justice become highly relevant in a context where international and global climate justice are not complied with.” (P. 94)

In this passage, the view being described is one that shifts the focus from one level to another in a context where the other level is *inoperative* or *dysfunctional*. To me, this view is *not* most naturally described as “complementing”. At first glance, the discussion is not

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<sup>16</sup> This does not reduce my view to (D), external bolstering. I believe that Paris requires fundamental reform.

<sup>17</sup>

about two levels that need to be brought together in a mutually supportive way; instead, it is about responding to the failure of one level by *turning one's attention elsewhere*, to something else.

A related impression is created in the passage where Bourban describes his own strategy: polycentrism, augmented with multiscale justice. Bourban introduces polycentrism by saying:

“[the polycentric approach] ... stresses that in the absence of an international treaty that would effectively reduce global GHG emissions, many mitigation measures can be undertaken by multiple entities at diverse scales that, cumulatively, can make a difference. In a polycentric system, each unit enjoys sufficient independence to make norms and rules to mitigate GHG emissions at the local, regional, and subnational levels. Local governments, firms, and international regimes can all encourage polycentric efforts to reduce the risks associated with climate change, even in the absence of an effective concerted framework at the global level.”  
(Bourban 2023 (repeated in 2026, P. 93); emphases added)

Bourban understands polycentrism in the climate case as operating *in the absence* of effective global governance. Consequently, his key idea is *not* one of mutual support between Paris and other levels. Instead, the aim is for independent agents at lower levels to achieve something *without support* from an effective global framework. Again, the phrase ‘complementing the current climate regime’ does not seem apt for describing this view.

One question that arises is whether there is a better word to describe the proposal Bourban expresses in these passages — namely, that of “turning way” in the “absence” of effective action at other levels, and indeed in the presence of persistent, ongoing failure and dysfunction at those levels. Something depends on the extent and nature of failure. If the idea is that Paris is a distraction and putting energy into it is seriously counter-productive (e.g., given the limited resources that Bourban goes on to emphasize), the strategy might be better described as *bypassing*, *withdrawing from*, *giving up on*, or perhaps *ignoring* the current climate regime. More moderately, at the very least the strategy seems to be one of *redirecting* attention away from the current climate regime and so *distancing* oneself from Paris rather than seeking to engage in mutual support. Thus, we might conclude that better words to describe Bourban’s approach run along a spectrum from ‘redirecting’ through ‘distancing’, ‘withdrawing’, ‘bypassing’, and so on, and possibly end up at ‘ignoring’ or even ‘abandoning’.

One might wonder whether ‘supplanting’ and ‘radical repurposing’ are also live options for describing Bourban’s underlying view. If polycentrism is needed because the existing regime is largely nonfunctional or seriously counterproductive, then ‘supplanting’ seems appropriate. ‘Radical repurposing’ may also be a good way of describing some forms of “redirecting”.

These thoughts underline the point that whatever differences there are between my view and Bourban's they are not well-captured by framing the debate as between 'supplanting' and 'complementing'. Arguably, Bourban is a "supplanter". After all, he wants to direct attention away from the current climate regime and put the focus elsewhere. Moreover, he seems to agree that Paris and the UNFCCC should cede their place in favor of a different strategy.

Notably, these terminological issues suggest another: the term 'polycentrism' is also potentially misleading in this context. One generic meaning of 'polycentrism' is 'the doctrine that a plurality of independent centers of leadership, power, or ideology may exist within a single political system' (e.g., Dictionary.com). This generic meaning is compatible with the idea of advocating action at *all* relevant levels (e.g., "use all the tools in the toolkit" or "let many flowers bloom"). On the surface it can sound like this is what polycentrism proposes. Indeed, this is the kind of position being promoted in the classic work from Elinor Ostrom. Ostrom tells us that "[Vincent] Ostrom (1999: 57) defined a polycentric order as "one where many elements are capable of making mutual adjustments for ordering their relationships with one another within a general system of rules where each element acts with independence of other elements"" (Ostrom 2009; see also Ostrom 2012). While Elinor Ostrom is concerned to push back on the view that a global policy is "the *only* strategy needed" (her emphasis), she emphasizes that "building a global regime is a *necessity*" (my emphasis) and that action at other levels can spur such action (Ostrom 2012, 353).

Importantly, this does not to be a helpful way to describe a view like Bourban's. Bourban wants to shift the focus *away* from the global level, is skeptical of making progress at that level, worries about dividing our energies between multiple levels, and advocates putting energy into the national and local levels *instead*. Consequently, it is tempting to label his view 'polycentrism-minus-one', since one center of action is missing, neglected or seriously downgraded: namely, the global level. Thus, his view might better be described as 'climate nationalism plus localism' (perhaps 'loco-nationalism').

A second reason for questioning the usefulness of the word "complementing" to describe Bourban's view emerges from the thought that 'complementing' does not refer to a distinct point or category on the spectrum I identified, but rather as directing our attention to other relationships related to the spectrum. For instance, implicit in the idea of 'complementing' is that to some extent one *retains* the original thing, and in a form that *warrants approval*. On this understanding, (B)-(D) — *minor tweaking, moderate internal reform* and *external bolstering* — are the options most naturally understood as "complementing" the current regime, albeit to different degrees. By contrast, (E) and (F) — repurposing and supplanting — are deeply revisionary. They seek to transform Paris in deep ways, including by changing its basic role and its essentials. Moreover, the core aim is to save the cause of robust climate action, including *from* the current regime. The focus is not on retaining *Paris*, let alone on making *it* seem attractive. Instead, the point is to move quickly beyond the current regime toward a more successful framework, in bold and decisive ways.

The spectrum analysis unsettles judgements about where Bourban stands. On the one hand, I assume that he is *not* implicitly invoking (B) or (C) or (E), since it seems clear that he

regards minor tweaking, moderate internal reforms and repurposing – such as his earlier proposals - as inadequate to current challenges. He says: “Although I used to support ... [repurposing], I now agree with Gardiner that it is no longer sufficient, and that more radical measures are required by the severity of the situation.” (P. 87) If this interpretation is correct, we cannot take Bourban’s view as an exemplar of “complementing” (in the weak sense).

It is possible that Bourban supports (D): external bolstering. However, this would be odd for several reasons. First, Bourban clearly accepts that Paris is deeply flawed and states that more radical solutions are required than repurposing. Yet on our spectrum, external bolstering is a milder option than repurposing; thus, it seems likely that Bourban would reject it too. Second, the idea that much of climate action should be left to states and substate actors is *already* central to the Paris architecture. Moreover, this is one of the central reasons that critics push back against Paris. Therefore, it is unclear how moving only to external bolstering would count as a new “third way” or why we would think it likely to succeed (see also below).<sup>18</sup>

My best guess is that — on my spectrum framing — Bourban endorses supplanting (or perhaps some radical or dramatic version of repurposing). He is arguing that attention should shift away from the current climate regime to “centering” polycentrism and in a way that renders Paris itself either on the periphery or largely irrelevant. Plausibly, then, he agrees with me on the idea that the best we can hope for from Paris is that it may function largely as a symbolic “umbrella” under which the real action occurs (Gardiner 2022, 2026). On this view, we should pay attention to Paris only insofar as it is actually useful for climate action and either ignore or repudiate it otherwise. We should certainly not accept elements of the Paris architecture that are unhelpful or get in the way of climate progress.

Among other things, this analysis disrupts the narrative that a “new” category emerges when Bourban introduces the term ‘complementing’ (P. 92ff). Instead, the spectrum framing suggests that implicitly he is either invoking (B), (C) or (D), or else stretching the meaning of ‘complementing’ so that (E) and possibly (F) also count. On neither reading does “complementing” constitute a new “third way”. The relationships are more complex than that.

At this point, I wonder if a stronger sense of ‘complementing’ may help us to make sense of Bourban’s use of the term. It holds that one thing complements another if the first *completes* the second, or “makes it whole”.<sup>19</sup> On that sense of ‘complementing’, the thought behind MB’s approach might be that loco-nationalism comes into play as the way

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<sup>18</sup> Dale Jamieson regards the basic idea of Paris as requiring that the impetus for action must come from below, in terms of mass movements within and across countries. He therefore suggests that the people have failed, not Paris (Jamieson 2025). A case can be made for this position. Still, I am not convinced that it was ever realistic to believe that success through this approach was likely or that Paris was a good way to facilitate such success. I am also not sure that the people were ever properly put on notice that they were expected to do most of the heavy lifting or that dramatic intervention from them was required. For instance, I do not recall this being a central theme of the speeches in Paris or its immediate aftermath.

<sup>19</sup> ‘Complement (verb): to complete or enhance by providing something additional’ (Mirriam-Webster Dictionary).

of filling in for Paris' failures by *transforming* Paris so that the two *together* make a successful and coherent whole. The idea is that Paris and polycentrism “complete” each other, and in doing so promote the goal of robust climate action. But polycentrism is the driving force, and it is so in part because it transforms Paris into something functional.

If this stronger sense of complementing — ‘completing’ — is what Bourban has in mind, it would be helpful for him to explain in detail what the connection is between Paris and his polycentrism, and specifically in what ways the polycentric approach will overcome the obstacles that plague the UNFCCC process while still leaving Paris in some sense intact.

One reason to ask for more explanation is that one can imagine *ultraminimal* senses of “completing” that either do not seem contentious or do not speak to the heart of the issue. One example would be if someone simply stripped-down Paris to its highest-level goals — such as the 2°C temperature limit — and then claimed that if polycentrism-minus-one were to rescue these goals then it must count as “completing (and thereby complementing) Paris”.

One problem with this ultraminimal view of completing is that it seems trivial and so to preserve Paris more in name than fact. Notice that on this view almost *any* approach that achieved climate success defined in terms of the generic goals would count as “completing” Paris, including supplanting or even total repudiation strategies (e.g., a successful GCC or even emergency solar radiation management that met the 2°C target). Yet surely this is an unreasonably capacious way of understanding ‘complementing’ given that the term is supposed to mark a distinct category.

A second problem is related: why think that the ultraminimal view is enough to count as *retaining* Paris? We should be particularly skeptical of the swift and dramatic retreat from the architecture that the UNFCCC is meant to provide (and which advocates for Paris previously lauded). To walk away from these after three decades sounds much more like supplanting or repudiation. Moreover, to insist that the ultraminimal view constitutes “complementing Paris” seems more like the kind of thing that might be important only as “face saving”. For such reasons, I doubt that ultraminimalism would be attractive to Bourban.<sup>20</sup>

This brings us to the third and final reason to think that ‘complementing’ is not a good way to describe Bourban’s position. The impression that Bourban is drawn towards a version of supplanting is bolstered by three further facts: first, he says he accepts my diagnosis of the failures of Paris; second, he is skeptical about the relevance of action at the global level; third, he urges us to choose polycentrism over global institutional reform. These attitudes strongly suggest that, rather than being retained, Paris is largely to be set aside. Moreover, they do not encourage the framing that the key task is to “make Paris whole” in such a way

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<sup>20</sup> A second example of a minimal view of completion would be if Paris is simply reenvisioned as a “rallying point” – or “umbrella” – under or alongside which successful action may occur, where the real momentum would need to come from elsewhere. This view is one I have suggested elsewhere (e.g., Gardiner 2022, 2026).

that restores our approval of the UNFCCC, nor does Bourban show signs of being particularly interested in that project. The action is elsewhere.

Bringing the points from this section together, the upshot is that, on my current understanding, Bourban is skeptical of the current regime *in (roughly) the same ways that I am*, because he is positioning himself as interested in the *same range* on my spectrum: namely, from radical repurposing to supplanting. One implication of this is that, on the most natural reading, neither of us offers a “complementing” view; however, if one stretches the meaning of ‘complementing’ then probably both of us do. In any case, the action is elsewhere. (Probably, somewhere along the way I have misunderstood parts of Bourban’s view, so I look forward to his clarifications.)

### 3.3. Polycentrism-minus-one

So, where is the action? Where do Bourban and I diverge? One issue is our differing reactions to Paris over time, which may suggest different underlying assessments. Notably, in the past Bourban has had much more faith in the Paris architecture and the UNFCCC process, and as recently as publications in 2018-21. Perhaps some of this difference in faith lingers in a way which helps us to understand our differences in approach. For example, one consideration that drives me toward radical repurposing and supplanting is that I regard various parts of the current institutional architecture as either *vacuous or ineffective or counterproductive* (and sometimes all three). Given this, I am not much inclined to try simply “adding” to the current regime with the aim of fashioning an attractive whole. There are numerous parts of the UNFCCC architecture that impede progress. Often, we must throw off the shackles of Paris, not try to work within them. Bourban’s view has shifted in my direction, but I am not sure how far and in what ways. I look forward to further discussion on this.

A second (related) issue is that Bourban’s polycentric approach appears much closer to the *status quo* than my emphasis on institutional reform. In principle, Bourban supports radical institutional reform and even approves of the idea of the GCC. Nevertheless, he says that, given our actual situation, we must prioritize. In practice, he sees this as implying that we must choose between pursuing global institutional reform and his polycentrism (or perhaps more accurately, “polycentrism-minus-one”). He favors a restricted polycentric strategy – specifically loco-nationalism. His reason is that the climate problem has now become so urgent that the institutional reform strategy will not have sufficient time to deliver. Therefore, he suggests, we should be loco-nationalist polycentrists and give up on pursuing the GCC. Let us call this, ‘the Prioritize Loco-nationalism Argument’ (PLA).<sup>21</sup>

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<sup>21</sup> One notable thing about the prioritization argument is that runs against the spirit of MB’s initial point, that he seeks to complement Paris, while I aim to supplant it. One might have had the impression that MB is being inclusive – “using all the tools in the toolkit” or “letting many flowers bloom” - whereas I am not. However, it turns out that ultimately it is his view that is not very inclusive. He emphasizes that we may need to *choose* between tracks, and he then favors setting aside, bypassing or ignoring the institutional track (and the GCC). This suggests that he wants to supplant both Paris AND global institutional reform in favor of throwing all our energy into his loco-nationalism (or

My first concern is that Bourban may have too much faith in polycentrism-minus-one. Polycentrism is not a new concept.<sup>22</sup> Bourban cites seminal contributions from Elinor Ostrom in 2009 and highlights policy publications from around the time of Paris, a decade ago. Moreover, the basic idea is much older. Over the past few decades, many actors around the world have made efforts to initiate their own climate efforts and coordinate their actions with others. Often, they have rallied around general top-line goals, especially temperature targets and emissions reductions. In the last decade, actors at all sorts of levels, from businesses, universities, community groups, and so on, have been explicitly aiming to make their activities compatible with net zero targets or in some sense in keeping with Paris' global temperature targets of 1.5°C or 2.0°C.

Despite all this activity, climate action remains seriously off track. Consequently — and this is the crucial point — on the face of it, *polycentrism is already taking a long time* and meeting with only limited success; therefore, polycentrists must also confront difficult questions about urgency. Specifically, given the very small carbon budget left for 1.5 and 2.0°C, it seems very risky to center a strategy which so far is not delivering on anything like the scale needed. The upshot is that, at best, it seems likely that the polycentric approach itself needs to be radically enhanced and very quickly. Yet why believe that this is particularly doable or likely under the current time constraints? At worst, some might argue that we already have a *negative* proof of concept. Polycentrism — including in the form of loco-nationalism — has already failed to move the needle on climate action on anything like the scale needed over a period of decades. Isn't that a very good reason to try something else? Isn't it still a good reason if one must choose between continuing to pursue polycentrism and doing anything else? What is the basis for Bourban's faith? It would be helpful to know.

My second concern about Bourban's prioritization argument is his appeal to urgency. I have confronted the urgency objection before in the context of defending my GCC proposal (Gardiner 2017, 2019). There I highlighted five dubious background assumptions that the objection makes: (1) that only the near-term challenges of climate change should concern us; (2) that the global constitutional convention process itself would (necessarily?) take a long time, (3) that we have some alternative way of proceeding that will be much faster and at least as effective; (4) that we must choose between the GCC and other approaches; and (5) that the sole purpose of institutional reform is to confront climate change specifically.

I refer readers to the earlier work for more detail on these responses. Here I will highlight only two issues. First, we should question the assumption that institutional reform must take a very long time. Against this, consider, for example, that the US Constitutional Convention took place over a few months and was implemented in a few years. Second, it is not obvious that *we must choose* between polycentrism-minus-one and global institutional reform. This claim probably rests on several questionable background

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polycentrism-minus-one).

<sup>22</sup> On Ostrom on climate change, see Gardiner 2011a.

assumptions, such as that the capacity to address climate change is sharply limited, that doing both loco-nationalism and something like the GCC is therefore impossible because there is insufficient capacity, and that the appropriate response is to make a quick choice between the two that rules out the one not chosen. I'm not sure what the reasoning is behind any of these assumptions. I can imagine reasons, but I'm unclear on why I should be convinced by them. So, I would like those – such as MB – who endorse the “center polycentrism-1” strategy to offer reasons, and in doing so be clearer what their empirical beliefs are and how they play out. Such clarifications would help to advance the debate.

### 3.4. Into the Arms of Self-interest?

I turn now to a different rival view. Marion Hourdequin finds the PMSA “important and apt”; yet she worries that its success may drive people “into the arms” of an economic realist approach which claims that “there is no place for ethics in climate policy” and that we must rely on self-interest instead.<sup>23</sup> (P. 105) Specifically, Hourdequin tells us that some of her students, on reading the book-length exchange between myself and David Weisbach, agree with the PMSA, but thereby become so pessimistic that they assert that Weisbach's self-interested approach is the only solution (Gardiner and Weisbach 2016). Consequently, Hourdequin is concerned that my PMSA may become a “self-fulfilling prophesy”, so that its success is a “double-edged sword”. (P. 104)

I admit that I find this phenomenon —accepting my diagnosis, but then embracing Weisbach's solution — perplexing. I have argued extensively elsewhere — including in that book —for the necessity of an ethics-based approach, in part because of the perils of relying on self-interest (e.g., Gardiner 2021; Gardiner and Lawson 2021; Gardiner and Weisbach 2016). While I cannot pursue those arguments in detail here, let me identify a few key points to suggest their flavor.

The first key point is that Weisbach's self-interest approach does not, on closer inspection, appear to provide “solutions” that are adequate to the problems at hand. Consider two difficulties. First, Weisbach insists that we must accept sharp constraints on climate policy coming from short-term, narrow self-interest, yet in context this claim threatens to be counter-productive. Weisbach offers as an example of a key constraint the idea that existing power plants cannot be retired early, since this would involve costs to the current generation. He says:

“How do leaders of a country explain that they are shutting down a plant that was just built at a considerable cost, works perfectly well, and is providing inexpensive and reliable energy to people who need it? They can't. Once it is built, it will be used.”

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<sup>23</sup> Note also the framing provided by Inger Andersen, Executive Director of UNEP: “Climate action is not philanthropy – it is national self-interest” (UNEP 2025, XI)

“Installing new fossil fuel infrastructure effectively commits a country to the emissions from that infrastructure for its lifetime, which can easily be fifty or even one hundred years.”

“To be sure, there is going to be some new fossil fuel infrastructure, particularly in developing nations. If we—people or nations concerned about climate change—tell India, China, or other fast-developing nations to scrap plans for new fossil fuel energy which they need for their economies to grow, we will simply be ignored.”<sup>24</sup>

In my view, accepting this sharp self-interest constraint threatens to undercut the central goals of climate action: for instance, Weisbach himself tells us that the infrastructure is already in place that will use up most of the carbon budget for even a 50–50 chance of not breaching the 2°C target for dangerous climate change (185). If this is right, endorsing Weisbach’s self-interest approach threatens to render mainstream climate goals *inaccessible*.<sup>25</sup> This may be why Weisbach appears to admit at one point that 2°C ‘may be unrealistic’ and ‘perhaps a more realistic target is 2.5°C or 3°C’ (Gardiner and Weisbach 2016, 177).

In my view, the inaccessibility result is unacceptable. Moreover, elsewhere I argue that “if current international climate policy is indeed sharply limited by the short-term, narrowly economic self-interest constraint, that constraint is a key part of the problem”. This suggests that a central task for effective climate policy is to neutralize the narrow self-interest constraint by addressing it head on. Consequently, in embracing the narrow form of self-interest and rendering it sacrosanct, the economic realist approach risks “falling on its own (feasibility) sword” (Gardiner and Lawson 2021).

The second area where the self-interest approach appears inadequate concerns who takes on the burdens of the climate transition. Sometimes economic realists encourage the idea that the way for climate policy to succeed is to make the victims of climate injustice “pay off” the big polluters, where those victims are poor countries and future generations. For example:

“Like it or not, the only way for other nations to ensure Chinese cooperation is through a special inducement, such as cash or extra emissions rights. Here is the harder question: should the United States also be paid for its participation? No one is suggesting such an approach and this should be puzzling.” (Posner & Weisbach 2010, 86)

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<sup>24</sup> Gardiner and Weisbach 2016, 182–88. Weisbach’s general argument advocates that we ‘go slowly’; ‘avoid the costs of scrapping perfectly good power plants, refineries, tankers, and other parts of the fossil fuel infrastructure’; replace that infrastructure only gradually as it wears out; accept that fossil fuel infrastructure has a lifespan of 50–100 years; concede that additional fossil fuel infrastructure will still be built because it is ‘needed’ for economic growth; and admit that more aggressive approaches are ‘sheer fantasy’.

<sup>25</sup> At least, absent nonconventional interventions, such as solar geoengineering - which DW opposes.

“[An optimal climate treaty] could well require side payments to rich countries like the United States and rising countries like China, and indeed possibly from very poor countries which are extremely vulnerable to climate change—such as Bangladesh.” (Posner and Sunstein 2008)

Proposals of this form are troubling. One of the main goals of ethical climate policy is to protect the most vulnerable. Requiring very poor countries such as Haiti and Southern Sudan to “pay off” the rich countries for climate mitigation compromises that goal. Should we count that as a “climate solution” or is it more accurate to say that it is a further manifestation of the same underlying problems? Plausibly, one should at least ask *whose* climate problem one is really addressing (and why). Again, it is at best unclear that the economic realist is really responding to the actual challenges we face.

The second key point about the economic realist approach is that it turns out that it is often difficult to pin down what “self-interest” is supposed to mean. Elsewhere, I identify several different conceptions of self-interest that seem to be in play, including: (a) perceived self-interest; (b) simple/narrow self-interest; (c) broad self-interest; (d) three-generational self-interest; and (e) short-term economic self-interest. Moreover, most can be invoked at multiple levels: e.g., the individual; the family; the nation; humanity globally; humanity intergenerationally (e.g., Gardiner 2021).

One of my complaints is that the economic realist position tends to wander between these accounts and so often appears more attractive or coherent than it really is. A second complaint is that different accounts of self-interest pull in different directions. So, for instance, often there are conflicts between short-term, narrowly economic interests and longer-term more robust interests. A third complaint is that, if it is not clear which “self-interest” we are talking about, speaking of “*the* self-interest approach” can *obscure* more than it reveals; in extreme cases, perhaps it can even become yet another vehicle for moral corruption.

The third key point about economic realism is that the most attractive versions of the self-interest view are most often covertly ethical, or at least appeal to ethical ideals or motivations to get them going. Consider, for instance, the concept of national self-interest. On the face of it, national self-interest involves integrating the interests and concerns of a very large number of people over a considerable period of time. Isn’t this implicitly an ethical ideal? Why would individuals or communities be interested in or motivated to promote it? (If I do not value my fellow nationals and the continuation of the country indefinitely into the future, why bother?) The concern is that, functionally, the allegedly hard-headed notion of “self-interest” serves to obscure commitments to other, ethically-loaded relationships. If so, the debate is more about favoring some ethical commitments over others than about a deep conflict between ethics and self-interest.

### 3.5. On Confronting Moral Ambivalence

Finally, I turn to Hourdequin's insightful discussion of moral ambivalence. (P. 106 ff) 'Ambivalence' means roughly 'the coexistence of opposing attitudes or feelings', or 'uncertainty', 'indecisiveness' or 'vacillation' in making a choice (American Heritage Dictionary). Hourdequin draws the concept of moral ambivalence from David Wong, saying "the central insight for our purposes is that in many contexts (including climate change) there are multiple values at stake, and moral ambivalence arises when multiple values conflict and it unclear how to prioritize them". (P. 107) In the climate case, she continues, there are "fundamental tensions between the values behind current institutions, economies and ways of living, on the one hand, and the values behind the actions and forms of restructuring needed to respond to climate change, on the other" (Hourdequin 2026). Hourdequin maintains that these tensions play out in the everyday lives of individuals and in the Paris agreement. We "recognize that climate change poses real threats to humans (current and future) and other forms of life", but we are also drawn to "the comfort, stability and benefits (to some) of the status quo"; thus "we are conflicted".

Hourdequin's discussion focuses on a group she calls "the currently empowered": those with "the capacity and desire to contribute to ambitious climate action and institutional reform". She offers three examples of their moral ambivalence: the *Handoff Approach*; "*There is No Alternative*" (*TINA*) Thinking; and *Actively Reproducing the Status Quo*. All three, she says, tend to resolve moral ambivalence in favor of the status quo. Therefore, they are partly constitutive of "a moral psychology of intergenerational buck-passing" that amounts to moral corruption. Importantly, such corruption causes negative reactions, especially among the young. Specifically, it encourages various forms of alienation, including "anger, resentment, disillusionment, lack of solidarity and hopelessness". Hourdequin concludes that the currently empowered must come to terms with their own moral ambivalence and develop new forms of solidarity with others. (P. 108)

Hourdequin's observations are insightful. I agree with many of her points. For instance, the *Handoff Approach* and "*There is no Alternative*" thinking seem clearly in play in conventional attitudes to Paris, the UNFCCC process, and many other venues where the climate crisis is being played out. I also concur that the risk of alienation is high, especially for the young and other vulnerable groups. I would add that I see the problem as quite general, and so as playing out across society at large, including within older generations.

Still, in the spirit of encouraging further engagement, let me indicate three areas for additional discussion. One area is the focus on "the currently empowered". Consider three sample concerns. First, it is not clear who counts. MH describes "the currently empowered" by singling out three main variables: (i) capacity, (ii) desire and (iii) ambitious action. Arguably, the most critical component is "capacity". However, what does it take to have the relevant capacity: namely, to contribute to ambitious action and institutional reform? To illustrate, consider three potential target audiences. Are we talking about billionaires or global elites (e.g., the top 0.1%)? Or the upper- and middle-classes? Or perhaps most adults (e.g., those able to vote)? Plausibly, it makes a difference, and one that impacts the degree to which we should be concerned with moral ambivalence rather than other matters.

Second, there may be a concern about the viability of focusing on the currently empowered. For instance, conceiving of the target group in terms of all three of desire, capacity and ambitious action may render that group quite small. Thus, as a matter of climate strategy, an emphasis on building a broader coalition may be more fruitful.

Third, suppose that ultimately what is needed to prompt change is a mass movement on a grand scale; then, it is not obvious that confronting the currently empowered about their own moral ambivalence should be the first issue to address or even among the most pressing items on the agenda for change. For instance, a common concern in the climate literature is that foregrounding the challenges facing the most concerned in integrating their values and lives pulls the focus far away from many of the key drivers of the climate crisis, such as economic structures and the so-called “carbon majors”.

Moving on, a second area for further discussion is whether focusing on moral ambivalence would be particularly helpful. Arguably, prioritizing resolving moral ambivalence encourages the currently empowered to turn inward, when much of the problem is “out there”. This may be counterproductive. Moreover, there are risks involved. Suppose we agree that those who are concerned have a role to play that includes addressing their own moral ambivalence in their daily lives. Still, too much introspection and focus on the self might also amount to moral corruption, especially (again) if it draws their attention away from other important drivers of climate damage and inaction. Even the young may prefer those with capacity to “act more” and “seek inner harmony less”.

In response, some will claim that fully integrating one’s own life will motivate others to rise to the challenge too. Still, the motivational argument is also worthy of scrutiny. For one thing, even if others would find a true moral integration of the currently-empowered motivating, it is not clear that they would do so on the scale or timeframe needed. For another thing, it is not obvious *why others* are supposed to *need* the climate-concerned to become “fully integrated”. In some cases, perhaps the demand itself risks becoming another distraction and thereby a convenient source of moral corruption. For instance, those with a biblical bent may ask: “why do you look at the speck in your brother’s eye, but do not consider the plank in your own eye?” (Matthew 7.3).

We might also have broader concerns about alienation. MH worries about the currently empowered alienating others, and especially the young. However, alienation can come from multiple directions. Perhaps emphasizing personal integration will put many people off, among both the currently climate-concerned and their potential allies. At the extreme, leading by highlighting what might be perceived as “climate purity tests” may not be a good way to build a movement, especially in a fraught context where moral ambivalence often reflects genuine uncertainties and deep structural barriers to change. In such a setting, many may be alienated even by being asked to try to achieve “personal unity”; consequently, perhaps it is better to forge “movement unity” first.

Related questions arise about *Actively Reproducing the Status Quo*. One point is that a key aspect of life in many contemporary societies is the difficulty of extricating oneself from the mechanisms that drive the climate crisis and other social problems. Many conceive of our

difficulties as “structural”, and so deeply embedded in wider phenomena. Under such circumstances, much of what do probably “actively reproduces the status quo”. Plausibly, in advanced economies we are doing so from the proverbial “moment we get out of bed” (before that if we keep the appliances on overnight). In a way, then, the basic complaint about active reproduction is partly a *description of an important aspect of the problem*, rather than a new objection or a manifestation of moral ambivalence.<sup>26</sup> Among other things, this suggests that pointing fingers at people for participating in the ways of life of their cultures *gets the problem backwards*. At least, it seems an odd *precondition* for social action that those implicated extricate themselves from those background conditions (especially to someone else’s satisfaction).

A third area warranting further discussion is how to confront alienation. Encouraging social solidarity through being better integrated in our own lives is only one strategy among many. Another is trying to change the world. Arguably, this is one of the best routes forward for supporting one another and changing ourselves. For instance, if some can alter the structural features of our societies in a manner that helps to operationalize new, sustainable options, then perhaps this is a particularly promising way of promoting goodwill, boosting a sense of common purpose, and building new forms social solidarity. Joining together in meaningful projects of reform can enrich lives by providing purpose and a sense of community in the face of problems that otherwise may seem insurmountable.

Notice that one promising vehicle (among many) for reducing alienation might be rallying around the proposal for a global constitutional convention for future generations. The GCC is explicitly targeted at fixing a defect in our systems by filling a governance gap with respect to protecting future generations against intergenerational tyranny. This is a noble purpose. Moreover, while the GCC is relevant to climate change, it is also part of a much more general project to address a basic standing threat to human societies and humanity as such (as well as nonhuman life). Recognizing the basic threat and taking serious steps to neutralize it may go a long way to reducing alienation and bolstering more positive motivations. Indeed, exposing institutional denial and pursuing urgently needed reform might become a prime example of how to build the right kind of social cohesion. Perhaps if we are bold enough to leave Paris and its romantic illusions behind, we can — like Rick and Captain Renault at the end of *Casablanca* — plant the seeds of “the beginning of a beautiful friendship” and find both solace and inspiration in that.

On that positive note, let me close by thanking my commentators for their generosity in taking the time to contribute, for raising such thought-provoking questions, and for helping to push the wider debate forward. I encourage others of good will also to weigh in on these vital topics in the same spirit of serious intellectual engagement.

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<sup>26</sup> This is one reason why some complain that the structural problem is so deep that focusing on the individual level is, while somewhat relevant, not especially helpful, in the sense of not being “at the heart of the matter”. Our chances of success in addressing moral ambivalence, it will be said, are higher if we grapple with the structural features that frame our daily lives and basic options.



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