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Making and breaking promises: must a country harmonize its climate pledges and policies?

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ABSTRACT

It is easy to put words on paper; it is harder to put them into practice. This is evidenced by the frequent discrepancy between a country's Nationally Determined Contribution (NDC) and its actual climate policies. In this article, we examine whether such disharmony should be criticized. We first provide a taxonomy of types of disharmony. We then examine various problems with settling the case for a strong norm of harmonization by simply referring to the general principle that commitments ought to be kept. This opens the door to paying more attention to the long-term effects of such a norm on emission reductions. In conclusion, we call for nuance in expecting countries to harmonize their NDCs and national policies. While climate policy offers the perfect test case for this normative examination, many of our arguments could be adapted to other areas in which deviations between international commitments and domestic policies arise.

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1. Introduction

The Paris Agreement marked a shift in global climate governance, from the regulatory model of the Kyoto Protocol to a pledge-and-review process founded on self-determination and transparency, among other things (Hale 2016, Aykut *et al.* 2021). Under the Paris Agreement, countries are to communicate their mitigation commitments to the international level via their nationally determined contributions (NDCs) and adopt policies at the national level that are in line with their NDCs. However, countries' words and deeds often do not match (Lee *et al.* 2023). Given that global climate action is insufficient even if international pledges were fulfilled (e.g. Liu and

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Raftery 2021, Lee *et al.* 2023), it seems obvious that countries should at the very least live up to the goals they set for themselves. Kammerer *et al.* (2021) call this vertical policy harmonization: aligning countries' national mitigation policies with their international pledges. We examine the importance of such harmonization from a normative perspective.

There are many reasons why international commitments and national measures deviate. Prior to climate conferences, governments prepare and communicate their NDCs. They are generally the product of political will, economic capacity, domestic interests, estimates of future developments and current policies. In order to implement NDCs countries must then adopt policies at (sub)national levels. While this chronology may vary, it is generally expected that NDCs are to represent the highest ambition possible and thus communicate future action to be realized by policies at the national level (Nascimento *et al.* 2023). This complex task requires the support of various (non-)state actors and constituencies. There is no guarantee that a country complies with its commitments, especially given the absence of enforcement mechanisms and the reliance on 'naming and shaming' measures. Moreover, keeping those promises is at the mercy of political will, the government's institutional settings, and domestic interests (e.g. Baker 2023, Nascimento *et al.* 2023). These are all hard to predict.

It may seem straightforward that deviations between commitments and adopted policies are normatively problematic – in the words of famous climate activist Luisa Neubauer: 'I don't think it's a particularly radical demand to ask governments to keep their promises' (SRF 2023). However, in the case of countries falling short of – or overshooting – their climate pledges, the case is less clear than it might initially seem. Of course, promises generally ought to be kept. But how strict is this principle? And are NDCs really akin to promises? This framing is characteristic of a non-consequentialist perspective, where the focus is not on the tangible effects resulting from a norm of sticking to one's commitments but rather on whether there is something wrong *in itself* with breaking a commitment. We believe that the alternative, consequentialist perspective deserves more attention: examining whether a norm of sticking to commitments is conducive to desirable consequences, in particular the consequence of reducing emissions.

The literature on NDCs has so far discussed how NDCs could be understood as commitments, negotiation positions, and governance instruments (e.g. Leinaweaver and Thomson 2021, Jernnäs 2023), estimated the feasibility and utility of conditional NDCs (e.g. Pauw *et al.* 2020), assessed NDCs' (in)ability to propel countries toward pathways aligned with the goals of the Paris Agreement (e.g. den Elzen *et al.* 2022), proposed equitable benchmarks for NDCs (e.g. Robiou du Pont *et al.* 2017, Holz *et al.* 2018), and outlined the interplay between NDCs and national climate policies (e.g. Nascimento *et al.*

2023; Liefferink and Wurzel 2017, Baker 2023). This article contributes to this literature in four ways. First, our taxonomy of disharmony expands on the extant literature to categorize disharmony, outline some of its sources, and serve as a basis for discussing its normative implications. Second, our normative assessment of vertical harmonization confronts the implicit assumption that harmony between a country's NDC and its policies is desirable. Third, we separate a consequentialist and non-consequentialist perspective in our normative appraisal, and we disentangle various strands of arguments within each. The latter perspective enables us to evaluate the disharmony of all countries regardless of their emission levels, while the inclusion of the former acknowledges that the (dis)harmony of large emitters is more relevant in addressing climate change. This two-pronged normative analysis can help both practitioners and academics clarify and critically examine their own reasoning. The consequentialist perspective provides arguments that may be more familiar to those engaged in climate policy debates and the non-consequentialist perspective to those engaged in philosophical or lay discussions relating to breaking promises. Such a comprehensive structuring of the arguments is currently lacking in the literature. And finally, the framework that we outline in the following sections is receptive to further considerations in understanding the normative implications of vertical (dis)harmony as countries update their NDCs and adopt new national policies in the future.

The practical relevance of this article is clearest when it comes to rich countries with high historical or current emissions. Their efforts often lag behind their fair share the most (see e.g. Roser and Seidel 2016). However, in principle our arguments – in particular the non-consequentialist arguments – are sufficiently general as to apply to any country. In fact, this article's approach is useful beyond climate policy, which can be seen as a particularly clear case of the more widespread problem of countries not living up to their international commitments, e.g. in foreign aid (e.g. Nunnenkamp and Thiele 2013), trade liberalization (e.g. Haftel and Thompson 2013), or respect for international law (e.g. Schulz and Levick 2023). Climate change offers a unique opportunity to analyze this general problem given how plainly it structures the issue: countries make explicit, and often measurable, commitments in their NDCs that need to be followed by compliant action at the national level. Although climate change is unique in some respects, it is nonetheless a great test case for assessing analogous cases. Given that the literature lacks a general normative evaluation of deviations between a country's words and actions, this article does double duty by providing a structured list of arguments many of which allow for abstracting from the specific case of climate policy.

In the next section, we describe how the problem plays out in climate policy. Section three evaluates disharmony according to a non-

consequentialist criterion: whether disharmony between NDCs and national policy is akin to breaking a promise and, if so, whether this is problematic. Section four evaluates disharmony according to a consequentialist criterion: whether a norm of discouraging disharmony does a (dis)service to the goal of fighting climate change. Finally, we conclude with a call for nuance in expecting countries to live up to their NDCs.

2. NDCs and disharmony

Policy harmonization is the process of ‘making the regulatory requirements or governmental policies of different jurisdictions identical, or at least more similar’ and has both horizontal (e.g. between countries) and vertical (e.g. from the international to national level) dimensions (Leebron 1996, p. 66). We are concerned with vertical disharmony; specifically, the gap between NDCs and national mitigation policies. Vertical disharmony can occur in both directions, i.e. by national policies falling short of or surpassing the commitments outlined in the NDC. We describe this as overdelivering or underdelivering.

There are three interpretative difficulties which we must tackle before proceeding. First, there is the question about how NDCs should be understood. In Article 4 of the Paris Agreement, NDCs are described as contributions that a country ‘intends to achieve’ and that countries ‘shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions’. At the 2013 Warsaw Conference of Parties (COP) the C in NDC was deliberately changed from standing for ‘commitment’ to ‘contribution’ to avoid a connotation of being legally binding (Biniarz 2016). Yet, this does not render NDCs substantially different from previous commitments made under the UNFCCC since they have all been unenforceable, either in principle or in practice (Barrett 2008, Depledge 2022). As such, NDCs could be understood as stern promises at one end of the spectrum, and at the other merely as vague descriptions of a country’s expectation of future actions. While neither extreme is convincing, it is difficult to pin down with precision the most plausible understanding given the challenges of discerning negotiators’ intentions in wording the Paris Agreement, of decoding the legalese, and of grasping countries’ mutual understanding of the seriousness of their commitments. Nonetheless, we will generally refer to NDCs as ‘commitments’ and our analysis both builds on a pre-existing interpretation of the strength of pledging involved in NDCs (e.g. Depledge 2022) but also further shapes such an interpretation.

Second, some NDCs explicitly present their goal as a *minimum* commitment, while others commit to achieving a certain goal *exactly*, i.e. to achieve neither more nor less than the goal they committed to.¹ We found that a majority of countries’ commitments are exact goals and a sizable

portion of the commitments of Annex I countries come as minimums (e.g. ‘at least’); see [Figure 1](#).² When countries present their goal as a minimum commitment, there can, strictly speaking, be no overdelivering since going beyond a promised minimum does not mean deviating from a promise. For the sake of avoiding an over-encumbered discussion, we generally word our arguments such as to apply most straightforwardly to commitments to do an exact amount, i.e. to countries who can in principle overdeliver. But the arguments can be applied, *mutatis mutandis*, to minimum commitments.

This matters because – building on terminology in related work (Kammerer et al. 2021; Baker 2023) – we refer to both underdelivering and overdelivering as disharmony. This may seem questionable since the causes and consequences of the two often differ. In contrast to underdelivering, overdelivering looks straightforwardly unproblematic, and in fact positively supererogatory. However, while overdelivering may be a clear win in terms of responsibility towards future generations, it may fail contemporaries, e.g. factions that are opposed to climate action in the national arena or organizations that develop long-term plans based on legitimate expectations about the level of a nation’s mitigation efforts (e.g. in the debate about stranded assets). Whether it be ideological or rational, both groups care that their country does *not* exceed its international commitments. Moreover, NDCs could in principle include controversial mitigation measures for which it is not clear that ‘more is better’ (e.g. nuclear power, carbon border adjustments, protectionism for the domestic clean technology sector). While this paper defines disharmony as doing both less or more than committed, future work will hopefully go beyond this simplification and provide a separate treatment of unambiguously positive cases of overdelivering.

Third, the commitments outlined in some countries’ NDCs are conditional on external financing, technology transfer, or capacity-building support. Conditional commitments are used widely, in particular by non-Annex

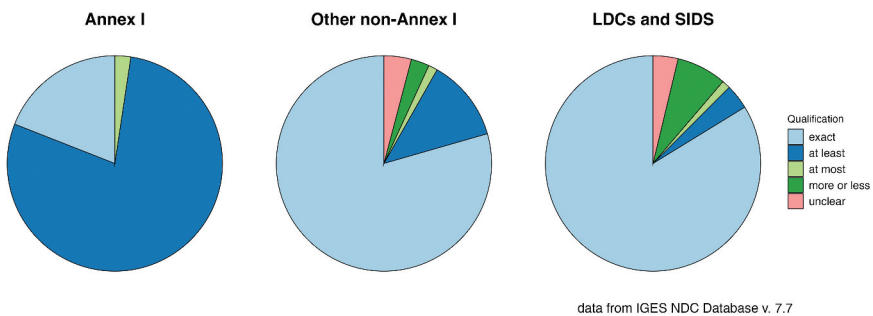


Figure 1. Qualifications of NDC commitments.

I countries, Least Developed Countries (LDCs), and Small Island Developing States (SIDS); see [Figure 2](#). Should the failure to keep a promise whose fulfillment is conditioned upon the provision of resources be perceived as disharmony? A straightforward view is that disharmony of conditional commitments is only possible if the conditions are met. If the conditions are not fulfilled, a conditional commitment cannot be assessed as disharmonized or harmonized with national policy – rather, the conditional commitment could simply be said to be ‘inactive’. By providing the stipulated resources, an external agent – i.e. Global North countries, who have in fact committed to do so – activate the conditional commitment. Without delivery of the requested resources, the failure of recipient (Global South) countries to keep conditional commitments arguably lies at the feet of donor (Global North) countries. While acknowledging this complexity, we focus on the straightforward point that conditional NDCs are relevant in discussing the normative implications of disharmony only if the conditions are met. These conditions are often not met as the costs of fulfilling the conditions currently exceed the financial pledges of donor countries even if they were to meet their funding targets (Pauw *et al.* 2020). Thus, conditional NDCs are not included in the present discussion of vertical disharmony.

Having resolved that we speak of NDCs as commitments and disharmony as involving both under- and overdelivering on unconditional commitments, we now introduce three categories of disharmony: technical, political, and deliberate disharmony. They are distinguished by whether commitments were made with(out) an initial intention to follow through. Under an ideal sequence of NDC pledging and national policy adoption (Nascimento *et al.* 2023), NDCs are to be more ambitious than current national policies. This is to trigger the adoption of national policies that reduce emissions and position countries to update their NDCs with successively more ambitious commitments, followed by further national policy adoption. Particularly relevant to the present discussion of NDCs and disharmony are uncertainty-

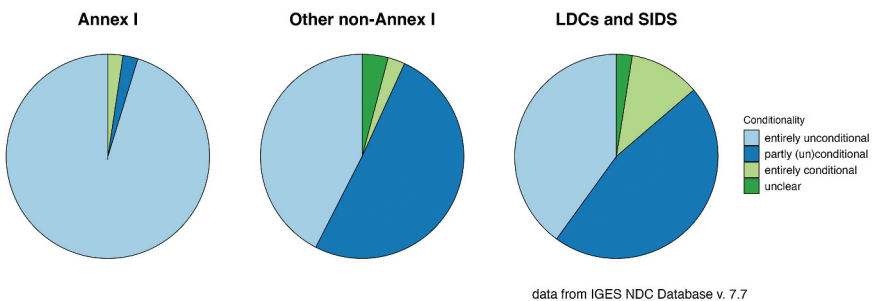


Figure 2. Conditionality of NDC commitments.

and ambiguity-based commitment problems (Leinaweaver and Thomson 2021, Tørstad and Wiborg 2023). The former are due to the uncertainty about future shifts in policy preferences (e.g. changes in administration or ruling elites) or in the benefits and costs incurred by the commitment. The latter stem from the misrepresentation of actual ability or willingness to reduce emissions because of structural or strategic ambiguity – i.e. insufficient resources leading to imperfect estimations of mitigation potential or policymakers pledging to do more or less than they know is possible. Considering these dynamics, we qualify technical and political disharmony as instances in which commitments were made with the genuine intention to follow through even in the face of structural ambiguity or uncertainty, whereas there was no initial expectation to actually carry out the commitment in cases of deliberate disharmony (i.e. pledging with strategic ambiguity). These three categories of disharmony are discussed further below and Figure 3 displays typical reasons for over- or underdelivering within these categories.

Technical disharmony refers to disharmony as an unavoidable feature of dynamic processes addressing global, wicked problems. Such disharmony can arise from insufficient financial, knowledge, or human resources (i.e. structural ambiguity) that inhibit countries from understanding their true mitigation potential, resulting in under- or overpromising (Röser *et al.* 2020, Tørstad and Wiborg 2023), or the impossibility of a country's words matching its actions on each level at every point in time. This latter source of technical disharmony arises from the different points in time at which countries increase their commitment at the international level and at

<i>international pledging dynamics</i>		With initial intention to keep		Without initial intention to keep
<i>outcome of national policy adoption</i>	Technical Disharmony	Political Disharmony	Deliberate Disharmony	
Overdelivering	Typical reason(s): <ul style="list-style-type: none"> • complexities arising from multi-level governance (e.g., differing domestic and international timelines) • resource constraints (e.g., limited informational or technical expertise) 	Typical reason(s): <ul style="list-style-type: none"> • Changing policy preferences – i.e., increasing political will 	Typical reason(s): <ul style="list-style-type: none"> • Avoid accountability or go at it alone 	
Underdelivering	Typical reason(s): <ul style="list-style-type: none"> • complexities arising from multi-level governance (e.g., differing domestic and international timelines) • resource constraints (e.g., limited informational or technical expertise) 	Typical reason(s): <ul style="list-style-type: none"> • Changing policy preferences – i.e., decreasing political will 	Typical reason(s): <ul style="list-style-type: none"> • Image seeking 	

Figure 3. Three categories of disharmony and their typical reason(s).

which they adopt measures at the national level. In fact, technical disharmony surfaces already at the communication of initial and successive NDCs ‘because countries typically set targets beyond what they are already on course to achieve’ under national policies (Fransen *et al.* 2023, p. 1). Some pockets of (dis)harmony are unavoidable. Thus, technical disharmony is not under the control of countries. Given that normative questions only arise to the extent that outcomes can be affected (‘ought implies can’), this article is primarily relevant for political and deliberate disharmony.

Political disharmony refers to cases where countries make commitments with the initial intention to keep them, but then fail to adopt the necessary policies due to constraints or changing political winds at the national level. When formulating an international commitment, uncertainty-based commitment problems make it difficult to foresee whether political constraints or changes of political will result in deviations from the commitment.³ Under political disharmony, under- and overdelivering may stem from changing policy preferences due to the interplay between complex institutional settings (e.g. bicameralism, judicial review, citizen referendums), power dynamics of domestic interests (e.g. the fossil fuel industry), and issue salience (e.g. a concerned or apathetic public) (e.g. Baker 2023). Moreover, exogenous shocks (e.g. financial crises or pandemics) may contribute to disharmony. These factors make it hard for policymakers to reliably commit to a future level of climate action (Bernauer 2013). Nonetheless, countries can be held accountable for instances of political disharmony as governments’ response to changes in policy preferences constitute an active choice to deviate from the initial commitment.⁴

Deliberate disharmony occurs when a country internationally commits to more or less ambitious mitigation action than what it ultimately intends to adopt. This is labeled deliberate as the country makes promises that they, at some level, know to contrast with their own ability or willingness. Both over- and underpromising can happen due to legitimate or even noble motives. When overpromising arises as an attempt to inflate a country’s image on the international stage their commitments are mere ‘displays of window-dressing’ (Lieverink and Wurzel 2017, p. 954). However, such overpromising could also be a praiseworthy attempt to push – or ‘trick’ – oneself (and others) beyond the current boundaries of political will despite the risk of later reputational costs (e.g. Fransen *et al.* 2023). Similarly, underpromising can be rooted in different motives. Pioneering countries adopt ambitious national policies that exceed their international commitments as they ‘may feel constrained by slower partners and/or followers, and thus try to “go it alone”’ (Lieverink and Wurzel 2017, p. 954, Wurzel *et al.* 2019). But countries may underpromise to insulate themselves from international pressure by simply promising

so little that it will hardly fail to achieve it (e.g. Hafner-Burton *et al.* 2017, Tørstad and Wiborg 2023). This may signal an excessive sense of sovereignty and lack of collaborative spirit. But some countries, especially in the Global South, may justifiably view scrutiny of their national efforts as offensive given that they have hardly contributed to climate change, whereas rich emitters have sidestepped transparency in the past.

While the above taxonomy informs our appraisal of (dis)harmony, it is important to note that countries are not invariably disharmonized and the type of disharmony a country exhibits can change over time given the constant evolution of multi-level, global climate governance processes. For example, a country might deliberately overpromise because an outgoing administration wants to bind its successor (deliberate disharmony) (Bernauer 2013). Later, the new administration might take even less climate action than expected because policy preferences changed, for example in the face of rising energy prices (political disharmony). Conversely, domestic constituencies might unexpectedly galvanize around climate action in which case the deliberate disharmony (previous administration's overpromising) and the political disharmony (increasing preference for climate action) would cancel each other out.

In principle, the following discussion could end up casting disharmony as bad, acceptable, or desirable. In any of these three cases, there is the additional question of *who* must act on disharmony. Two types of agents stand out as responsible for resisting, embracing, or promoting disharmony. Firstly, the countries who exhibit disharmony themselves. They can either adjust their commitments to match their actual national policies or adjust their national policies to match their commitments. Secondly, all nation-states, international organizations, transnational and domestic non-governmental organizations, and individual thought leaders can collectively promote certain norms and adopt mechanisms that discourage, tolerate, or even encourage disharmony. For example, they could resist disharmony by accelerating the transfer of financial, technological and capacity-building resources to Global South countries. Moreover, increasing transparency requirements under the Enhanced Transparency Framework (ETF) 'could make apparent [...] the gap between promises and action', push countries who are on track or overperforming to submit more ambitious NDCs, and generate information that (non-)state actors can utilize to "name and shame" laggards or "name and fame" best performers' (Romain *et al.* 2020, p. 512). Through such mechanisms, the collective and individual actors engaged in global climate governance can act as 'norm entrepreneurs' (Sunstein 1996) regarding the importance of harmonization.

3. A non-consequentialist perspective: the importance of keeping commitments

From a non-consequentialist perspective, there is a very straightforward problem about disharmony: keeping commitments is obviously an ethical desideratum, and it is so regardless of the consequences. The most prominent philosophical encyclopedia starts the entry on promises – the paradigm form of a commitment – by observing that few moral judgments are ‘more intuitively obvious and more widely shared than that promises ought to be kept’ (Habib 2022). If a country promises to reduce emissions and does not follow through, this is *prima facie* simply and plainly wrong. *Pacta sunt servanda* – one of the most basic principles in contract law and international law – similarly expresses a blunt affirmation of living up to one’s commitments. However, as clear as the case for keeping commitments may seem, there are six considerations that diminish its weight for the case at hand.

First, commitments are on a spectrum. Our moral vocabulary distinguishes between sworn oaths on one hand to mere heads-ups on the other; between them is a fine-grained spectrum of promises, assurances, pledges, written or oral ‘words’, etc. The moral importance of sticking to these various kinds of commitments in the absence of legal enforcement is on a corresponding sliding scale. They all generate *some* reason to follow through, but some do so more than others. Much weight, then, rests on how stringent NDCs are, which, in turn, depends on how stringent countries mutually interpret them to be. It is hard to know how nations *precisely* understand NDCs (see e.g. Victor *et al.* 2022). While it is clear that they are understood to be less stringent than promises, it is equally clear that they are taken to carry *some* moral seriousness beyond what is captured by the literal wording ‘contribution’. Otherwise, ‘naming and shaming’ in response to the failure to live up to an NDC would not make sense.⁵

A second reason why the general demand to keep commitments does not simply settle the issue relates to the concept of agency. A common reason for countries not living up to their commitments lies in their internal fragmentation, especially in the case of weak, disorganized, or failing states. But this also applies to democratic countries, and even more so for countries with multiple institutional entry points (e.g. federations) by which actors can exercise (in)formal veto powers (e.g. Baker 2023). States are said to be collective agents, but the label ‘agent’ is only appropriate under certain conditions. Such conditions can be spelled out in various ways, e.g. the presence of well-ordered decision-making processes which enable the rational pursuit of goals (see e.g. Pettit 2006, Smiley 2023). If a state’s internal organization renders it simply unable to follow a coherent, goal-directed trajectory of actions, the problem is more fundamental than breaking a commitment: there is no agent in the first place who is able to make and

break a commitment. This problem can be framed as a gradual matter: *to the extent* that a state lacks agency, its commitments should not be *fully* taken as commitments in the first place, and to this extent they should also not be seen as broken. While this takes off *some* pressure from *some very few* countries to follow through on what seem like ‘their’ commitments, the issue should not be overstated. After all, most countries are keen themselves to be treated as having agency.

In a related but different vein, Fleming (2020) has developed a novel theory of treaty repudiation. He highlights the difference between contracts in private law and treaties between states. While both are entered voluntarily, treaties bind domestic constituents involuntarily. Hence, treaties must be responsive to the views of these constituencies. Changes in the political will (see political disharmony) give a reason to default on treaty obligations which is not present in the case of private contract law when individual or corporate preferences change (cf. Wallimann-Helmer 2019). Of course, this reason is often not sufficient to justifiably repudiate a treaty. But – in contrast to individual or corporate contracts – it *can* be sufficient. Above we emphasized that states *do not* always have sufficiently well-ordered decision-making processes to count as genuine agents. In contrast, Fleming emphasizes that states *ought not* let considerations of consistency over time inescapably trump responsiveness to changing preferences of their constituencies. This is relevant to the case of NDCs. Governments are not only faced with the imperative to stick to the pronouncements of past governments acting in the name of their country, but must also be responsive to the views of the constituencies presently making up the country. This lightly weakens the case for delivering on one’s NDC in certain cases. However, this reasoning can also be taken to imply that countries should not enter treaties or make commitments in the first place. This is relevant since one reason for disharmony may be that some governments want to tie the hands of their successors (cf. Urpelainen 2011).

Third, a reason for keeping promises is fairness. Promise-breakers are unfairly free-riding on the promise-keepers whose conscientiousness upholds the institution of promising (cf. Habib 2022). Promise-breaking is particularly bad if others would not have made their promises – and invested the effort to keep them – had they expected others to not keep their promises. However, if others do not live up to their promises, there is no unfairness involved in failing to keep one’s own word. This works gradually, too: if a significant fraction of agents are breaking their promises, one reason for promise-keeping – fairness – is diminished. NDCs could be seen as such a context: disharmony between commitments and action is, in fact, widespread and thus the fairness-based reason to follow through is reduced. Admittedly, one should not give too much weight to this point, since the fairness-based reason for sticking to one’s commitments is primarily

a context-independent reason. There is only limited scope for fine-tuning its weight to a specific context such as climate policy. To be clear, the fairness at stake here is different from the most important kind of fairness in the climate context. That is, if countries do not follow through on their commitments, unfairness in the context of disharmony does not consist of free-riding on other countries' efforts to mitigate climate change but rather of free-riding on other countries' efforts to uphold the social practice of making and keeping commitments.

Fourth, as previously mentioned, we classify doing more than one has committed to as disharmony since it is not unambiguously positive. However, there are of course cases in climate policy where going beyond the commitment is even better than merely keeping it. In these cases, the moral principle that commitments ought to be kept applies asymmetrically to our definition of disharmony: it speaks against underdelivering but not against overdelivering.

Fifth, only voluntary promises must be kept or, alternatively, only voluntary promises are genuine promises in the first place. NDCs are of course generally voluntarily committed to as Article 4 of the Paris Agreement plainly and simply says that it is each party's own business to 'prepare, communicate and maintain successive nationally determined contributions that it intends to achieve'. After all, the keenness of sovereign countries to avoid outside interference was a central driver behind the design of the Paris Agreement. However, voluntariness is not an either/or, but it can occur on a sliding scale. And in fact, there are reports about pressure being exerted on developing countries in formulating their international climate commitments (Röser *et al.* 2020). Thus, *to the extent* that sheer pressure was at play, there is a slightly diminished reason to live up to one's commitments.

Sixth, there is a more radical challenge to the idea that a commitment to reduce emissions strengthens the moral importance of doing so: justice already requires countries to reduce their emissions – independently of any commitment to do so. Unless a commitment exceeds what justice requires anyway, the commitment does not increase the moral importance of reducing emissions.⁶ Tacking on a commitment to do what one ought to do anyway hardly changes the normative situation.⁷ Promises can only change the normative situation if they are supererogatory, i.e. promises to go beyond the call of duty. Take, for example, two neighbors with a shared backyard. For the sake of the argument, distributive justice calls for equally splitting the work of maintaining the backyard. An explicit commitment by one neighbor to do their fair share does not increase the moral importance of actually doing so. *A fortiori*, if the other neighbor currently only does a quarter of their fair share, a commitment to increase their contribution to a third does not have any moral relevance. Such a commitment may even be repugnant since it

frames staying below the fair share as a live option. Analogously, countries committing to merely reduce the gap between the status quo and the minimal demands of justice can be seen as repugnant, too. Regardless of whether it should be seen as such, it does not strengthen the overall moral case for reducing their emissions.

This argument is only practically relevant if the NDCs of some countries actually do fall short of what justice requires of them. This is plausibly the case. The collective global mitigation effort falls short of achieving justice towards future generations (Roser and Seidel 2016, pp. 90–92). Even if all countries were to keep their commitments, we would still fall short of limiting global warming to 2°C or 1.5°C (Lee *et al.* 2023). On top of being insufficient, the collective effort is not shared fairly. The Global North is failing in particular (e.g. Holz *et al.* 2018). This is not surprising given that the architecture of the Paris Agreement does not enforce a fairly shared collective effort in achieving this overarching goal, but merely asks countries to explain how they consider their NDC to be fair and ambitious (UNFCCC, United Nations Framework Convention on Climate Change 2018). Thus, in effect, most countries' NDCs fall short of what justice requires. Hence, while they have much reason to do more than they currently do, this reason is not primarily that they committed to it but rather that justice requires it.

From the perspective of justice, the ambition gap is the elephant in the room; the gap between NDCs and national policies (i.e. the implementation gap) should not divert attention from it. Of course, one can criticize both: if the commitments of rich countries with high emissions are too low, the additional failure of not living up to such low commitments makes matters even worse (regardless of any intrinsic relevance of keeping commitments) – but it should not distract from the insufficiency of the commitments in the first place.

4. A consequentialist perspective: the importance of mitigating climate change

If the commitment does not have as much weight as it initially seems, this gives us the liberty to take up a more consequentialist perspective and focus on the (un)desirable consequences of expecting countries to keep their international commitments. That is, whether entrenching a norm of vertical harmonization ultimately helps or hampers the mitigation of climate change. If climate action is failing in essential ways to bring about justice, paying attention to criteria other than harmonization's contribution to mitigation might seem like a luxury. In fact, the consequentialist perspective might be key even if there were, contrary to the previous section's argument, strong intrinsic reasons to keep commitments.

It is an empirical question whether pushing for vertical harmonization serves the goal of mitigation or not. Unfortunately, there are currently no clear answers since a norm of vertical harmonization would be just one among many causal factors affecting mitigation. This is especially so given the time lag between policy adoption and observable reduction in emissions and given that the vertical harmonization of policy outputs at different levels involves policy processes evolving differently over time (see technical disharmony). Moreover, it may be practically difficult to assess whether commitments are being kept as countries may opaquely report shaky or wrong data (see e.g. Mooney *et al.* 2021). Nonetheless, a number of plausible effects can be identified even if we lack empirical evidence regarding their size.

The first is simply that it is obviously positive if countries who under-deliver achieve harmonization by adjusting their actions to their pledges. This is the straightforward case we typically have in mind when thinking about pressuring countries to keep up with their own stated goals. However, pushing for harmonization could in principle also mean overdeliverers reducing their efforts. In this case, harmonization would be counterproductive for mitigation.

However, this simple take omits indirect effects of entrenching a norm of vertical harmonization. These may be larger than the direct effect. We identify five of them and only the second speaks for strengthening the call for harmonization, whereas the others speak against it. Note that in [Section 2](#) we presented the various types of disharmony. The reasons for deliberate disharmony typically are about gaming the system with such indirect effects.

First, we can take dynamic effects on future commitment-setting into account. Pushing for harmonization might incentivize countries to deliberately make low commitments so as to increase the probability of achieving them. This could lead to less ambitious action over time. If the threat of being judged due to disharmony has a chilling effect on setting high targets in the first place, a norm of vertical harmonization is counterproductive. Even if the targets have been set unambitiously to avoid scrutiny rather than action, they could end up serving as an actual benchmark for national policy – a benchmark which is lower than it would have been in the absence of the heightened international scrutiny wrought by a norm of vertical harmonization. This would undermine the effectiveness of the Paris Agreement’s ratchet-up mechanism by slowing patterns of ambition-raising. This effect is still at play when countries craft the NDC by assimilating it to their actual policies rather than vice versa.

Second, NDCs can function as trust-builders (Jernnäs 2023). When countries follow through on their commitments and when they do so visibly to others (hence the importance of the ETF), this can enhance trust amongst countries and strengthen the publics’ trust in their respective governments (Jernnäs 2023). Producing trust – which, in turn, enhances the prospects of

cooperation – is seen as a key feature of kept promises in any social context (Habib 2022). Given that the lack of smooth and collaborative global decision-making procedures is a key bottleneck for climate policy (and for a host of other present and future global challenges), any progress in bolstering trust is a weighty benefit of a norm of vertical harmonization.

Third, insisting on harmonization removes leeway for messy processes that come with a certain amount of – often merely technical – disharmony. The complex paths in the multi-level climate regime are inevitably unpredictable and rumple. This was arguably one of the reasons for the Paris Agreement to intentionally embrace the bottom-up reality of global climate policy-making rather than clinging to more top-down ideals, as was previously the case. This calls for the art and science of muddling through (Lindblom 1959). Scrupulously requiring commitments and actions to correspond at each stage in time constrains the necessary flexibility for navigating this difficult territory. Being too stringent might thus hamper the achievement of an ambitious climate outcome.

Fourth, setting aspirational goals that slightly exceed a country's realistic expectations is an important psychological and practical resource for increasing ambition. Skilled policymakers strategically set the goal neither too much nor too little above the realistic prediction so as to draw some additional political will from their country from the discrepancy. Setting a high goal does not just directly create psychological pull but also indirectly by creating a fear of criticism in case of failure. If, instead, we insisted on always rigorously synchronizing pledge and reality, we would make it impossible to exploit this psychological mechanism and accountability-based commitment device (on the positive functions of ambition, see Duvic-Paoli 2023).

Fifth, setting overambitious goals can signal willingness to cooperate in solving the global public goods problem of climate change (Wurzel *et al.* 2019). Such mutual signaling can create a positive dynamic. Aykut *et al.* (2021) describe the approach of the Paris Agreement as ‘incantatory governance’ – and some actors believe such communicative devices to be effective. Laurence Tubiana, one of the Paris Agreement's architects, presents the treaty as a ‘self-fulfilling prophecy’, whereby positive narratives ‘by producing a convergence of rational anticipations [...] contribute as much to change as the agreement itself’ (Aykut *et al.* 2021, p. 524). Vilifying any mismatch between NDCs and national-level targets takes away the freedom to proclaim targets which are higher than what they realistically expect to achieve. Being lenient about disharmony thus makes space for the signaling benefits of overpromising. Critics of overpromising lament that ‘talk is cheap’. However, the fact that talk is cheap precisely speaks in its favor: if talk sometimes comes with sizable real-world signaling benefits and if talk hardly costs anything, this indicates that talk sometimes has a good cost–benefit ratio. Note that conditional NDCs are especially valuable in terms of the signaling benefits. They combine the

advantage of setting in motion the beneficial psychological dynamic of high goals with the advantage of mitigating the risk of disappointment. Further, they have the additional benefit of giving countries with low historical responsibility and economic capacity an avenue for expressing their legitimate expectations about global burden-sharing.

Unfortunately, it is currently hard to assess the net effect of all these various channels. It is noteworthy, however, that there is a genuine possibility that pushing for harmonization might ultimately be counterproductive in terms of achieving a just climate outcome.⁸

5. Conclusion

In this article, we show that it is surprisingly unclear whether we should entrench a norm of vertical harmonization. Under the non-consequentialist perspective, we assess disharmony against criteria that come naturally to many laypersons and philosophers, i.e. the simple principle that commitments must be kept. This would obviate any deliberation about the practical consequences of embracing or tolerating disharmony. However, a detailed examination reveals that the general principle of keeping commitments hardly settles the case when it comes to NDCs. Hence, we take up an alternative stance, i.e. assessing disharmony from a consequentialist perspective. Alas, this too does not settle the case. While a norm of vertical harmonization may promote emission reductions in a typical case (i.e. a country not living up to its international promises), the all-things-considered direct and indirect effects are harder to gauge. Even after disentangling the various aspects of the trade-offs, there is a real possibility that the net effect of promoting a norm of vertical harmonization may hinder mitigating climate change. The blurriness of this overall upshot makes for one clear conclusion: a simple and blunt insistence that commitments be kept is too shortsighted. We should be less dismissive of disharmony than seems fitting at first sight.

Acknowledging that deviations from international pledges are not necessarily undesirable affords room for reassessing the design of NDCs and the surrounding apparatus. Considering the paramount goal of mitigating climate change, such a system could flexibly optimize levels of disharmony between international pledges and national policies for the psychological utility of overambitious goals while inflexibly insisting on international pledges jointly fulfilling the Paris Agreement. In other words: an inflexible determination to close the emissions gap might require a flexible approach to the implementation gap. This could take shape in a variety of ways. Otto *et al.* (2015) suggest countries' pledges could be made 'anti-fragile' by tying them to an index of attributable anthropogenic warming that is constantly updated, making commitments responsive to the evolving economic and climate realities. This could conceivably remove uncertainty-based

commitment problems as roadblocks for ambitious NDC pledging, thus potentially alleviating instances of political disharmony. Another proposal goes beyond the incrementalism of annual COPs and suggests super-COPs that constrain countries' bargaining window and makes them 'approach their true bottom lines in talks [...] thereby aligning climate negotiations with states' true national interests' and in doing so enabling the 'collective sprint' required to address climate change (Manulak 2023, p. 2; 7). This proposal would minimize strategic ambiguity in making commitments and thus potentially resolve deliberate cases of disharmony. However, if we are to return to the current architecture of global climate governance, how might we optimize the social norm around harmonization under current circumstances? One possibility is to reinforce the practice of 'naming and shaming' (e.g. by bolstering transparency requirements under the ETF) and encourage (non-)state actors to engage in naming and shaming in a nuanced rather than blanket manner, especially in cases of political or deliberate disharmony (see Section 2). Empirically, this has merit; Tingley and Tomz (2022) demonstrated that naming and shaming proved most effective in instances of partial compliance of climate commitments, whereas the effect was smaller for countries in full (non-)compliance. Our assessments serve as an encouragement for policymakers and civil society actors to trust their intuition about what kinds of disharmony to name and shame (or fame). Rather than unflinchingly decrying any ever-so-slight deviation from a commitment as a matter of strict principle, a context-sensitive assessment is in fact justified. The importance of keeping one's promises does not simply settle the issue from the outset, despite initial impressions to the contrary.

We encourage viewing these judgment calls as an art rather than science. Practicing the art of critically assessing individual cases of disharmony and of shaping the general norms around it can build on the framework we have provided. Such nuance should not be mistaken for lukewarmness. Rather, the normative evaluation should take (dis)harmony's effects on long-term emission reductions as its main guidance. If the disharmony between commitments and adopted policies is not as clearly normatively problematic as it might seem at first sight, the disharmony between commitments and the demands of justice is much more clearly normatively problematic.

Notes

1. It could be debated, however, whether some countries who do not explicitly qualify their commitment as constituting a lower boundary may not *implicitly* mean their commitment to be that of the minimum.
2. Other non-Annex I countries in Figures 2 and 3 include non-Annex I countries that are not categorized by the United Nations as LDCs or SIDS.

3. In this context, we relate political will to the prevailing policy preferences of a country. This includes a dynamic mix of domestic politics, including the preferences of administrations, ruling parties, elites, powerful interest groups, and civil society organizations.
4. Although this is especially relevant in democratic states, ‘authoritarian regimes are also prone to shifts in policy preferences over time as ruling coalitions change’ (Leinaweaver and Thomson 2021, p. 77).
5. While most of the considerations in this section are fairly independent of real-world developments, the mutual understanding of NDCs’ stringency can change, and indeed be deliberately affected in future climate negotiations.
6. To the contrary, in cases where a commitment falls short of the demands of justice, there is even a reason to *deviate* from it by doing more than one has committed to.
7. For a contrasting perspective, see Moellendorf (2016).
8. We should not merely evaluate whether outcomes are just but also whether decision-making processes are legitimate. However, this would require a paper of its own. Pushing for harmonization can be interpreted as a shift of weight from national decision making processes to those at the international level, and hence national accountability is shifted towards global accountability. One might believe that such a shift is a win in terms of legitimacy (Roser and Seidel 2016, pp. 205–16). This is especially so if the development of NDCs is not just delegated to unelected bureaucrats but if they rather emerge from an inclusive and participatory process – something which is in fact demanded of nations (UNFCCC 2018).

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