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Social-psychology, equity and climate change negotiations

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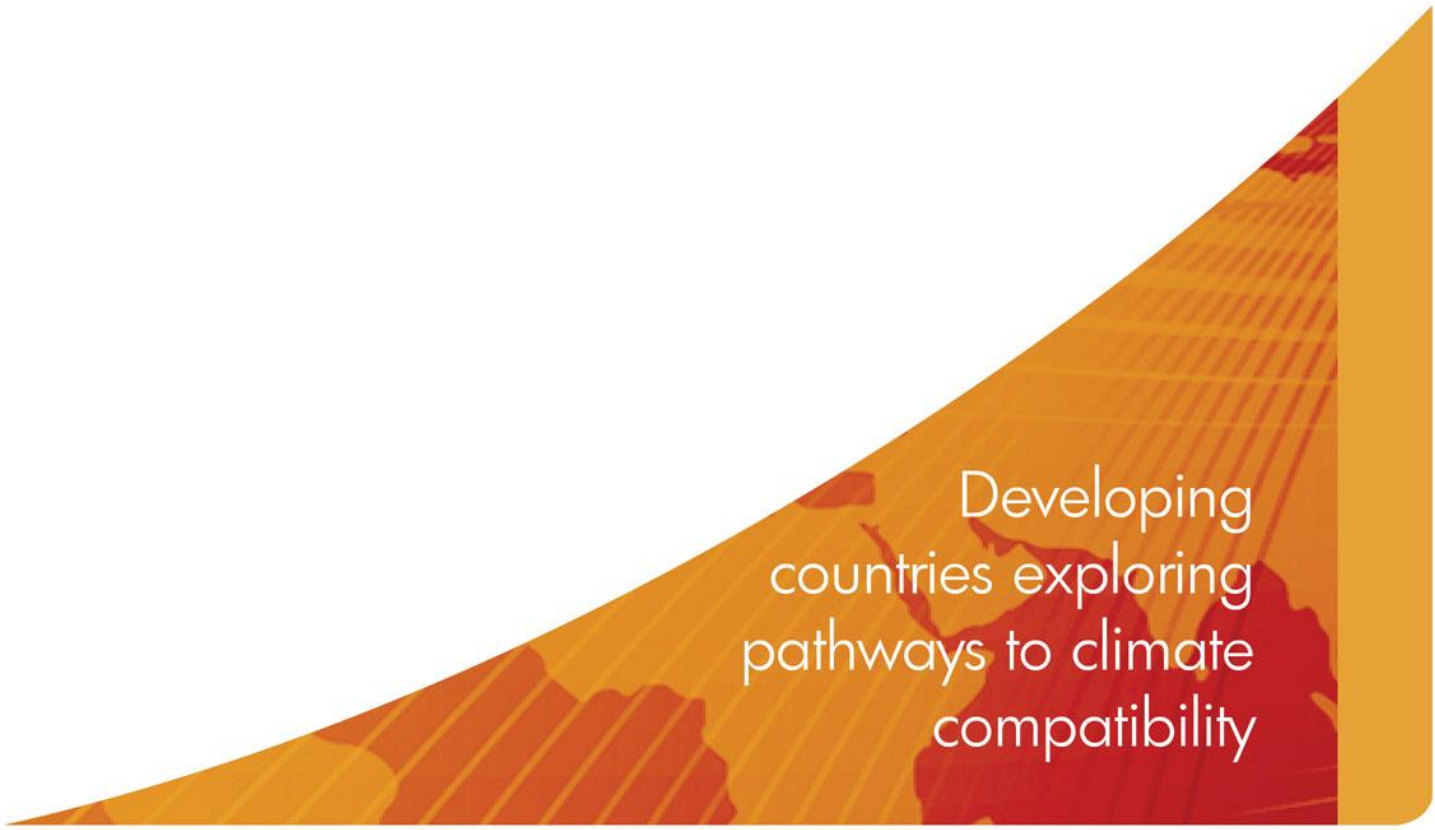

Social-psychology, equity and climate change negotiations

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Authors:

Sonja Klinsky, Arizona State University

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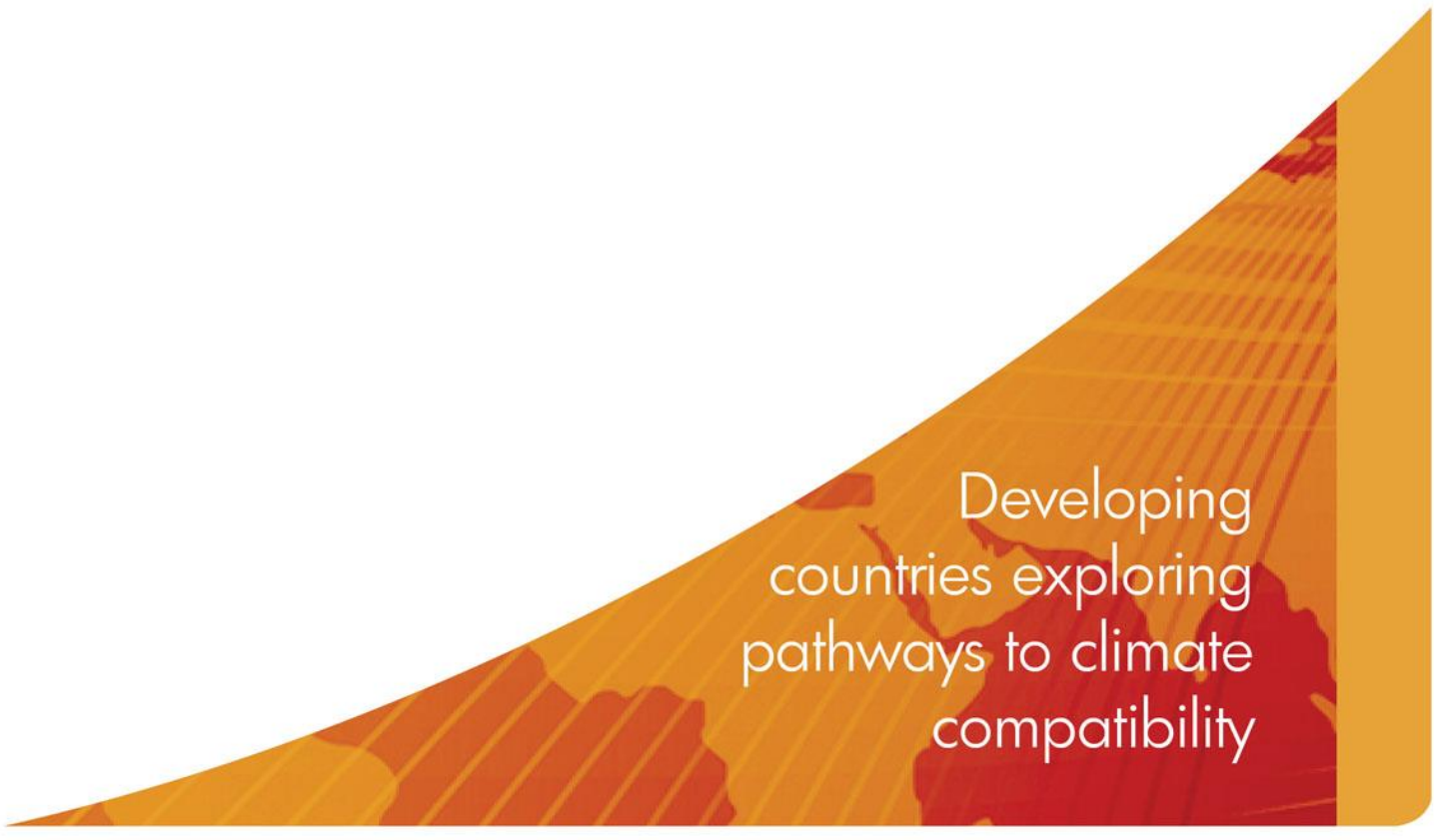

BRIEFING POINTS

- Current discussions of equity in international climate negotiations have overlooked the central importance of psychology: how people feel about fairness may be as important as principle-based or numerical analysis.

- Arguments for equity as an enabler of ambition are only likely to hold if Parties, despite different views, "perceive each other as being members of the same moral community". Psychological positions on fairness are shaped by underlying ideas about what the problem is, which in turn relate to interests, interpretations of the geopolitical context, and perceived power.

- Psychologically, different kinds of equity logic may resonate differently across mitigation, adaptation, and loss and damage. Different frameworks or approaches may be needed for each of the three categories, to find overlapping ideas of a 'fair enough' deal.

- The more direct causal lines are seen to be, the more intentional the action, and the greater the level of control, the stronger causal responsibility arguments may be. Lines of causality are closer in mitigation than adaptation; yet the latter – and loss and damage – relates to one of the deepest inequities in the climate problem.

- Perceptions of how "close" actors are, the degree to which they are seen as useful, and the extent to which they are in competitive relationships will shape the overarching frameworks people decide are appropriate for any given situation. It is likely that actors' perceptions of all of these factors will be linked to their geopolitical position, interest, and relationships with others.

- In situations of high uncertainty, mistrust, or when inputs and outputs are varied or difficult to compare procedural justice is likely to be felt to be particularly important.

- These patterns suggest that different equity arguments will have greater resonance across mitigation, adaptation, and loss and damage for diverse Parties than others.

EXECUTIVE SUMMARY

Although widely acknowledged as an important component of any climate policy approach, deep divisions about the meaning and requirements of justice continue to stymie climate negotiations. This paper self-consciously takes a different approach to the equity debates within climate policy, and draws attention to underlying social-psychological patterns that could shape ideas about what *feels* fair in various situations. The underlying idea is that principle-based concepts of justice are useful in helping Parties think through the justifications for particular positions, but that Parties' perceptions of what is "fair enough" in a political collective-action dilemma that are likely to be central as they seek resolution. Accordingly, this paper examines insights about underlying rationales people use when evaluating when a situation is "fair enough" that emerge from social-psychological studies of justice. It then juxtaposes these rationales with characteristics of mitigation, adaptation and loss and damage. The suggestion emerging from this juxtaposition is that a single framework for justice is unlikely to resolve such a multi-dimensional conflict.

Three bodies of theory and evidence from social-psychological perspectives are included in this work. These are ideas about causality; concerns with process and procedural justice; and the role of distance and relationships in shaping justice perceptions. When juxtaposed against mitigation, adaptation and loss and damage it is proposed that different underlying perceptions of what is "fair enough" are likely to be used. For instance, the particularly direct causal pathways present in a mitigation context are more complex and more distant for both adaptation and loss and damage, suggesting that while causality is likely a crucial element of a fair enough mitigation context, it could have narrower resonance across stakeholders in the other components of a climate deal. Similarly, in light of the importance of procedural justice, particularly in situations of complexity or uncertainty, the profound and somewhat irreducible uncertainties existing in both adaptation and loss and damage suggest that procedural fairness is likely to be unusually important in these debates. Finally, when looking at the role of relationships and distance in shaping justice perceptions it is suggested that more precise comparisons of inputs and outputs may be more likely to be central to a fair enough mitigation agreement, than in an adaptation or loss and damage contexts in which emphasis on loose equality or needs-based responses could find wider agreement.

This work is offered as a contribution to an ongoing conversation about equity and comes with a range of caveats. It recognizes that equity has been, and will continue to be, a central component of climate negotiations at both international and national levels and argues that there is a need to widen the current way of thinking about these issues. While there are many limitation of this tentative work, it is suggested that there may be some merit in separating the underlying equity frameworks used in mitigation, adaptation and loss and damage. These three components are clearly linked, but in a political collective action challenge, untangling the equity knot might be better served by partially separating them.

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INTRODUCTION

When the Intergovernmental Panel on Climate Change released its first assessment report (Houghton, Jenkins and Ephraums, 1990), the tone was calm but concerned. Climate change was happening, was largely caused by anthropogenic greenhouse gas emissions, and was likely to result in significant harm if left unchecked. The overarching message on the science of climate change emerging from the fifth assessment report is that the situation is far more serious (IPCC 2013). Moreover, almost two decades of domestic and international efforts to address climate change have been unable to achieve the changes in emission trajectories called for by the IPCC.

Simultaneously, equity has been pervasive within climate policy efforts, especially at the international level, for two primary reasons. First, despite rapid economic growth and increases in consumption for many, large numbers of the world's population remain below levels identified as necessary for basic wellbeing (Milanovic, 2012). Such inequalities of wellbeing have become central to climate debates both because of the relationship between greenhouse gas emissions and the creation of economic wealth to date, and because of the risk of increased vulnerabilities caused by climatic changes.

Second, the global, collective nature of the climate change problem means that equity is strategically important. Adequate mitigation requires massive shifts in how greenhouse gases are produced and patterns of consumption, but no party is likely to agree to actions that will damage its own interests. The collective action component of the puzzle is made more difficult by two facts. First, heightened GHG concentrations in the atmosphere are due primarily to the cumulative emissions of developed countries. Second, even if all developed countries stopped emitting greenhouse gases entirely, the emissions from developing countries would continue to contribute to climate change. In order to be adopted a global agreement has to be "fair enough" to Parties facing incredibly diverse opportunities and challenges internationally and domestically.

These lines of logic highlight the centrality of equity to any climate change agreement, but the situation has an added level of complexity. Equity may be an essential element of any climate agreement but, like any other powerful form of discourse, it could either promote or discourage effective policy action. There are many different ways of seeing and communicating ideas of equity in the climate policy space. The risk is that in a zero-sum framework focused on immediate policy costs, strong equity arguments could serve – and in some situations have already served – as further justification for Parties to do less, not more.

Equity in the climate change context has long been a major topic of policy and research interest (Shue 1993; Agarwal and Narain, 1991; Rose et al., 1998; Ikeme, 2003; Gardiner, 2006; Baer et al., 2000; Ott et al., 2004). The majority of this work has examined the legal and philosophical elements of equity and has resulted in a range of proposals for burden sharing and insights into the legal options at the international level. This paper builds on this work. First, it provides a brief history of equity debates within the climate policy arena. It then proposes that insights from social-psychological studies of justice could be helpful because if a deal has to feel "fair enough" to be possible. Section 3 offers thoughts about how feelings of fairness emerge may be a useful contribution.

A BRIEF HISTORY OF EQUITY AND CLIMATE CHANGE

Calls for the consideration of equity within climate change policy have existed from the very beginning of the development of an international framework. For instance, concerns about the vulnerabilities of low-island states, the centrality of development priorities for developing countries, and recognition that developed countries were largely causally responsible for the emission of GHG were all embedded in the chapeau of the United Nations General Assembly resolution that initiated the negotiating process leading up to the creation of UNFCCC (United Nations General Assembly 1990). The basic dimensions of the problem, including differences in the amount of GHG emission being produced, ongoing disparities in the standard of living experienced worldwide, and intergenerational consequences, necessarily place questions about equity or fairness at the centre of efforts to address climate change.

Initially, the equity framework focused largely on mitigation. Early work (Shue, 1993; Agarwal and Narain, 1991) framed equity largely in the terms of the production of GHGs, the associated patterns of consumption, and the necessity of dividing the burden of emission reductions. It was during this initial round of discussions that most of the key arguments about distributive justice within the climate space emerged. Although the actual proposals that were developed during this period varied enormously (Aldy et al., 2001; Brazil, 1997; Beckerman and Pasek, 1995; Meyer, 2000; Barrett, 2002) many of them pulled on a core set of moral arguments. Within this diversity, core moral concerns about causal and historical responsibility; the importance of need and ability; and an awareness of special obligations to avoid harming the most vulnerable repeatedly emerged as central considerations (Gardiner, 2006; Rose et al., 1998; Baer et al., 2000; Ott et al., 2004).

While academic debate and actual policy formation is often poorly linked, several of these central equity concerns were formally included in the UNFCCC. Recognition of the differences among both Parties' contributions to emissions, and abilities to reduce emissions led to the adoption of the CBDR+RC principle (UNFCCC 1992: Article 3.1) – a principle which remains central to debates about the meaning and operationalization of equity within the international arena (see for instance Winkler, 2010; Rajamani, 2012). The uptake of these and related concepts domestically is less clear, partially because of the diversity of national governments, their perspectives on climate change and the types of policy options facing them.

The Kyoto Protocol was the first operationalization of the principle of CBDR +RC within a specific climate treaty, and reflected an agreement that the first attempts to address climate change would be led by developed countries who agreed to quantified mitigation commitments. Although concerns about sustainable development strongly informed this agreement, they were formalized primarily through the agreement that developing countries were not required to carry mitigation obligations and the establishment of the Clean Development Mechanism.

The Kyoto Protocol proved central to some governments but it was less successful in spurring action in others. Perhaps most importantly, the US did not ratify the Kyoto Protocol, largely due to the Byrd-Hagel resolution passed by the US senate calling on the state not to pursue any climate policies with the potential to damage the US economy, unless large emerging economies also took these steps. While it can be argued that this position was based in the immediate interests of the US, and may have reflected other domestic concerns as well, it is notable that it was framed domestically as an issue of potential unfairness in a competitive economic space. As the Byrd-Hagel resolution of the US senate stated; the US should not agree to reduction commitments unless such reductions will not hurt its economy and "unless the protocol or other agreement also mandates new specific scheduled commitments to limit or reduce greenhouse gas emissions for Developing

Country Parties within the same compliance period" (Byrd-Hagel, 1997). This way of evoking the discourse of equity, used in a strict zero-sum framework of burden sharing within a context of global economic competitiveness, contributed to the inability of the US federal government to promote strong domestic action. While this perspective on equity is contrary to the sense in which it is commonly evoked in the international climate arena, the potential use of equity language to shore up domestic interests must be acknowledged as it could lead to increasing – rather than decreasing – abilities to find a globally acceptable pathway.

As the first phase of the Kyoto Protocol came to an end, scholars, governments and policy advisors proposed an incredibly wide variety of potential architectures. Some of these proposed options for continuing the Kyoto Protocol with varying degree of modification, while other proposals suggested moving in entirely other directions for a new global climate treaty that would be able to support broader action than had been possible within the KP (Tonn, 2003; Aldy and Stavins, 2010; Agarwala 2010; Kartha et al. 2009; Bodansky, 2004). Despite the diversity of these proposals, equity was central to many of them as scholars and Parties sought to shape a new agreement for the post-2012 regime. Most of these proposals focused on mitigation, although many recognized the need for "development space": at this point adaptation was only starting to be included in the equity conversation (see for instance Paavola and Adger, 2006). While the actual formulations of the specific proposed policy architectures varied, the underlying set of equity arguments remained relatively similar to the initial set. Debates continued to explore the role and calculation of causality (present, historical and future emissions); human development need; and capabilities.

While the post-2012 literature and policy-effort focused on creating an agreement that could be adopted in Copenhagen in 2009 this round of negotiations failed to provide a comprehensive and adequate response to climate change. However, the conference did spur a process of domestic pledges towards both mitigation and adaptation. At this point substantial hopes were still pinned on the US domestic ability to enact comprehensive climate policy. Unfortunately, due to domestic political divisions combined with a global economic downturn, the US was unable to either pass and implement domestic legislation, or adopt a national climate change policy approach. Simultaneously, increased attention was turned to the large emerging economies due to significant shift in both their emissions profiles and, to some extent, their economic capabilities.

It was against this tumultuous backdrop that the Durban Platform emerged. During the Durban COP17 the BASIC countries released for the first time a coordinated set of papers presenting shared core arguments about the need for a vision of equitable access to sustainable development within climate policy (BASIC experts 2011). For BASIC, access to sustainable development and historical responsibility are core components of climate policy negotiations. Simultaneously, the Durban Platform excluded all justice or equity language and established a direction for negotiations in which the future climate regime will be applicable to all under the Convention. However, the Durban Platform also indicated that any resulting future agreement would be under the Convention. The requirement that a 2015 agreement both be applicable to all and respect the principles of the convention, which includes CBDR+RC, reopened academic and policy research about the meaning and operationalization of 'equity'. What should a global agreement on climate change look like, and what role does equity play within this?

Hard-Won Equity Lessons

As the global community revisits the question of operationalizing equity, it may be useful to briefly reflect on some of the lessons that have emerged from attempts to forge an 'equitable' global agreement so far.

First, any discussion about equity and climate policy at either the domestic or international level necessarily exists within a geopolitical context in which multiple other issues, obligations and relationships are also being navigated (Streck and Terhalle, 2013). The geopolitical context is important to the consideration of equity for two reasons. First, power dynamics within and among Parties shape the bargaining process and what is, or is not, politically possible in the policy arena. Second, perceptions of justice, relationships and interests are intimately connected. Perceived competition, expectations (and hopes and fears) of future power distributions globally, past histories, levels of interdependence -– all of these may shape the types of justice arguments likely to be considered central within and across Parties. Positions on equity are necessarily grounded in the national interests, narratives, and aspirations of Parties.

Second, the dual-scale nature of international treaty making increases the difficulty of reaching a single agreement on equity. While national representatives can sign a treaty, treaties usually come into force when sufficient Parties ratify the agreements in domestic processes. Even more importantly, Parties must implement domestic changes if sufficient climate actions are to be taken. Although the level of public and stakeholder involvement will vary across countries, to some extent parties must be able to "sell" their international commitments to their domestic publics. Regardless of the moral force of equity arguments, in a dual-scale political context national governments are unlikely to stray too far beyond what they think they can get agreement (or at least acquiescence) on domestically.

Third, the interaction between equity and collective action can either help or hinder climate actions. On one hand it has been noted that failing to prevent dangerous climate change would be fundamentally unfair – especially to those who are unable to adapt and/or who did not contribute to the problem – which has been used as an argument to spur deeper action. From this perspective only an adequate climate deal is a fair deal (Ngwadla, 2014). On the other hand, concerns about equity have the potential to lead to increased entrenchment of positions as Parties consider national interests. The reality of this risk can be seen by juxtaposing strong calls for the centrality of historical responsibility within understandings of equity, such as that expressed by Brazil, China, and India, with the United States' (and others) equally strong objections to this framing. Unfortunately, as has been amply demonstrated in other situations, zero-sum principle-based framings can make conflicts more intractable, and in the climate arena, could lead to less, not more, action.

Finally, current discussions of equity are much more diverse than those that occurred in the pre-Copenhagen era and now include substantial consideration of adaptation, technical and financial support, and mitigation (Morgan and Waskow, 2014; Klinsky and Winkler, 2014). In addition, the issue of how the international community will deal with losses that go beyond what can be covered under current understandings of adaptation remains somewhat open, and has also been presented within an equity framework by some Parties and civil society groups (Khan, Schwarte, and Zaman, 2013; Adow and Carnwath, 2013; Action Aid, CARE, and WWF, 2013). From this perspective, more pressure is being placed on the UNFCCC to find an 'equitable' solution across more dimensions of climate change than ever before. Will having multiple dimensions of equity make an adequate agreement more, or less, feasible?

Based on all of these considerations, this paper starts from the proposition that a "neutral" or objective definition of equity is difficult, if not impossible, to achieve conceptually, much less accept politically (see also Roberts and Parks, 2006; Muller, 2001). The equity claims presented within international negotiations can have multiple dimensions and be difficult to

disentangle from underlying interests, especially because of the dual-scale nature of climate policy. However, as we know from studies of justice and social conflict, if Party positions on equity are solely reflective of their immediate self-interest without reference to broader notions of equity they are unlikely to gain traction with others or have widespread credibility (Mikula and Wenzel, 2000). Definitions of equity can provide useful points of comparison, work as rhetorical devices to push greater action and gain traction, and contribute to the awareness of the importance of the issue. However, climate negotiations exist within a political context in which diverse actors are attempting to resolve an embedded and multi-faceted collective action dilemma. In these situations relying on or waiting for broad acceptance of an 'objective' definition of equity – or even a single agreed upon definition – for the development of policy actions could contribute to even slower action. The central question this then poses is: how could a path be created that genuinely engages with the needs and fears underlying concerns about and desires for equity, while also avoiding pushing climate negotiations further towards an increasingly dangerous stalemate?

To date several streams of analysis have grappled with this challenge. A large amount of work has explored a diversity of possible arrangements for the distribution of mitigation, (and to some extent adaptation), obligations of various parties (to name a few: Baer et al. 2009; Chakravarty et al., 2009; Dellink et al. 2009a; den Elzen et al., 2007; Meyer, 2000; Pan, 2003; Ott et al., 2004). Another stream of analysis has focused on the legal options available for regime design (Winkler and Rajamani, 2014; Bodansky, 2011; Werksman, 2010), and in so doing has reflected on the possible interpretations of principles such as CBDR+RC.

Based on the observations above, this paper starts from the suggestion that principle-based concepts of equity are useful in helping Parties think through justifications for particular positions; can provide moral pressure towards a more ambitious outcome; can strengthen the voices of those with strong moral claims but limited geopolitical power; and create a space in which Parties are encourage to think beyond immediate self-interest. Simultaneously however, in a political collective-action dilemma, it is finding overlaps in *all* Parties' perceptions of what is "fair enough" that holds greatest potential for an inclusive resolution that respects the core concerns of all Parties.

Accordingly, this paper deviates from much of the existing scholarship on equity and climate change to explore another potential source of consideration: the social-psychology of justice. The social-psychology of justice tradition is primarily concerned with understanding how people make, use and evaluate justice claims. Scholars in this tradition have effectively asked; "when does someone decide something is unfair, and what goes into this decision?" The social-psychology of justice tradition could be useful in the climate context because it draws attention to underlying reasons for people's perceptions of fairness, which, if aiming for a political agreement on "fair enough" policies may be an important component of climate action. It may also be helpful in negotiating different conceptions of equity. This alternative approach to justice is explored not because it is superior to existing scholarship, but in the hope that it could contribute some new ideas to what could otherwise become an intractable problem.

As a starting point for an exploration of the utility of social-psychological perspectives on justice this paper uses a simplified "set" of issues to be negotiated within international climate change venues. This set includes mitigation, adaptation and loss and damage. It is recognized that this does not cover the full extent of debates within the international arena – including crucial areas such as technical and financial support. However, this set is used in this paper because they are all central and each has somewhat distinct characteristics, enabling a structured process of comparison. In addition, each of these characteristic areas has implications for issues such as technical or financial support and wherever possible these linkages have been highlighted.

For the purposes of this paper mitigation refers to actions undertaken explicitly designed to reduce GHGs from being produced and/or entering the atmosphere. Adaptation refers to actions undertaken to protect communities or ecosystems from negative impacts of climate change. Due to the tight connections between existing conditions, ongoing efforts for sustainable development and climate impacts, adaptation could include a wide range of activities. Finally loss and damage has emerged as an important component of the international policy debate and typically refers to permanent losses and/or climate impacts that go beyond what communities or countries could adapt to. Although the dividing line between adaptation and loss and damage is fuzzy, and the two aspects of threats from climate change are intimately connected, in this paper loss and damage is used to refer to deep losses including: permanent changes to ecosystems; forced resettlement; losses of life; and other profound and likely irrevocable impacts on communities (see for instance SBI, 2012).

As noted above, several important discussions cut across these three issues. For instance, climate finance is a core component of all three issues: mitigation in many developing countries will require financial assistance, as will elements of both adaptation and loss and damage. Similarly, processes to augment technology development and transfer are relevant to all three of these issues although the specific technologies and challenges of each might differ. By not addressing these issues explicitly this paper is *not* suggesting that they are not important parts of the conversation. However, for conceptual clarity at this early stage of thinking through the social-psychological elements of justice across climate change policy dimensions there are benefits in focussing on the smaller set of three issues.

SOCIAL PSYCHOLOGY OF JUSTICE

In this paper, the social-psychology literature is examined to generate some hypotheses about underlying and possibly unconscious models of thought that could be feeding into ideas about equity within different dimensions of climate change policy. Although this body of research has rarely been applied to climate change, some initial empirical evidence suggests that people might accept very different moral arguments in mitigation versus adaptation contexts. If some amount of agreement on justice or equity is essential for domestic or international policy, where might the most likely points of overlap or disagreement occur, especially when the multiple dimensions of climate policy are taken into account?

Unfortunately, very little concrete research linking the social-psychology of justice with large-scale issues has been conducted, and for this reason this discussion proposes more questions and thought-experiments than solid conclusions. This paper is self-consciously seen as a new strand of discussion in the equity debate that may – or may not – prove fruitful.

Causality

Causality has been a central element of climate policy debates. For many it is a crucial component of a 'fair' deal, and is often placed at the heart of discussions about the appropriate interpretation of CBDR+RC. Within these conversations the role of historical responsibility for greenhouse gas emissions has been a particularly contentious issue. Empirical evidence from social psychology experimentation highlights several consistent patterns that contribute to people's perceptions of what causality is, and how it relates to justice. Three sets of observations of direct relevance to climate change can be made here.

First, people consistently judge their obligations differently depending on the degree to which they perceive themselves to have caused the situation; they are more likely to feel an obligation to 'clean up their own mess' than to contribute positively to a situation to which they have not negatively contributed (Baron 2006). This framework has, in fact, been widely used to articulate why the burden of mitigation should fall on those who have contributed the greatest amount of GHGs (e.g. Shue, 2009).

Second, and related, the extent to which people feel that they have caused something is tied to the length and complexity of the causal chain. Direct causal actions are regularly seen as "more bad" than actions with similar outcomes that are mediated by several steps (Waldmann and Dieterich, 2007; Greene et al., 2009). Similarly, it has been found that harms created by not doing something, such as not preventing something that then caused harm, are often judged less harshly than those caused by direct involvement, such as actively harming someone. This "omissions bias" can lead to perceptions that contributions to social ills through omissions (inaction) are "less bad", and thus less likely to demand special obligations, than contributions to social ills that result from direct action (Greene 2002; Bazerman 2006; Cushman et al. 2006).

Third, perceptions of causality are often mediated by ideas of intentionality and control. Harms that are seen as accidental, or caused by actions that were not entirely within the control of the person triggering the chain of events that led to the harm, are consistently judged less severely than those perceived as intentional and fully within the control of the perpetrator (Shaver 2012). These judgments then shape the types of resolutions often accepted by the parties involved. For example, claims based on unintentional harms may be satisfactorily resolved through compensatory justice in which the victim is given compensation roughly proportional to the harm. In contrast, for intentional harms, victims often seek

retributive justice in which the perpetrator has not only to 'make up' the harm, but also to be seen to suffer themselves in some way (Darley and Pittman 2003).

The links between these findings and the ongoing debate about causality in the climate space are easily apparent, and raise a number of questions about how causality is, or could be, used to shape ideas of equity in different dimensions of the climate change problem.

For example, the causal chains of mitigation, adaptation, finance, or loss and damage, are all quite different in their complexity, length, intentionality and degree of control. If part of finding an agreement rests on the extent to which a deal can be represented as "fair enough", how much persuasive power is causality likely to carry in each of these domains of international and domestic policy-making?

While little climate specific research has been yet done on this issue, the theory from this tradition would predict that the more complex and lengthy the lines of causality, and the more ambiguous issues of intention and control were, the less likely causality would be to have broad, intuitive resonance as a basis for the distribution of obligations. Several scholars have already suggested that an omission bias has contributed to the accumulation of more attention to mitigation than to adaptation or sustainable development, because of the directness of the causal relationships between actions and harms (Baron, 2006). Similarly, in initial research public participants were seen to place much less emphasis on causation for the allocation of adaptation responsibility than for mitigation responsibilities (Klinsky et al., 2012).

It would be interesting to explore the psychological tensions that could be at play within discussions not only of past and current causation, but future causation. Are future emissions likely to be evaluated in the same way that past emissions are? To some extent they have an even less direct relationship with causation as they have not yet happened, which would suggest a less direct application of causal arguments.

However, as the state of knowledge and pressure to avoid emissions is now higher than it was in the past, it is possible that future emissions could be seen as more intentional. If this were the case there would be co-existing oppositional tendencies shaping perceptions of causality and responsibility. Much of this would turn on the extent to which future emissions – particularly those from developing countries – are understood as intentional, optional, or controllable. For instance, emissions that are seen as essential based on the demands of development are likely to be judged less harshly than those perceived as nonessential, controllable, or intentional. From the social-psychology of justice perspective, evaluations of causal responsibility are likely to be tied to how emissions are perceived and to the larger economic and geopolitical context.

To date none of this work has addressed finance or loss and damage. However, the existing research and theory would suggest that the increased complexity, non-intentionality, limited control and indirectness of the causal chain between emissions and finance or loss and damage results could erode support for the use of causality as a primary consideration of "fair" effort. This observation is not saying that there is not a causal element to adaptation or loss and damage, merely that causality alone may have limited persuasive power as a central argument in domains in which the relationship between cause and effect is less direct.

Process and Procedures

Although social-psychological research started by examining questions of distributive justice, it quickly became apparent that procedural justice was central to fairness judgements. It has been found repeatedly in both experimental and observational studies that when faced with conflicts centred on interests[1] people preferred processes they perceived as fair, even if they were not necessarily likely to maximize their interests through these processes. (Thibaut and Walker, 1975; Tyler et al., 1997; Tyler and Dawes, 1993). From within this body of research, key aspects of fair process at the very least include: legitimate organizations, inclusive and transparent process, and equal opportunities through the process.

Recent work also suggests that people emphasize procedural justice in situations of outcome uncertainty. When information about outcomes is unavailable, uncertain, or considered untrustworthy, people may use their observations about procedural justice – observations which may be easier to make – as an heuristic to estimate the overall justice of a situation (Van den Bos and Lind, 2002). Taken together these insights highlight the importance of procedural justice: not only is it crucial to people's acceptance of distributive outcomes in ordinary situations, but when the final outcomes are uncertain – as climate impacts almost always are – procedural justice is likely to carry even more psychological importance. In addition, procedural justice may be given particular salience in situations marked by a lack of trust because observations about procedural justice are easier to observe directly, do not require careful calculation of outcomes, and are less dependent on others for translation or interpretation.

The relevance of these insights to international climate policy making is easily observed. First, this importance of fair process to agreement acceptance underlines the level of attention dedicated to the design and control of Monitoring Reporting and Verification (MRV) and other measures aimed at achieving some level of transparency, first about mitigation efforts and increasingly about adaptation commitments. If the final outcome of mitigation or adaptation is uncertain, more attention is necessarily going to be placed on the process of how targets are established and on the process of achieving such targets. Similarly, the greater importance of procedural justice in situations of uncertain outcomes and heightened mistrust highlights the possibility that any situations in which any Party perceives "fair process" to be compromised are likely to prevent agreement.

Ensuring fair process for all Parties has long-been acknowledged as a challenge within climate negotiations (Shue 1992; Mace 2006) due to capacity and resource inequities, but, as climate negotiations get more complex and urgent, guaranteeing fair process within the UNFCCC may become even more challenging. Small delegations are already negotiating at or beyond their capacity, and the packages under consideration for climate agreements are becoming increasingly complex which can make final outcomes difficult to assess. The decision-process is unwieldy, but it is unclear how to effectively use smaller groups in a way that will be accepted as procedurally just (Kjellen 2010). Simultaneously, disputes about the meaning and pursuit of consensus within the UNFCCC have already been encountered, leading some to look more thoroughly at options for other decision-rules. Without some agreement about what "fair process" is, it could be increasingly difficult to find any acceptable compromises, essentially limiting the ability of the international process to respond adequately to climate change.

This set of theories also suggests that examining the uncertainties inherent in different aspects of climate negotiations could help identify areas in which procedural justice is likely to be more central than others. Due to existing MRV and

[1] The distinction here was established by Thibaut and Walker (1975) and is between conflicts over interests and conflicts over truth. In conflicts about interests they suggested that people wanted "fair" procedures but that if settling conflicts in which the goal was to find out the correct answer (i.e. "truth"), people were happier with a more authoritarian resolution.

accounting rules developed over time, mitigation outcomes (in terms of contributions) are moderately observable, despite the complexities of time frames, baseline manipulation and fragmentation. However, despite commitments to support adaptation, it is still profoundly unclear which finance is new and additional, where finance comes from, or even what reasonable goals for adaptation are collectively or individually (Haites 2013; Narain, Margulis, and Essam 2013).

The situation for loss and damage is even murkier, due both to its relative immaturity within global discussions, and to the irreducible uncertainty of predicting precisely where and what kinds of loss and damage events are likely to occur. With the exception of slow onset events, it is not clear that an in-depth conversation about outcomes (much less how to do the accounting for them) is even possible at this point within the loss and damage context. These observations would suggest that procedural justice will remain central in all aspects of climate negotiations but could play a particularly strong role in equity debates in the adaptation, support, and loss and damage contexts.

To date the governance of the adaptation fund has been a major source of tension within the UNFCCC (a procedural justice dimension), despite the fund's relatively limited financial resources (an outcome based dimension) (Grasso, 2010). Similarly, COP19 in Warsaw ran late in part due to tensions about the governance of a loss and damage mechanism – without fully defining its role or allocating it specific resources. Both of these disputes have revolved almost entirely around process as few, if any, concrete outcomes or commitments are on the table. This body of theory would suggest that until more certainty and trust can be developed about actual outcomes from adaptation finance and loss and damage efforts, procedural justice is likely to remain a key proxy for disputes. In turn, this suggests that agreements on a "fair enough" climate policy will necessarily involve in-depth attention to governance and process – particularly around adaptation and loss and damage issues due to the high levels of outcome uncertainty involved.

Distance and partiality

One of the moral challenges raised by an increasingly globalized world, and by a world in which we have some understanding of possible future conditions based on current actions, is that it is unclear where the appropriate boundaries for moral consideration should be set (Fabre, 2007). If we are all linked through environmental, economic and social flows, then is it justifiable to exhibit partiality within communities or countries? Similarly, if current conditions are built on past social and economic arrangements, and if future conditions are shaped by current conditions, how should we make decisions across time and which factors should be included? Should temporal, spatial or social distance be a factor in our decisions about what is just?

Social psychologists have not engaged in questions about what we should do in justice dilemmas across boundaries, but they have repeatedly demonstrated that most humans do use distance in their justice evaluations. Two themes of analysis have emerged from this work. The first examines the idea of 'moral boundaries' and the second has investigated how people apply moral judgement to situations varying, in part, to perceptions of distance and relationship.

First, it is broadly demonstrated that humans routinely mark moral boundaries by differentiating between in-group and out-group members when making and using justice arguments (Mullen, Brown, and Smith, 1992). Such differentiation can manifest as either preferred treatment of those with whom we share group status, or as a lack of acknowledgment for the claims of those outside our group entirely. In their work on conflict and justice, Mikula and Wenzel argue that justice arguments are only productive when opposing parties "perceive each other as being members of the same moral community" (2000: 132). To what extent do those involved in global climate negotiations see themselves as sharing a moral community that extends across social and temporal distances?

Similarly Opotow's idea of moral exclusion suggests that we have a continuum of moral consideration. At the far ends of this continuum, we either entirely focus on, or exclude others' interests in any decision about justice. Opotow (Opotow 1990; Clayton and Opotow 2003) suggests that three variables are important in determining where we set our moral boundaries: 1) the degree of similarity between ourselves and the other; 2) the extent to which the other is seen as useful; and 3) the level of conflict in the situation. When negotiating justice with those perceived as distant, non-essential, or in competition with us, we are least likely to give their claims weight. On the contrary, we are likely to acknowledge our justice obligations towards those who are physically and socially close, who are perceived as useful, and with whom we are not in competition.

A second, highly related, theme of investigation has examined the connections between relationships and justice perceptions. In his classic work, Deutsch (1975) suggests that in relationships in which people are not particularly close to one another, or in which the focus is on protecting (or maximizing) individual economic interests within an inter-related system, people are likely to use arguments about comparative inputs and outputs to determine justice. These he calls *equality* relationships. In *equality* relationships, actors are sufficiently connected that the goal is to maintain group cohesion and avoid conflict. Pursuing loose outcome equality can facilitate group maintenance in complex relationships with multiple dimensions, especially when all or some dimensions or considerations are not easily quantified. The final category consists of *need-based* relationships in which participants perceive tight bonds and in which the goal is to care for and nurture all members. In these relationships justice arguments based on the concept of need trump other considerations, but the approach is non-metric.

Deutsch was initially thinking of interpersonal relationships, but if applied conceptually at the international level his theory suggests that attention to how Parties (and to some extent their domestic publics) characterize the nature of global relationships could contribute to our understanding of the types of justice they are likely to seek. For instance, if the global community is seen as an anarchical collection of largely independent states competing for resources, then an international treaty that seeks to regulate equity and provide "fair play" is likely to be pursued; the WTO might generally be seen as a model of this. Similarly, for individual companies facing global competition, sector-specific arrangements that guarantee some level of 'equity' may be the most desirable representation of justice in climate policy.

In contrast, if there is a desire to maintain good relations and some level of social cohesion internationally, an agreement that seeks to limit the range of outcome inequality may be seen as a compelling goal. An equality model might also be relevant within nation states in which there may be pressures to seek a certain level of outcome equality as a way of maintaining social order. International commitments to ideas such as the Millennium Development Goals would be an example of an effort to limit the extent of outcome inequality globally, presumably partially through recognition of collective community membership.

Finally, for those for whom the global community is tightly connected, need based relationships could be seen as central. It is likely that a strong need-based framing rooted in acknowledgement of the interconnectedness of a globalized world would resonate more with Parties for whom international action and support are most necessary to their development goals and/or avoidance of extreme loss and damage, than with Parties who may self-perceive themselves to be less vulnerable in the face of global ecological, social and economic climate impacts. From a need-based perspective the goal of international agreements would be to ensure protection of the most vulnerable wherever they occurred within the global community. Simultaneously however, while need could in theory be a universalizing claim, it is likely that in a trade-off situation in which domestic needs and needs outside domestic borders were at odds, strong claims to ensure domestic stability first would be most compelling based on insights about distance and moral exclusion. Indeed, initial empirical

investigations of this possibility do suggest that trade-offs of this sort could be used by publics to support domestic actions to the detriment of internationally focused efforts (Klinsky, Dowlatabadi, and McDaniels, 2012).

Realistically it is likely that all three archetypes co-exist. In addition, as different stakeholders' core interests are likely furthered by one or the other notion of the global contract, the use of these positions has a political component. The question is when and how such archetypal frameworks are likely to generate widest support in the climate change space.

One possible interpretation could be that mitigation, adaptation and loss and damage have evolved to fit within different models of the global relationship. For example, in a mitigation context the focus of debate thus far has largely centred on economic interests and tensions about possible competitiveness impacts. In addition, effective mitigation requires broad participation at least among all large emitters. The necessity of having all large emitters on board for mitigation is likely to shape which Parties are seen as "useful". Following from acknowledgement of utility, genuine efforts to engage with the claims and needs of all large emitters is likely and has already been seen through efforts such as the Major Economies Forum (MEF). Simultaneously, perceived competition between major players would be likely to emphasize attention dedicated to assessing the relative inputs and outputs of mitigation efforts. Who is doing how much, and is this a fair level compared to everyone else so that no-one (i.e. no-one with the specific sphere of moral consideration) is unfairly disadvantaged? This interpretation would place mitigation within an equity framework, in which arguments centred on relative effort and benefits would be likely to appear. One potential side-effect of this framing could be the marginalization – or moral exclusion – of those who are not major players within mitigation due to perceptions that they are not as "useful" in these conversations. This risk of marginalization is likely one of the reasons that many Parties, especially those who could easily be excluded due to lack of perceived "utility", have resisted foras such as the MEF and other extra-UNFCCC discussions.

At the same time, in the adaptation context it is possible that a loose form of an equality narrative might receive wider support than strictly comparative equity framework for two reasons. First, the moral framework commonly appealed to in the adaptation context stresses the ability for all humanity to achieve some base level of wellbeing, an argument that is focused on a general equality of outcome (such as an achieved level of human wellbeing or development), not on a comparative evaluation or exchange of inputs and outputs. Second, assessing inputs and outputs in an adaptation context is extremely difficult due to the diversity of local adaptation needs and efforts, and the continued lack of clarity about global adaptation needs. While there have been several efforts to develop and divide a global burden level of adaptation (Ngwadla, 2014; Eriksen and Kelly, 2007; Dellink et al., 2009b) this faces significant challenges due to the potential incommensurability of adaptation needs. As Deutsch suggests, in situations in which exact measurement is difficult, a loose outcome equality may be more likely to be accepted as 'fair enough'.

Theoretically, an equality argument would lead to very strong pressure for adaptation support as a way of maintaining global cohesion. However, it is possible that perceptions that some parties are more essential in a climate deal than others could erode the power of adaptation claims made by less powerful Parties on more powerful Parties. Unlike the mitigation context in which even very powerful countries need - at the very least - some kind of agreement with the major emerging economies, the adaptation context is somewhat different. It would be possible, although undesirable, to have the most powerful countries address direct and bounded adaptation needs without contributing to adaptation efforts (beyond general mitigation) elsewhere. Simultaneously, less powerful countries or those with greatest adaptation needs are likely to need adaptation assistance either from developed countries, or through solidarity amongst themselves. It would not be surprising therefore, if those facing adaptation needs larger than what can be domestically provided have a stronger sense of global community, and call on a wider scope of moral inclusion than those for whom adaptation is more likely to be

achievable through domestic action. It is also possible that these perceptions could lead to greater south-south solidarity and adaptation support.

The extent to which Parties make contributions to adaptation globally is likely to reflect their perceptions of how integrated global society is, but how far do claims to loosely equal wellbeing go? Is global wellbeing a shared moral obligation, or is it an ideal to be reached through voluntary actions? These questions extend far beyond the scope of climate negotiations and speak to much longer and deeper debates within moral philosophy, international politics and transnational activism.

Finally, in the loss and damage context high uncertainty about exact loss events and their damages makes the idea of an equity approach (in which the goal is to equalize inputs and outputs) unwieldy. It would be almost impossible to assess an exactly comparable ratio of inputs and outputs across diverse and uncertain circumstances of profound loss. It is also unclear (and likely contested) if the underlying purpose of a loss and damage mechanism is: the achievement of some equality of wellbeing; a source of development revenue through compensation; or the guarantee of a basic level of security and assistance in the face of extreme loss. Competition is less likely to be a major theme in these discussions than in mitigation contexts, which means that Parties may be more willing to fully consider and include the needs of all. However, the profound power imbalances among Parties, and the subsequent variation in their roles in a global climate agreement, could limit the extent to which any Party would fully accept the needs of distant others within their moral scope of obligation, especially if these conflicted with domestic interests.

The question that emerges from the social-psychological perspective is how 'tight' global society is understood to be? According to these theories, if global society is envisioned as tightly connected, meeting the needs of the least well off is likely to be seen as a strong obligation. However, if global ties are perceived to be weaker, the strength of these obligations erodes, and meeting adaptation or basic security needs could be seen as a virtuous but voluntary activity beyond the immediate moral scope of obligation. Yet again this theory suggests that the specific debate – in this case about loss and damage – depends on much broader narratives about the type and scope of global relationships Parties are embedded in. The ultimate challenge of course, is that although perceptions of global relationships appear crucial in determining the psychology of justice, different Parties and stakeholders likely have different understandings of the extent and nature of the global community.

The slippery questions about ways in which Parties see the interconnections across the global community only get more complicated when distance across time is included for consideration. While social psychology and behavioural economics have established the widespread use of future discounting in human decision making (Lind 1999; Frederick 2006), it is not clear how this would compare to trade-offs between temporal and physical distance, or how discounting might interact with different perceived relationships globally. For instance, are future generations living in the same physical area seen as more or less art of an existing Party's moral community, than geographically distant but contemporaneous people? Unfortunately existing research cannot yet provide insight into such questions.

Summary of social-psychological insights for climate policy

To the extent that any of these insights from social-psychological traditions of justice studies are valid in the climate change policy context, they suggest that using identical ideas of equity across mitigation, adaptation and loss and damage dimensions may not be a likely direction for a politically acceptable agreement. For instance, the theory suggests that the less direct and immediate the causal chain, the less people are likely to perceive strong moral obligations to address negative consequences of their actions. Additionally, negative consequences that are seen to be accidental, or out of the immediate control of the perpetrator, are likely to be connected to more lenient ideas of responsibility. Those consequences seen to have ambiguous or shared causality are likely to generate the loosest notions of responsibility. While causal responsibility can – and has – been a part of mitigation, adaptation, finance, and loss and damage discourse, the directness and simplicity of the link between causal actions and negative implications, does vary across these dimensions.

Similarly, while procedural justice is always an important component of people's perceptions of fairness, it has been suggested that it is particularly important in situations in which there is high outcome uncertainty (either because outcomes are irreducibly uncertain or because they are difficult to evaluate comparatively due to their complexity and/or non-transparency). Again, like causality, mitigation, adaptation and loss and damage may vary significantly in terms of how easily comparable their outcomes are. It is possible that this variance could contribute to increased attention to process within perceptions of equity for adaptation and loss and damage because their outcomes are hard to compare, predict or evaluate.

While they may be the most difficult to measure definitively, underlying notions of the global relationships among Parties may be absolutely crucial in shaping approaches to fairness. Concerns about competition, perceptions of closeness or similarity, and political evaluations of "utility" could all contribute to the extent to which Parties (or their domestic publics and stakeholders) extend moral consideration to others, and what rules of thumb they use within these moral boundaries. Importantly, the political power and global geopolitical context of Parties is likely to shape how they evaluate others across all of these dimensions. Although our ability to make concrete observations about the direct linkages among these dimensions and mitigation, adaptation and loss and damage is limited, a few tentative observations can be made.

For example, competition is likely an underlying concern for many Parties within the *mitigation* context, and Parties may not be perceived to be particularly close to one another. Mitigation is additionally commonly framed in economic terms, and commitments are routinely translated into somewhat comparable metrics. Importantly, due to the role of utility in shaping inclusion, the political reality of needing to get a broad range of emitters "on board" in a mitigation sense, could strengthen the extent to which even very large players include others in their scope of moral consideration. Together these underlying considerations would support a mitigation equity approach based on formal comparisons of efforts and causal contributions.

Simultaneously, attempting to evaluate *adaptation* from a strict equity sense, in which there is attention to comparative efforts, inputs and outcomes, may be deeply challenging (and maybe impossible). Competition may be less palpable within discussions of adaptation which would tend to expand the scope of moral consideration. For these reasons using a loose equality of outcome frame that articulates the importance of guaranteeing basic wellbeing and development opportunities may be more fruitful than a strict equity approach. It is also interesting to consider the understandings upon which claims for deeper adaptation support may be based. Due to perceptions of utility and distance, it is possible that more powerful and/or wealthier Parties may downplay the extent of global consideration. In this framing sharing adaptation finance across multiple Parties may be seen as a form of voluntary but virtuous action. Simultaneously it is likely that those faced with

deepest adaptation needs are likely to perceive a much stronger global community and see adaptation finance from a stronger perspective of solidarity or moral obligation. Although these underlying narratives may be difficult to measure directly, they may shape the approach to fairness in the adaptation context. The large diversity in perspectives, especially when combined with the difficulty of measuring adaptation, may be another reason that a loose equality narrative may find greater resonance across a larger variety of Parties than a strict comparative equity framework.

Finally, the relationship narratives in the *loss and damage* context are least likely to have undertones of competition, which would suggest a broad moral scope of consideration. Perceived "utility" and distance are interesting variables psychologically because it is unclear what they might look like as understandings of loss and damage evolve. For instance, certain types of extreme loss (such as the destruction of globally central shipping ports; major interference with agricultural production; large forced migrations) could have sufficiently broad impacts that even Parties' with high self-perceived domestic capacity and/or resilience could feel threatened. These types of losses could generate a greater sense of shared utility and solidarity, which in turn would widen and deepen the scope of moral consideration. However, for localized or more self-contained losses it is also possible that needs-based reasoning could result in partiality to domestic interests. It is suggested that the evolution of this issue area will depend both on how interconnected Parties see the world to be, actual climate damages, and how much tension emerges between domestic and international needs-based claims.

In Table 1 the key characteristics of mitigation, adaptation and loss and damage are sketched out in relation to the insights about how people evaluate causality, process and procedural justice, and distance and relationships. For each of the three major categories of climate policy, the table first identifies key characteristics, and then suggests the possible implications each characteristic might have for the ways in which these issues are perceived from a social-psychological perspective. The cells *are not suggesting what an ideal agreement should be* from a normative perspective, but how the characteristics of each dimension might be seen through the lens of social-psychological theories.

Table 1: Key characteristics of mitigation, adaptation and damage and loss

	CAUSALITY		PROCESS AND PROCEDURAL JUSTICE		DISTANCE AND RELATIONSHIPS	
	Characteristics	**Implications**	**Characteristics**	**Implications**	**Characteristics**	**Implications**
Mitigation	• Strongest direct causal claim • Impacts unintentional but partially foreseen • Mixed perceptions of control	• Most likely to have widest resonance for use of causality in agreements	• Somewhat established MRV for transparency and comparability of mitigation efforts	• Procedural justice important, but main focus likely on outcomes	• Strong competition among large emitters • Strong economic orientation • Need to include all large economies	• Likely focus on comparative inputs-outputs • All large economies considered part of moral scope (regardless of distance)
Adaptation	• Causal chain more indirect • Pre-existing contexts may mediate perceived causality • Impacts unintentional but partially foreseen • Perceptions of	• Causality may be more difficult to use as a base for broad agreement than in mitigation contexts	• MRV much less established • Outcomes (finance and impacts) uncertain and difficult to compare • Lack of trust	• Process and procedural justice likely to be particularly important debates	• Use of frameworks stressing human development • Inputs/outputs difficult to measure and compare	• Focus on general human wellbeing • Strength of equality claims dependent on views of global commitments and perceived interdependence

	control unclear					
Loss and Damage	• Most complex causal claim • Pre-existing factors shaping vulnerability • Impacts unintentional • No (or very limited) control	• Direct use of causality likely to be highly contested amongst Parties	• Loss and damage metrics undetermined, no shared system of tracking • Outcomes deeply uncertain • Policy goals ambiguous	• Process and procedural rules likely to be contentious	• Non-competitive framing • Only partially economically framed • Basic needs and security stressed • Damages could either be localized or global in scope	• Possibility for need-based reasoning, but dependent on ideas of global relationships • Narratives partially dependent on scale and spread of damages

POSSIBLE CRITIQUES OF A SOCIAL-PSYCHOLOGICAL PERSPECTIVE ON EQUITY

Because social-psychological frameworks have not entered the mainstream climate and equity debates, a full body of debate and critique has not yet been developed. However, it is possible to identify several potential areas that are likely to be critiqued if this stream of consideration was extended further.

First, a potentially strong critique of the idea that greater attention should be paid to the underlying psychological elements of equity perceptions across different dimensions could be that an approach aimed at "fair enough" dramatically reduces the ambition and moral weight of calls to fully address issues of compensation, deeper forms of equality. This is a valid argument, especially from a strict sense of moral philosophy: moral philosophy challenges the community of those invested in climate policy to interrogate their own actions, rationales and perceived rights and obligations from a perspective of justice which extends far beyond self-interest. Such challenges can push us morally to acknowledge – and possibly work to rectify – situations of injustice that may have otherwise remained unseen. A social-psychological perspective is less challenging in this way, which could lead to charges that is insufficiently critical of existing power dynamics or unequal outcomes of current structures of development and vulnerabilities.

However, climate policy negotiations exist within profoundly political contexts and are necessarily going to be resolved through political consideration. This political context will include recognition of domestic politics and it is in this context that the social-psychology of justice may have greatest relevance. While a "fair enough" approach is less ambitious than many have pushed for, it is also rooted in a different place and explores what types of arguments might be underlying domestic willingness, or unwillingness, to support domestic or international policy. If nothing else, thinking about justice from a psychological perspective suggests a space for potentially useful research: how do domestic publics see these justice issues and how willing are they to apply pressure to governments domestically? Until negotiators arrive at UNFCCC COPs equipped with sufficiently deep and flexible mandates to find meaningful agreements it is going to be impossible to adequately respond to the challenge of climate change, and these mandates have to come from governments embedded in domestic politics.

Second, it remains an open question how rigorously a frame of analysis designed for individuals within a social context contains intellectual merit is when applied in a context shaped by nation states and other large collective actors. This question has been more commonly debated in the use of other micro-frames of analysis (such as game theory) within international relations or other attempts to use psychology to explore the behaviour of large collective actors (see Goldieger and Tetlock 2001 for a review). As has been seen, while the simplifications that occur during such analysis do necessarily miss some of the "real" dimensions of the actors, they can also generate useful insights that can then be used to fuel further reflection and analysis. Collective entities do share many elements with individuals: they are composed of humans with emotions, needs, and stories, and they have a sense of who they are and how they are (or would like to be) related to others. Simultaneously however, it would be pushing the frame of analysis too far to suggest that nations are "just like" individuals. It is for this reason that the social-psychological framework in this piece is offered in the spirit of a point of reflection and insight without insisting that some kind of concrete "truth" can be revealed from this analysis. It is hoped that seeing the human psychological and social psychological elements of the situation may open up some possibilities for resolution that have not otherwise been seen.

Finally, a major potential critique of this approach is that although using social-psychology to understand justice dynamics in the climate arena can be useful because it can help draw attention to how arguments may be interpreted or shaped domestically, it provides limited guidance about how to reconcile fundamentally different interpretations of underlying relationships, requirements, and obligations. How does a social-psychological approach help us find new ways forward out of very difficult conflicts of interests, values and perceptions? It is to this potential critique that this paper now turns. The next section briefly considers unconventional approaches from several other fields that have attempted to speak to the challenge of resolving justice conflicts.

RESOLVING JUSTICE CONFLICTS

While the social-psychology of justice offers a range of theories which may help us see various elements of the equity problem differently, it does little to provide strategies for addressing conflicts that arise from fundamentally different perspectives of the equity issues embedded in climate policy. However, scholars and practitioners from several different academic disciplines have invested considerable attention to the questions of how best to address complex, historically rooted disputes, many of which have a justice dimension. Considering that over two decades of climate change negotiations at the international level have yielded limited concrete results and that there is no obvious resolution in sight, this paper suggests that reflecting on insights from dispute resolution (or at least dispute management) could provide some useful ideas and perspectives to the challenges of causality, process, and differences in the relationships embedded in components of climate policy. This section briefly introduces three sets of lessons emerging from work on conflict management. The first looks at the balance between backward looking justice and forward looking peace in reconciliation processes; the second reflects on proposals currently being discussed to shift the climate policy narratives; and the third examines some of the process options that have been pursued or suggested in this space.

Reconciliation Processes

Causality and historical responsibility have been particularly difficult areas of the equity debate. Taking a social psychological perspective to causation can help identify areas in which Parties – or their domestic publics – may be more or less likely to accept causality as a direct determinant of obligations. However, it provides little guidance about how to navigate fundamentally different ideas of causation, and in particular how debates about the extent to which historical responsibility should be used to shape climate policy.

From an entirely different tradition, research on complex conflict resolution draws attention to the challenges inherent in conflicts with deep historical components. Historically rooted conflicts can be difficult to resolve due to mutual distrust, multiple layers of causality, and the need to find justice for wrongs without eroding the possibilities for new, peaceful co-existence.

In a comparative study of 12 conflicts involving historical injustices, Zartman et al. examine the tension between "backward looking justice and forward looking peace" (2005). This study suggested that without recognition of past injustices combined with structural changes to ensure prevention of further injustices, communities could not move forward. These efforts had to be seen as genuine and beyond merely rhetorical: the structures that had facilitated the injustices had to be addressed directly. Simultaneously, some injustices cannot be easily remedied or compensated for. In these situations, mechanisms were needed that acknowledged these injustices but that also set bounds on the extent of retributive justice exacted upon perceived perpetrators. Without establishing some acknowledgement and boundaries to the extent of justice, it was impossible for communities to build new relationships and institutions capable of providing the peace desired. While they have seen mixed results, peace and reconciliation processes have been presented as a strategy to balance justice and peace.

Initially peace and reconciliation processes may seem like an unusual place from which to draw analogies to climate change. However, the depth of disagreement and the potentially irreconcilable visions of climate policy commitments stemming from past and future oriented understandings of causality suggest some structural similarities to other complex conflicts. What would an arrangement that addressed the tension between backward recognition and forward

oriented arrangements look like in the climate policy arena? Is it possible that an agreement seeking explicitly to find appropriate balance between backward and forward approaches might look different in the domains of mitigation, adaptation, or loss and damage?

While historical justice has long been discussed in relation to mitigation, it has more recently been introduced in the form of compensation for loss and damage. The extremely strong rejection of the ideas of compensation in the loss and damage context demonstrated by some Parties, juxtaposed with ongoing promises to address global need on a more voluntary level (such as discussions of support for technology transfer; pledges towards adaptation funding; and concrete assistance in disaster situations) suggest that Parties with causal responsibility may not be entirely contrary to concerns for global wellbeing but may require some boundaries to the extent of retributive justice demanded. Simultaneously, the strength of historical justice arguments remains unabated after over 20 years of debate, suggesting that acknowledgement of causality and alterations of the underlying structural components are equally non-negotiable for some Parties. The lessons from existing peace and reconciliation processes indicate that elements of both these requirements are essential, the challenge is determining how exactly to meet them in a climate context.

Narratives and Framing

Explicit attention to the overarching narrative of climate policy is another area that could yield strategies for better managing the potential for equity debates to lead to stalemates. It has been long acknowledged that zero-sum framings can inhibit the ability of Parties to find any meaningful and sustained resolution.

Within the climate space, several attempts to redefine the negotiating space and create a positive-sum framework have been pursued. One stream of thought has attempted to re-evaluate the costs and benefits of climate change policy, so that climate impacts (market and non-market) are better included in economic accounting. The fundamental premise of these efforts is that focusing only on current mainstream economic evaluations of policy costs undermines the ability of domestic publics, stakeholders and decision-makers to include longer-term economic and non-economic benefits stemming from policy action in decision-making. Efforts to more fully quantify and include damage functions in modelling used to assess the desirability of climate policy options present an example of this approach (Stern 2006; Garibaldi 2014). To the extent that domestic perceptions of the costs of pursuing climate policy shift through such an evaluation, this could reduce the collective action zero-sum orientation of current negotiations.

Similarly, a second stream of thought has argued that a new model of economic growth is possible – one that is less dependent on the use of fossil energy, and that might actually provide greater domestic wellbeing than the current growth model (Jaeger 2012; Zhang and Shi 2014). The basic premise of this work is that current understandings of economic equilibria are only partially correct and do not take into account: 1) the possibility that new equilibria that could develop under strong climate policy could actually result in better economic outcomes, and 2) similar to the work mentioned above, the potential of catastrophic losses. By seriously including both of these options in an economic growth model, domestic benefits in pursuing climate policy independently of others become visible. If this view of global and domestic economic systems is realistic, it could offer a significant re-orientation of policy negotiations towards a positive-sum situation.

The power of both these streams of analysis stem from their ability to shift a pessimistic, zero-sum, burden-focussed framework into one characterized by a sense of optimistic, positive-sum opportunity sharing. Evidence from simulated negotiations suggests that an optimistic, problem-solving framework can actually be essential for successful negotiations (Penetrante 2012). These experimental findings resonate with insights from actual conflict resolution

contexts in which it has been repeatedly found that moving away from a zero-sum framing is crucial in successful negotiations (Zartman et al. 2005; Sebenius 2013). While these may not be the only ways to reframe the challenge, they are both gaining traction, as can be seen by the explosion of interest in "green growth" and related concepts (Hallegatte et al. 2012; Kosoy et al. 2012; Toman 2012).

However, both of the efforts to reframe climate policy discussed above will depend on strong empirical evidence and theoretical developments. While the potential of each strategy to dramatically shift climate policy should not be underestimated, without sufficient rigour and evidence that resonates with decision-makers these concepts have limited power. In addition, one insight worth considering from social-psychology of justice research would be the caution that betrayal biases are very high: if efforts promised to bring wellbeing do not, or even worse reduce the wellbeing of communities or Parties, these failures can be particularly strongly felt.

Process

As discussed earlier, the procedural elements of climate negotiations have contributed to the difficulty of reaching an agreement and directly impinge on equity perceptions. The climate regime represents a profoundly complete suite of negotiations and involve economic, trade and industrial policy; international and domestic environmental regulatory concerns; and a full range of human development and wellbeing considerations. To make it more complicated, the power and capabilities of Parties are uneven, and some key stakeholders (including future generations, non-Parties, and non-human species) have no official representation at all. These characteristics, especially when juxtaposed against uncertain outcomes, are likely to result in deep concerns about procedural justice which in turn present an additional challenge to forging sufficient climate agreements.

Without belittling or under-appreciating the complexities of process within the climate regime several themes of suggestions have emerged to facilitate greater movement. A full analysis of these efforts is impossible in this paper: they are briefly covered with the intent of placing process on the agenda for further discussions about equity in the climate arena.

The first category of process-related efforts includes those aimed at incrementally augmenting existing UNFCCC processes. For example, following the breakdown in trust following the exclusion of many small Parties during the 2009 Copenhagen talks, a number of efforts have been undertaken within the UNFCCC system to increase inclusivity. Such efforts have included the use of paired co-chairs from developed and developing countries; *Indabas* and other inclusive discussion forums; and the continued use of workshops and roundtables to include a greater range of expertise and to facilitate informal talks (particularly through the ADP process). It is interesting to note that concrete evaluation of these efforts has not been forthcoming: having a clear, empirical analysis of the success of these efforts could be useful as negotiations move towards (and beyond) the 2015 negotiations.

A second theme of discussion has been the possibility of more fundamentally shifting or augmenting the way in which UNFCCC negotiations are structured and conducted. For instance, in recent years a number of Parties have had their perspectives overlooked within COP decisions, leading some to reflect on the lack of clarity about the meaning of consensus within the UNFCCC and the possibility of introducing voting as a strategy to help negotiations (e.g. Kemp 2014).

Less focused on the decision-rules another theme of discussion has focused on mediation. Citing the idea that mediation has been a successful strategy in addressing conflicts in a wide range of contexts it has been argued

the developing mediation capacity to augment mainstream negotiation practice could be a useful contribution (e.g. Mediators Beyond Borders 2012). To some extent this approach would resonate with many of the findings in this paper: one underlying rationale for mediation and other related techniques (such as Interest-based negotiation) is the idea that starting from core interests or concerns instead of from stated positions, may help Parties find novel solutions that meet the actual needs but that may not have been apparent if negotiations remained mired in positional bargaining only (Sebenius, 2013; Fisher and Urry, 2011)

Finally, a number of efforts have sought to influence the process of negotiation by looking towards a broader level of influence. For instance, efforts to increase the capacity of delegations through trainings or the provision of synthesized information have sought to assist those within limited resources better use the UNFCCC process to have their voices heard (e.g. FIELD 2013; UNITAR 2013). Another strategy has been the creation of "outside" venues and discussion in which Parties and others can more openly explore their perspectives.

Some of these process-oriented strategies are clearly beyond the scope of immediate discussion within the UNFCCC, but may be worth considering in more depth. As argued in this paper, the challenges of adaptation and loss and damage may result in particularly difficult procedural justice considerations and thinking through the process dimensions of the negotiations within (and perhaps outside of) the UNFCCC could be a promising avenue for assisting the resolution of some very difficult conflicts.

CONCLUSIONS

The fundamental proposition of this work is that the current discussion of equity at the international level has overlooked the central importance of psychology: how people feel about fairness may be as, or more important, in climate negotiations than principle-based analysis of justice. Several key insights and questions for further thought emerge from this overview.

First, it has highlighted the psychological elements in play when people make judgments about what is fair when. Central to these processes are judgements about causality (including intention and control); distance and partiality; and process.

Second, and highly related to these elements, it has emphasized that underlying ideas about *what the problem is*, and *how actors are related to one another*, are key in shaping various psychological positions on fairness. It should not be assumed that different Parties understand the context similarly, or that they are working from identical perspectives about the contours of global society or the nature of moral obligations within global "society". Differences in these underlying perspectives may be tied to interests, interpretations of the geopolitical context, and perceived power and can strongly shape ideas of fairness.

Finally, based in these insights from social-psychological theories of justice this paper has suggested that mitigation, adaptation and loss and damage are sufficiently distinct from a social-psychological perspective that different frameworks for equity may need to be pursued in order to find sufficiently overlapping ideas of a 'fair enough' deal.

For example, the more complex and lengthy the lines of causality, and the more ambiguous issues of intention and control were, the less likely causality would be to have broad, intuitive resonance as a basis for the distribution of obligations. One important feature of the mitigation conversation is the relatively short, direct causal linkage between emissions and the need to reduce emissions. The immediacy of this linkage makes mitigation the component for which causality has the clearest and most widely compelling claim from a psychological perspective. The degree of certainty possible about some elements of mitigation suggests that more interest may be expressed in using processes to evaluate outcomes, rather than the other way around. Simultaneously, the highly competitive and economically focused nature of mitigation suggests that an equity frame that clearly articulates the comparison of contributions is likely an important part of a "fair enough" mitigation deal.

In contrast, adaptation has a more complex, more particularistic and less direct causal chain. In addition, deep uncertainties in terms of how to measure climate impacts, adaptation needs, and adaptation commitments persist at international and domestic levels. Some uncertainty could be reduced through further efforts to clarify commitments, but some of it is irreducible due to the local specificity and social nature of many adaptation requirements. It could be very difficult to evaluate either a strict form of equality or comparative equity in which all inputs and outcomes were included for the adaptation space. Instead, it is possible that claims to lose global equality – at least in terms of fundamental sufficiency and opportunity space to improve wellbeing – may have wider political feasibility, particularly in situations in which competitive pressures are low (leading to a greater chance that the needs of those physically or socially distant will be acknowledged).

Despite these considerations, it cannot be forgotten that without addressing adaptation in a serious manner, proposed solutions to climate change risk perpetuating one of the deepest inequities in the problem - that those least responsible for causing it (the poor) are least able to adapt to its impacts and most likely to suffer loss and damage.
With all the caveats that any direct use of theory carry, it may be fruitful to consider how loose

equality in the adaptation space would differ from a stricter, comparative equity approach that might have broader resonance in the mitigation context.

Finally, loss and damage might suggest a different combination of approaches to equity. The causal linkages are particularly complex, losses are unintentional and it is unclear who has which kinds of control in the situation. Simultaneously, even more than adaptation, a comparative equity approach is unlikely to fit loss and damage due to the specificity and uncertainty of damages: is any genuine and respectful comparison possible across situations of profound loss? Instead, the strong moral claim of needs suggests that a needs-based understanding of justice might fit the discussion better. This approach would be essentially non-metric but would centre around the idea of need and deep loss. The great danger with this psychological approach to justice is its openness to partiality. If pushed to accommodate trade-offs between the needs of those closest with those more distant it is likely that – regardless of moral argumentation – the psychological pressure would be to address the needs of those closest, regardless of depth of need.

This discussion has self-consciously been exploratory and is not meant as a strict notion of either what should be, or what will be. Instead, the purpose was to provide some structure for thinking though how different ideas of equity might intersect with the various aspects of international climate negotiations. The basic idea proposed is that a single approach to equity is unlikely to work across all dimensions. Mitigation, adaptation and loss and damage are intimately linked but differ in fundamental ways across each of the three categories emerging from social-psychological investigations of justice: causality; procedural justice; and distance and partiality. The premise of the paper is that using the social-psychological lens may help us better 'see' why different positions towards the equity debate may be taken. These reasons include but extend beyond straight self-conscious self-interest to also recognize that different Parties or groups conceptualizations of the wider relationships within global society shape the types of approaches to equity they are likely to espouse.

As mentioned above, a limitation of this analysis is that it has not deeply explored potential solution spaces for current equity debates. For this reason three of the newer themes of discussion – the importance of thinking about bounding and managing the tension between historical injustices and forward oriented approaches, the use of overarching narratives to create more negotiating space, and the importance of rethinking process – were briefly included. These themes were selected largely because they have received only limited consideration but may be useful to think about.

There are many caveats of this work. First, the lack of strong empirical investigation of the relationship between social-psychological concepts and climate policy mean that at best this work provides a set of hypotheses that could each be investigated. Second, the degree to which ideas of justice psychology are applicable or relevant to the international or even domestic context is unclear. Countries certainly cannot be considered people, and real decision-makers are necessarily balancing a multitude of considerations far beyond perceptions of equity. This being said, all negotiators and all domestic decision-makers do, at some level, have to find broader public resonance and acceptance of their attempts at forging climate policy if they are to be successful. For this reason, paying more attention to how people tend to shape and evaluate justice claims may be useful and it is in this spirit that this paper is offered.

Finally, some may reject this work based on the argument that focusing on perceptions of "fair enough" dramatically reduces the ambition and moral weight of calls to fully address issues of compensation, transformative mitigation, and deeper forms of equality. This is a valid complaint, especially from a strict sense of moral philosophy. However, international climate negotiations are profoundly political and hinge on domestic politics, opportunities and threats. Until negotiators arrive at UNFCCC COPs equipped with sufficiently deep and flexible mandates to find meaningful agreements it is going to be impossible to adequately respond to the challenge of climate change – and these

mandates have to come from governments embedded in domestic politics. If nothing else this paper draws attention to the importance of the psychology of justice, and could lead to further thinking about public strategies to apply pressure to governments and policy-makers domestically.

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