



Tackling climate change and gender justice - integral; not optional

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KAREN MORROW* 

Abstract

This paper examines the relationship between gender justice and climate change, arguing that, to meaningfully address the issues that arise in this context, it is imperative to engage not only with matters of principle, but also with the practicalities of gender exclusion in respect of climate change itself and the praxis of global climate governance. The discussion briefly considers key gendered societal and scientific contexts that form part of the complex substrate that situates climate change in reality, academic and political debate, and which ground and shape the global climate change regime. These considerations explain why, while there is now a systemic acknowledgment of the need to act on gender issues in principle in the UNFCCC regime, the effectiveness of recently adopted strategies is not a given, and more profoundly, it behoves us to consider how their efficacy might be improved as we seek to mature global climate governance.

Key words

Gender; Andropocene; climate change; UNFCCC; governance

Resumen

Este artículo examina la relación entre justicia de género y cambio climático, argumentando que, para ocuparse de forma significativa de los problemas que surgen en este contexto, es imperativo implicarse no sólo con temas de principio, sino también con aspectos prácticos de la exclusión de género respecto al cambio climático mismo y con la praxis de la gobernanza climática global. El debate toma brevemente en

* Morrow has been Professor of Environmental Law at Swansea University since 2007. Her research interests focus on theoretical and practical aspects of public participation in environmental law and policy and on gender and the environment. She has published extensively in these areas. She is on the Editorial Boards of the *Journal of Human Rights and the Environment*, the *Environmental Law Review*, and the *University of Western Australia Law Review*. She is a series editor for *Critical Reflections on Human Rights and the Environment* (Edward Elgar) and sits on the international advisory board for the Gender and Environment book series (Routledge). She is a member of the Global Network for the Study of Human Rights and the Environment. Contact details: Professor Karen Morrow. Hillary Rodham Clinton School of Law, Swansea University. Singleton Park Swansea, Wales SA2 8PP. Email address: K.Morrow@swansea.ac.uk

consideración contextos generizados claves en sociedad y ciencia que forman parte del complejo substrato que sitúa el cambio climático en la realidad y en el debate académico y político, y que estabilizan y dan forma al régimen de cambio climático global. Dichas consideraciones explican por qué, si bien existe ahora un reconocimiento sistémico de la necesidad de actuar sobre temas de género en principio en el régimen de la CMNUCC, la efectividad de estrategias recientemente adoptadas no se debe dar por hecha, y, en más profundidad, nos incumbe reflexionar sobre cómo se puede mejorar su eficacia a medida que intentamos madurar la gobernanza climática global.

Palabras clave

Género; Andropoceno; cambio climático; CMNUCC; gobernanza

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1. Introduction: Getting to grips with gendered contexts

There are numerous reasons, some of which go to the foundational social and political constructs and contexts and the scientific settings that locate debates about climate change, that give force to arguments that climate justice requires gender justice. This article contends that, until the global climate change regime engages with the gendered underlying structures upon which it is founded, its attempts to integrate gender, however well-intentioned, will have, at best, limited impact. The discussion begins by considering how deeply imbricated gender is in the societal contexts of the Anthropocene and our responses to it in the sciences and social sciences. This framing situates consideration of key gender issues that situate gender and climate change at a conceptual level. These factors in turn are among those that locate the global climate change governance regime and its treatment of gender. To illustrate this the chapter examines the rise of gender in the United Nations Framework Convention on Climate Change (UNFCCC) regime and the challenges it continues to encounter. The final substantive issue considered is the potential for gender to contribute a valuable facet to climate change litigation. The discussion concludes with a call to continue and accelerate the process of gender inclusivity in the realm of climate change to seek empowerment of the excluded/under-included in global climate governance.

1.1. Not so much the Anthropocene as the Andropocene

The modern and (though increasingly questioned, still essentially anthropocentric) post-modern world have seen and continue to see, human activities that generate planet-wide adverse impacts, fuelling discussion as to whether they are of such scale and severity that we now live in the Anthropocene. Geology provides the relevant disciplinary context for the official declaration of a new geological epoch, and was the point of origin for current debate (Crutzen and Stoermer 2000). The scientific conceptualisation and formal recognition of the Anthropocene has however subsequently become somewhat bogged down in discipline-focussed debate and the recommendations of the Anthropocene Working Group notwithstanding (AWG 2019) the International Commission on Stratigraphy has yet to be persuaded to formally adopt the proposed new epoch. This has not however prevented the term from spreading like “wildfire” (Bruun Jensen 2010, 1) and taking on a variety of guises, emerging in fields as diverse as archaeology (Kelly 2014) and anthropology (Bruun Jensen 2010). Much of the debate in geology centres on the putative historical origins of the epoch (Otter *et al.* 2018). For non-geologists however, the concept of the Anthropocene is arguably more significant in terms of the present and future, in that the unique distinction between our current reality and other geological ages lies in the growing appreciation that its significant planet-wide impacts are driven by the aggregated impacts (both deliberate and inadvertent) of human agency (Hudson 2014) rather than the products of uncontrollable happenstance. As Steffen and coauthors (2018, p. 8252) observe, “The knowledge that human activity now rivals geological forces in influencing the trajectory of the Earth System has important implications for both Earth System science and societal decision making”.

The concept of the Anthropocene is therefore helpful in many ways, not least because it necessitates interdisciplinarity in order to engage effectively with its inherent complexity. As Edgeworth puts it, “[t]he anthropocene has political, economic and social

dimensions that can never be fully apprehended by methods of the natural sciences alone, any more than data from ice-cores and climate measurements can be fully evaluated by social scientists“ (Edgeworth 2014, p. 75).

Furthermore, it may be said that the social, political, and popular-culture-based (Bruun Jensen 2010, 3) iterations of the Anthropocene debate are proving more significant in focusing the attention of both epistemic communities and the wider world than the naming a new geological epoch. In this regard, the concept of the Anthropocene is prompting freshly focused consideration of the planetary-scale impacts of human activity. Although humans have always affected the environment, modernity, facilitated by science and technology and associated population growth, massively expanded the scale and complexity of the effects of human activity and agency (Harari 2014).

Inevitably, many debates are prompted by the composite of myth and fact that comprises the Anthropocene (Edgeworth 2014, p. 73): for example, some reject the very notion of species-wide responsibility for global environmental degradation in general and climate change in particular, preferring instead to refer to the Capitalocene (Malm and Hornborg 2014). However, the latter concept fails to reflect that all human societies, capitalist or not, are implicated, albeit to varying degrees, in driving environmental degradation and all experience its consequences (Burke and Pomeranz 2009). In functional terms, the idea of a more fine-grained approach to questions of responsibility for human-generated impacts nevertheless has something to offer, as it can be argued that we find ourselves not so much in the Anthropocene as the Andropocene. This is because, despite long-standing legal and political attempts to foster equality, it remains the case that: governance at the international, domestic and local levels; political and legal regimes (of all complexions); educational institutions (Aiston 2019); economies, commerce and industry; and most aspects of civil society, continue to be predominantly led and driven by men. While this paper is concerned with the status and role of women, gender equality is recognised as extending beyond this to encapsulate all aspects of gender because it is entwined with other equality issues including race, gender, class, sexual orientation, (dis)ability and age which are highly relevant to debates on privilege and exclusion – though they are not, for reasons of space, discussed here. Powerful men largely, but not exclusively, drawn from a narrow constituency of the privileged, white, wealthy, and educated, remain the dominant power group in the modern world (Szeman and Boyer 2017). One consequence of this is that the “values, ideologies, institutions, and economic systems that shape human-environmental relationships are themselves gendered” (Norgaard and York 2005, p. 508).

Climate change, given its variable, cross-cutting, multilevel and multifarious manifestations, which pose a potentially existential threat to humanity and many other forms of life, is arguably a hallmark of the Andropocene and exhibits and augments the continued toxicities of a way of being that profoundly affects interhuman relationships, as well as characterising a fatally flawed incarnation of the humanity-nature interface.

1.2. Gendered thinking, science, social science and climate change

The tools that we apply to investigate and develop our understanding of and relationship with the Earth, including science, are, whatever our pretensions to objectivity, at least partially shaped by our own biases and standpoints and are in

consequence gendered. Science is central to our understanding of climate change, but it is at the same time deeply implicated in its causes. Simultaneously, with technological optimism forming a strong strand in responses to environmental degradation, science is also a key driver of global climate governance. Climate change is increasingly understood in terms of Earth system thinking that encapsulates breath-takingly complex, cross-disciplinary science – arising from the need to construct a “language to recognize the Earth’s environmental systems... a language that can describe how everything is connected, and everything has consequences” (Solnit 2019).

There is no reason to suppose that Earth system science (to which we will return in more detail shortly) will escape a gendered inheritance any more than any other area of scientific endeavour, including existing areas of inter/transdisciplinary inquiry, not least mainstream climate science. The Intergovernmental Panel on Climate Change (IPCC 2018a) has only recently acknowledged that the urgent need to address a pervasive lack of gender balance in the area. Inter/transdisciplinary science does however offer additional scope for gender-literate inquiry, as initial empirical research suggests that such areas are regarded as appealing to women scientists in exhibiting, for example, team-working and stakeholder engagement, and in the opportunities they may provide to carve out a career in an emerging area (Rhoten and Pfirman 2007). Interdisciplinary approaches do raise important possibilities, but the full relevance of gender to their practice and sustainability is under-researched (Rhoten and Pfirman 2007, p. 72). While the problems inherent in the often unquestioned male domination in science in general have been the subject of exhaustive feminist commentary (Keller 1995, chapter 4), such scrutiny is also required in climate and Earth system science as integral to their development, rather than a late addition. Furthermore, the fact that global climate activism, not least the recent school climate strikes, is strongly female-led indicates that the gender/climate nexus is also becoming increasingly visible in society more generally and as such warrants further research (Glenza *et al.* 2019).

The relative invisibility of women in environment-focused social science scholarship and its implications have also long been noted:

Women occupy space just as much as men do... They are found almost everywhere that men are found. But almost everywhere women’s lives are different in nature to men’s; their relations to the earth, to its resources, and to the productive systems that people have evolved for making use of these resources, are not the same as, nor even parallel with, those of men. (Hayford 1974, p. 1)

Over the last few decades, academic research across a whole range of disciplines has done much to expose the gendered reality of environmental experience and has “provided growing empirical evidence of the importance of understanding women’s environmental constraints as one set of forces contributing to women’s restricted social position” (MacKenzie 1984, p. 9). Concomitantly, it is increasingly understood that the constrained social positions of women often subject them to the consequences of adverse environmental conditions.

Significant challenges have however been encountered in addressing the gender-environment nexus from the outset. As MacKenzie observes, while empirically-driven socialist feminist spatial geographers were in many ways in the vanguard of early research on women and the environment, the fact that their research tended to begin

with identifying “men” as the “norm” and proceeded to characterise women as a “deviant sub-group” skewed their approach (MacKenzie 1984, p. 11). The use of males for standard setting remains socially pervasive (Criado Perez 2019), if often implicit across most disciplines, including law (Otto 2005). Despite the subsequent emergence and development of complementary theoretical frames of analysis for scholarship on women and the environment in geography and other disciplines, the legacy of early empirically-driven thought remains highly influential, as women continue to be routinely viewed as wanting against a male norm and thus “presented as ‘victims’ of environmental constraints, not as actual or potential creators of environments” (MacKenzie 1984, p. 11). In this, research on climate change is no exception. The original disciplinary context from which the gender-environment nexus emerged also shaped and constrained the approach in other fundamental respects as it “implicitly elevated spatial restrictions to causal status, and failed to explicitly examine the social parameters of these restricted spaces, tending toward an implicit theorizing of ‘spatial oppression,’ and a ‘naturalization’ of women’s roles as environmentally determined” (MacKenzie 1984, p. 11).

Gender issues aside (though these need to be researched as a matter of urgency in order to profit from the hard-earned lessons of the past), Earth system science highlights the fact that systemic environmental deterioration now represents an unprecedented existential threat to humanity. Much activity and debate (both scientific and political) has been generated by the ground-breaking work of the Stockholm Resilience Centre on the concept of planetary boundaries. The concept focuses on: “the intrinsic biophysical processes that regulate the stability of the Earth system” (Steffen *et al.* 2015, p. 1) and the project seeks to determine thresholds applicable to nine boundaries (climate change being identified alongside biosphere integrity as core) in order to identify and facilitate action securing a “safe operating space” for humanity. Planetary boundaries thinking alerts us to the fact that “the only state of the planet that we know for certain can support contemporary human societies, is now being destabilised” (Steffen *et al.* 2015, p. 1).

The concept of planetary boundaries has gained broad public traction in relatively short order. Laybourn-Langton and his team, in an early example of policy response founded upon their implications for society, posit that we are now in an embryonic “age of environmental breakdown” (Laybourn-Langton *et al.* 2019, pp. 15–20). They express the view that “Fundamentally, environmental breakdown (including climate change) is an issue of justice. The problem has been predominantly caused by the activities of a minority of nations, companies and sections of society, and its consequences fall most severely on poorer nations and populations, who have a limited ability to respond” (*ibid.*, p. 8). They conclude that “environmental breakdown interacts with other inequalities, such as class, ethnicity and gender. This makes environmental breakdown a fundamental issue of justice” (*ibid.*, p. 5). As planetary conditions shift to the sub-optimal (even without the added possibilities of sudden irreversible cascades of change) this builds on, augments, mutates, and expands the societal impacts of existing environmental inequalities and injustices – including those based upon gender.

A key driver of environmental breakdown is the extreme “carbon inequality” between the developed and developing world, and indeed within societies, with the wealthy being responsible for the lion’s share of emissions but the poor bearing the brunt of the

adverse consequences (Oxfam 2015, Laybourn-Langton *et al.* 2019). Developed world domestic environmental (in)justice patterns (if not yet consumption levels) are being replicated in developing countries (Newell 2005, p. 74). Furthermore, as we shall see below, carbon inequality, like other environmentally-rooted inequities, exacerbates existing societal fault-lines.

Laybourn-Langton and coauthors, influenced by Raworth's work on what she terms "doughnut economics" (Raworth 2017) (which adds a social justice dimension to the concept of functional safety in planetary boundaries thinking), suggest a double-pronged response to environmental breakdown by "meeting human needs, while bringing human impacts to within environmentally sustainable limits" alongside preparedness to adapt to the new ecological normality (Laybourn-Langton *et al.* 2019, p. 27).

Lawyers also see justice as inherent in planetary boundaries issues such as climate change. Sze and London, for example, describe the expansion of the environmental justice movement into the climate realm, as it increases its disciplinary reach and spatial coverage. They observe that "[g]lobal climate change is a key issue in which environmental justice frameworks are particularly useful because the roots of the problem are found in the differential power and global inequalities in relationship with the environment" (Sze and London 2008).

There is much common ground to be found between the long-established environmental justice movement and the drive for gender justice that is applicable to climate change, not least their shared focus on exposing inequalities and underlying structural power imbalances and in a characteristic blend of theory and activism. Gender is also a concern in the context of environmental justice, with (Verchick 1996, pp. 26–27) pointing to the prevailing role of women in unpaid leadership (paid leadership being male dominated (Mellor 1997, p. 127) and rank and file membership of the movement as it emerged in the United States (US).

The climate justice movement builds upon its feminist and environmental antecedents, shared concerns about justice, vulnerability and disproportionate impacts, and similar methodological praxis (Morrow 2017).

1.3. Climate change, morality, rights, and gender

Mary Robinson has stated the case for climate justice in typically succinct fashion, describing the moral imperative for urgent action as "indisputable": "Climate change undermines the enjoyment of the full range of human rights – from the right to life, to food, to shelter and to health. It is an injustice that the people who have contributed least to the causes of the problem suffer the worst impacts of climate change" (Mary Robinson quoted in Carrington 2019).

Recourse to this species of moral argument is now commonplace in the public rhetoric of climate crisis. Latterly this has been evident in recognition of the escalating impacts of climate change on core protected human rights, including women's rights, in academic commentary (Humphreys 2010) and in the political mainstream, in part due to the work of John Knox, the Office of the United Nations High Commissioner for Human Rights (OHCHR's) first special rapporteur on human rights and the

environment (United Nations Human Rights Council – UNHRC – 2016). The moral and legal concerns that permeate these debates, not least with respect to questions of justice, raise fundamental concerns but have not proven sufficient to prompt efficacious concrete engagement with them by the international community.

In addition to addressing moral concerns and rights issues, integrating gender into climate change governance offers the potential to fundamentally alter the nature of the wider debate and the regime itself. It would do so by shifting from the current productive, economic and technical-fix dominated tack, to a mixed approach that also looks to harnessing lived experience and reproduction, in the broadest sense (relating to those activities that perpetuate and support life) in an innovative and integrated approach towards living with a new climate reality. This offers one means to provoke the profound societal change needed to deal with the impacts of climate change and finding new ways of living in a climate-altered future. Research and analysis already point to the significance of demographic factors, such as gender, in shaping both attitudes and behaviours towards climate change across multiple dimensions from theory to action (Salehi *et al.* 2015, p. 31) and the impact and utility of this needs to be more widely explored.

Finally, patriarchally-framed governance regimes are inevitably impoverished because they underrepresent or exclude the experiences and views of more than of half the global population. This is significant both in principle and in practice as research on gender differences in attitudes towards climate change demonstrates (Kronsell 2013, pp. 7–8). One important finding of such work is that gender can influence formal political decision-making, with, for example, legislatures featuring higher numbers of female representatives being more likely to prompt national ratification of environmental treaties (Norgaard and York 2005). Further research is warranted on the potential of higher levels of female representation in decision-making bodies to supply a corrective to the disproportionate influence of dominant and privileged perspectives on political decisions on climate change and on whether this applies at the international level. This is particularly important given that the global climate change governance regime has long been criticised for its inadequacies in even mainstream political commentary (House of Commons Energy and Climate Change Committee 2012). The matter is becoming ever-more urgent as the much criticised attempt in the UNFCCC Paris Agreement to revivify the moribund regime (Falkner 2016, Rogelj *et al.* 2016) by allowing states to set their own emissions reductions rather than imposing binding targets on them, is proving problematic, as commitments fail to reach levels required to support its main goal:

Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change. (Paris Agreement, 2015, Art. 2)

The IPCC has subsequently revisited the targets (IPCC 2018b) recommending that 1.5 °C offers better prospects; arguably though this is a more scientifically realistic stance, it is at best politically challenging but certainly behoves us to examine additional ways to better promote regime efficacy, for example by bringing hitherto silenced/muted voices into the debate in order to press for a more stringent approach.

1.4. *Vulnerability and agency*

It was inevitable that climate change would, like other cross-cutting issues such as development (sustainable and otherwise), be found to be gendered in root and branch (Nelson *et al.* 2002). Some take the view that the origins of greenhouse gas emissions are gendered as they are shaped by societal structures that perpetuate male control over production (Morita 2007, Kronsell 2013, p. 7). The difficulty in disaggregating emissions on gender grounds however makes pursuing the ramifications of this challenging (Pearse 2017, pp. 6–7). More established is the long acknowledged gendered nature of climate change impacts, (Morrow 2016); not least in terms of gender-constructed vulnerability:

Women often bear the heaviest burden of all in a warming world. They are generally more heavily dependent on climate-sensitive livelihoods (such as rain-fed agriculture, and collecting water for household use), and they often have the least to fall back on in harsh times or to help them escape a downward spiral in productivity (such as access to land, training or capital). (Oxfam 2015)

Climate change is increasingly viewed as a source of risks, particularly for the poor, and as a potent factor exacerbating existing inequalities and vulnerabilities, including those rooted in gender (United Nations Development Programme – UNDP – 2007, p. 74). As the UNDP has observed:

Gender inequalities intersect with climate risks and vulnerabilities. Women’s historic disadvantages — their limited access to resources, restricted rights, and a muted voice in shaping decisions — make them highly vulnerable to climate change. The nature of that vulnerability varies widely, cautioning against generalization. But climate change is likely to magnify existing patterns of gender disadvantage. (UNDP 2007, pp. 81–82)

Disaster vulnerability provides a particularly marked demonstration of the gendered impacts of climate-related calamities. This is ultimately expressed in mortality figures but is also evident in myriad lesser guises which do not only (or even primarily) arise only from climate change induced or climate change aggravated disasters. Differential impacts in this context are also attributable (to a degree) to gender difference, often expressed in socially constructed vulnerabilities, and to the exacerbation of pre-existing gender discrimination and violence. Significantly, poverty plays a decisive role in the vulnerability of women to such disasters as their generally disadvantaged positions can largely be offset by high, or aggravated by low, socio-economic status (Neumayer and Plümper 2007).

Vulnerability is an important moral consideration that should underpin climate change adaptation measures and policies. That said, if it is foregrounded to the extent of blotting out other considerations, it becomes problematic in principle and in practice. MacGregor points to this as a key pitfall when vulnerability is raised in concert with gender to the point where they are conflated (MacGregor 2017). This argument was marked in the emergence of gender issues in the context of climate change which appears to have been based on what will, for convenience be termed, pre-existing “gender and...” thinking and practice. The relationship between first gender and development and later gender and sustainability are its most obvious precursors. Both areas feature approaches that exhibit questionable theoretical and practical credentials in addressing what we would now term vulnerability, that open them to a whole range of criticism, not least for placing additional burdens on women instead of addressing their plight (Resurrección 2013, p.

34). Vulnerability is also problematic in terms of the essentially dualistic vulnerability-resilience framing that characterises many early climate change and gender discourses. MacGregor identifies this as particularly corrosive because it pits the supposed passivity of victims (who are both “feminised and racialised”) unfavourably against the “capability” of the “resilient” male subject (MacGregor 2017, p. 19).

MacGregor notes that emphasising vulnerability has not been a particularly efficacious strategy in addressing the gender-climate change nexus and suggests that better arguments can be made. She seeks to do this by shifting the debate beyond victimhood and the material impacts of climatic harms by using a “gender lens” to focus on underlying issues relating to the construction and performance of gender identities and their salience to climate change. Crucially, this recognises that the gendered impacts of climate change are not free-standing or isolated but instead manifest the deep power of patriarchal social structures. In consequence, MacGregor argues, “[g]ender inequality is itself harmful to women and the global ecological crisis is making it worse. It is through this logic that recognising women’s plight, and taking action to reduce their suffering, have become matters of climate justice” (MacGregor 2017, p. 15).

Adopting an overwhelming focus on vulnerability as an argument for climate justice also raises the danger that other equally important matters will fall by the wayside. While women are indeed vulnerable to the impacts of climate change, this is not the only significant manifestation of the relationship between gender and global heating. As Pearse succinctly puts it, “the agency and resilience of women and marginalized social groups falls out of view when inequality is understood as vulnerability” (Pearse 2017, p. 5). Thus, women’s capacity to undertake climate change adaptation, for example, in husbanding increasingly scarce water resources, or developing new approaches to food cultivation and gathering (Pearse 2017, 5–6), is often underappreciated. The prevalence of a vulnerability-skewed approach has therefore served to perpetuate gender stereotypes and injustices because it tends to ignore the lived experience and insights of those at the sharp end of climate change impacts, who are often women. (Patouris 2016).

Nonetheless, for all its flaws, vulnerability has its uses as *a* (rather than *the*) tool to argue for justice; for, as the UNDP observes, “[o]ne corollary of gender vulnerability is the importance of women’s participation in any planning process for adaptation to climate change” (UNDP 2007, p. 82).

1.5. A worrying emergent context - the gender equality backlash

There is one final contextual factor with important implications for gender in the context of climate change: the rise of the “anti-gender” movement. This development is putting women’s human rights under pressure, subjecting them to sustained erosion at the hands of a multi-stranded loose alliance of religious and conservative states and like-minded social actors. These seek to curtail the legal protections due to women, for example in restricting access to family planning services and abortion, and in failure to address gender-based violence. While there has always been residual hostility towards the idea that “women’s rights are human rights”, the mantra popularised by Hillary Clinton in her speech at the UN Fourth World Conference on Women, Beijing (Clinton 1996, p. 100), this is now on the rise (see for example, Policy Department for Citizen’s Rights and Constitutional Affairs 2018). In some quarters, antagonism towards women’s

rights has been further fuelled by the rise of populism and the increased mobilisation of the far right (O'Malley 2019), which commonly display an anti-gender equality predilection. According to Lilja and Johansson, these heterogeneous actors unite in a drive to “reiterate and build upon binary notions of different social categories and their struggles are against reproductive technologies, anti-discrimination policies, gender mainstreaming, sex education, transgender rights, and so on” (Lilja and Johansson 2018, p. 82). Climate change governance, where gender is beginning to emerge from marginalised issue status, is susceptible to the threat that this broader backlash will stymie progress.

2. Gender and the global climate change regime

The societal and scientific settings discussed above are illustrative of the forces that have shaped and continue to permeate the form and substance of global governance. The global climate regime is no exception and, under the 1992 UNFCCC features, “gendered institutions, practices and discourses” (Prügl and Meyer 1999, p. 4). The climate change regime was, at least initially, dominated by western values and statecraft and is highly technocratic in nature (Morrow 2017). Change has begun, but the regime is still dominated by a masculinised worldview (Crossland 2014, p. 125). The reality is that systems work in the interests of those who design and run them (Kronsell 2013, p. 22, MacGregor 2017, p. 18), and that in global climate governance this usually equates to white, wealthy, males whose dominance permeates global political, legal, scientific, and economic systems, as well as the energy (Carlsson-Kanyama *et al.* 2010) and transport sectors (Duchène 2011) that are centrally implicated in global heating. The question of who is in control of deeply embedded power structures is also key in determining who is ignored, silenced, and excluded. Keeping gender off the climate change governance agenda for many years was a form of systemic resistance (Kronsell 2013, p. 8) that continues by silencing awkward questions about limits of technocracy and market, while perpetuating patriarchal privilege.

2.1. The UNFCCC and gender - a late adopter of gender concerns

After a lengthy, sophisticated, and multi-faceted civil society campaign, in concert with other political drivers and institutions within the UN (Morrow 2013), the UNFCCC secretariat finally accorded provisional recognition to the gender constituency (Gendercc) in 2009, followed by formal approval in December 2011 prior to COP17 in Durban. Furthermore the role of NGOs, especially highly effective internet-based networks (Yamin 2001) that partially underpinned these developments, is well suited for mapping the links between the global climate change agenda and its local manifestations, and proved central in framing and adding weight to the campaign for incorporating gender issues into the UNFCCC regime. Systemic recognition was a significant development in global climate governance in both symbolic and practical terms, as it finally gave women’s representatives official status within the global climate governance system. This brought with it more direct access to the regime on various fronts, including meetings, resources, and information. Above all it conferred a degree of legitimacy to gender constituency within the regime. However, it speaks volumes that environmental, business and industry non-governmental organisations (NGOs); local government and municipal authorities; indigenous peoples; and research and

independent organisation; and trade union constituencies were all recognised well before this point (Morrow 2013).

The tardiness of the climate change regime is getting to grips with gender issues is even more remarkable given that broad coverage for gender had been present in the human rights canon since its inception in the Universal Declaration of Human Rights (UDHR) in 1948 and augmented by evolving systemic recognition of gender issues within the UN over many years. This seemingly indicated important pressure points for pressing for a gender literate approach to climate change governance, nevertheless progress was glacial. The case had been made over many years and on several fronts: moral, legal, and practical, and is now pithily summarised in the gender constituency's "vision", which recognizes that: "The challenges of climate change and gender injustice resemble each other, in that they require the existing (and deeply flawed) systems of power, politics and economics to be addressed and overcome" (Gendercc, n.d., n.p.).

It is telling that the language of justice is emphasised by women's groups and often linked to international human rights commitments to gender equality, women's rights, and the role of gender in pursuing the Millennium Development Goals and now the Sustainable Development Goals (Gendercc n.d., Women's Environment and Development Organisation – WEDO – 2018). Justice is also prominent in supporting the constituency's goal of achieving a formal voice for women/gender in climate change negotiations, plans and actions (Morrow 2013).

Subsequent developments in gender coverage within the UNFCCC have been comparatively swift and numerous, although their impact in the pursuit of justice is open to question. Key examples include the adoption in 2012 of Decision 23/CP.18 on gender balance and women's participation in the UNFCCC negotiations and the Convention's constituent bodies (UNFCCC 2012). While on its face this represented a formal institutional commitment to address gender issues, it equivocally identified "gender balance" as its goal, eschewing established UN institutional language relating to gender equality and gender mainstreaming. The tone and approach used in the decision is necessarily hortatory, but even in this context it indicates a lukewarm attitude on the part of state parties to the UNFCCC. This is borne out in subsequent developments such as the disappointingly scant coverage (it is mentioned only three times) accorded to gender in the Paris Agreement (2015).

In 2013, in a positive development, the UNFCCC began to disseminate information on the gender composition of its constituent elements on an annual basis, which provided a crucial baseline from which to gauge subsequent progress (UNFCCC 2013). In an international regime whose power to compel state actors to improve the gender representation in the UNFCCC's constituent bodies is non-existent, publishing information and exposing inaction or highlighting action is crucial (and is consistent with the transparency and accountability frameworks relating to nationally determined contributions in the Paris Agreement). For the first few years, the gender composition reports made for depressingly repetitive reading – consistently stating that "urgent action" is required and that more needs to be done. However, the 2018 report showed some evidence of change, despite uneven progress, and cautious grounds for optimism:

for the first time since reporting commenced in 2013, more than half of the constituted bodies have female representation of 38 per cent or more, and three constituted bodies

have an equal number (48 or 50 per cent) of female and male members. (UNFCCC 2018, paras. 11–12)

The number of women chairing, or co-chairing, constituted bodies is also increasing (UNFCCC 2018, paras. 11–12). It does however remain to be seen whether such positive changes will be perpetuated.

If there are limits in the ability of the UNFCCC to persuade signatories to fully embrace gender issues, what of its ability to do so indirectly by getting its own house in order? The adoption of Decision 18/CP.20, initiating the two-year Lima Work Programme on Gender (LWPG) (UNFCCC 2014, p. 13) which promised a new level of engagement with gender issues by the regime machinery, was hugely important in setting in motion a systematic review of the regime's gender progress (and the lack thereof). Following on the LWPG, the regime further institutionalised its engagement with gender in adopting Decision 3/CP.23 on the Establishment of a Gender Action Plan (UNFCCC 2017) which operated to support the implementation of gender-related decisions and the operation of gender mandates within the UNFCCC system.

The post-Lima approach to gender in the UNFCCC finally appears to be gaining purchase, for example, in regime structures and in discrete and cross-cutting coverage on Convention website, where gender is more visible than in time past and listed as an aspect of the regime's core topic coverage (UNFCCC 2020). If the LWPG provided the foundations of the regime's new, more systematic approach to addressing gender issues, the GAP built upon them. The LWPG and the GAP developed their credentials as they progressed and quickly became part of the regime architecture, and both were subsequently endorsed by successor provisions (UNFCCC 2019). While the systematisation of gender concerns represented by the LWPG and the GAP were welcome, presence on the agenda and in proceedings are prerequisites to, but not sufficient for, securing a gender equal climate change regime. As Pearse (2017, p. 9) puts it, a "simple process of including more women into organizations and decision-making bodies is not sufficient. More fundamentally, gendered exclusions are not simply a matter of including more women, understood as an undifferentiated social category". Thus, while presence is a start, what is needed is a profound culture shift that addresses underlying causes of exclusion, enables an effective and sustained focus on gender issues, and secures not only the ability to press for change but also the capacity to influence outcomes through full participation. This requires effectual action to redress pervasive female disempowerment in policy formulation and decision-making processes (Bhatta 2001). Kronsell's (2013) work synthesising common approaches from gender analysis and governance theory on climate/sustainability-centred transitions, offers useful insights in this regard. Her research draws upon Sweden's well-known advanced approach to gender equality and active engagement with climate change, which seemed to offer positive prospects for enlightened treatment of these intersecting issues. Disappointingly, Kronsell found that, despite equal representation in the various institutions shaping Swedish climate policy, gender remained almost entirely invisible in measures adopted at all levels of government (Kronsell 2013, pp. 10–11). Kronsell posits that effective transitions involve three distinct elements which include improving participation alongside structural changes to deal with "oppressive power relations" and challenge "institutionalized norms" (Kronsell 2013, p. 2). This requires not just lip-service, but deep engagement to tackle a broad range of deeply rooted and systemic

gendered disparities. This is a high threshold to reach. In the global climate change regime, it is more challenging still, as additional gendered concerns are in play, such as the lack of resources, technical capacity, and advocacy skills required for meaningful participation. Furthermore, beneath these particular concerns, lies a complex substratum of structural inequality generated and perpetuated by broader social, economic, cultural, legal, and educational barriers that also need to be addressed in order to forge progress (Brody *et al.* 2008).

Such progress as has been made on gender issues in the UNFCCC may be regarded as the product of an exercise of feminist discursive power in that:

one precondition for recognition of and the success in mobilizing a political question is a certain discursive preparedness. To be recognized, a group must already have a certain influence and power over the dominant discourses. (Lilja and Johansson 2018, p. 86)

Using the broader recognition of gender in international law and politics to seek to remedy the dearth of female voices in the climate governance regime process is a first step towards addressing gender disparities in global climate justice, the importance of which should not be underestimated. This development also serves as an exemplar of the need to include a broader range of marginalised and excluded perspectives in addressing the climate emergency. This would not only go some way to satisfying democratic values, it would also improve regime efficacy by opening up discussion, embracing the broad range of inputs available in the search for progress, and serve as a means to seek societal buy-in to necessary future decisions and actions (Dobson and Bell 2006). Nevertheless, equal representation alone will not suffice to deliver gender justice in the global climate change regime; deeper structural inequalities must also be effectively addressed.

2.2. *States, gender, and climate litigation*

Whatever the deficiencies of the international climate change regime, commitments adopted under it are beginning to emerge as a source of inspiration for climate change litigation against states and corporations in an incipient and symbolically important aspect of climate justice. According to the Sabin Centre for Climate Change Law's Litigation Database (2020) the UNFCCC itself has only been raised in five cases against states and one petition to the IACHR to date. It is however already apparent that the Paris Agreement is beginning to act as a catalyst in this area (UNEP 2017, p. 17). There is potential for gender-framing to apply to such climate change litigation, as demonstrated in *Verein KlimaSeniorinnen Schweiz v Bundesrat* No. A-2992/2017 (hereafter *KlimaSeniorinnen*).

Bahr and coauthors. (2018) offer a detailed analysis of this case, which began with a petition in 2016 to the Swiss Government, targeting the legislature and federal agencies charged with responsibility for transport, energy and environmental protection, for continuing to use inadequate targets in response to climate change and seeking action consistent with meeting the State's commitments under the Paris Agreement. The case was raised by Greenpeace Switzerland and an NGO comprised of "senior women" who would be over 75 years old in 2020 (Bahr *et al.* 2018, p. 204). They alleged that the state had failed to meet its obligations under articles 10 (right to life), 73 (sustainability

principle), and 74 (precautionary principle) of the Swiss Constitution and articles 2 (right to life) and 8 (right to respect for private and family life) of the European Convention on Human Rights (ECHR) by failing to adopt emissions reductions targets and mechanisms consistent with its commitments under the Paris Agreement. Following the approach adopted in other prominent cases, such as *Urgenda Foundation v The Netherlands* (2015) and *Juliana v United States of America* (2016), global level international law was not directly relied upon. Instead the plaintiffs argued that “environmental principles and international law are material in making a determination of whether Switzerland’s actions or inactions are contrary to domestic and [regional] ECHR human rights protections” (Bahr *et al.* 2018, p. 218).

The petition deployed a range of scientific evidence, including epidemiology, the work of the IPCC, and Swiss government research (Bahr *et al.* 2018, pp. 200–202) to try to establish (as required by domestic law) that senior women are particularly vulnerable to health impacts generated by climate change. The petition was dismissed on lack of standing and victim status, essentially deciding that the women were acting in the general public interest, and that an *actio popularis* claim could not be entertained under the applicable legislation. An appeal to the Swiss Federal Court was rejected and a further appeal to the Swiss Supreme Court was dismissed in May 2020 (KlimaSeniorinnen 2020). Regardless of the outcome of the case itself, Bahr and coauthors (2018) point to the wider spatial and temporal relevance of the *KlimaSeniorinnen* litigation, noting that, given the global nature of its founding concerns, the argumentation (like that in other climate change cases) has significant potential for cross-pollination in cases in other jurisdictions and as part of the larger climate justice conversation. Litigators, and litigants tend to keep abreast of climate litigation other jurisdictions as they seek to capitalise on the fact that:

courts are becoming more willing to assert authority over climate disputes because of the robust nature of climate science as summarized in the IPCC reports, indisputable evidence of climate harm and greater understanding of the human rights obligations requiring climate protection and precautionary action. (Bahr *et al.* 2018, p. 216)

While case outcomes will always be unpredictable, there certainly appears to be a rapidly maturing general judicial willingness to entertain this species of climate change litigation, which speaks to an emerging and evolving jurisprudence as another tool to though which to address these pressing issues. This disappointing outcome in *KlimaSeniorinnen* notwithstanding, gender-based litigation may, in future cases, have much to offer in this regard.

3. Conclusion: Gender justice and climate change - voice and choice

Women’s presence as participants and leaders in society more generally and in the global climate change governance regime is improving, but remains inadequate. The frustration of the slow grind towards equality in each and every context, to wrestle into being what should be the default position as of moral and legal right, is real and exhausting. It remains the case that, as with other strategies to advance gender equality, a soft stance has had to be taken on what should be hard rights and non-confrontational means adopted to appease patriarchal power-holders and persuade them to share jealously-guarded privileges that, kept within the hands of the few, ultimately serves no-one’s interests – not even their own (Verloo 2001). After long and hard battles of this

kind, women are no longer invisible or voiceless in international climate governance, but they are still marginalised and obscured. Other minority sexuality/gender identified groups, falling under the broad LGBTQI+ banner fare worse still, being excluded/absent from constituency coverage and their plight requires urgent research and forceful advocacy. In the Andropocene, where science and society and the power structures that they inhabit remain dominated by masculinist modes of being and predominantly populated by homogenous male actors, with others excluded and/or ignored, the Anthropos (understood as the full range of the human) is not in evidence.

As for climate change, as far as the UNFCCC is concerned, while change is afoot insofar women's participation is concerned, presence in itself does not equate with influence outcomes and more research is required on the qualitative impacts of initiatives to date. The next step must be securing the substantive influence of women in global climate governance. This is vital because, as experience has shown regarding parity of treatment for gender in the domestic sphere, formal equality is superficial and inadequate for achieving full gender equality. Addressing deeper structural inequality demands more than mere numbers – though improving the latter is a necessary start. This holds for areas as diverse as electoral praxis (Rodríguez Ruiz and Rubio-Marín 2008, p. 288) and climate change governance (Kronsell 2013). In consequence, if the equal presence of women in deliberative bodies does not happen spontaneously – and it has taken several years for the glimmerings of improvement so far – it can and should be enforced by law. Without:

a minimum presence of women in representative bodies, it is unlikely – despite continued talk of representation and advancement of the common good as the good of all those represented – that sufficient attention will be accorded to issues that affect women disparately. (Rodríguez Ruiz and Rubio-Marín 2008, p. 297)

The same applies to other excluded groups. If presence is not secured and the deep-seated structural inequalities that underpin climate change governance fully addressed, the so-called “common good” cannot be defined as the “good of all”, and climate change governance will continue to exacerbate existing injustices and contribute avoidable aggravation to a dystopian future for people and the planet.

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