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It's Not Aid, it's Reparation: Corrective Climate Justice in the Context of Nuclear Legacy

Abstract: This paper looks at corrective (reparative) justice in the framework of climate change, in particular the potential of reparations for permanent and irreversible loss and damage. Guided by scholars criticising the Western dominance of climate narratives, I argue that reparations offer a meaningful approach to justice in a postcolonial setting in which the imperial wrongdoing has made communities more vulnerable to the contemporary climate harm. By using the nuclear legacy of the Marshall Islands as its case study, the paper proposes that the atomic testing conducted by the United States has exacerbated the climate vulnerabilities in the Marshall Islands. The history of atomic testing continues to contribute to a variety of economic and non-economic losses and damages to which climate change now is a threat multiplier. While the Marshallese experience cannot be universalised, arguments for reparations in this and similar cases can provide a useful starting point for the consideration of corrective justice in the context of climate change.

Keywords: *climate change; corrective justice; loss and damage; nuclear legacy; reparations*.

Introduction

> 'In our era, climate justice and reparations are the same project: climate crisis arises from the same political history as racial injustice and presents a challenge of the same scale and scope' (Táíwò, 2022: 147).

During the 26th Conference of Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) in Glasgow in 2021, Albon Ishoda, then Ambassador of the Republic of the Marshall Islands to Fiji and the Pacific, tweeted in relation to negotiations on irreversible and permanent loss and damage: 'it's not aid, it's reparation' (Ishoda, 2021). With his short and provocative social media post, Ambassador Ishoda emphasised that for Small Island Developing States (SIDS), loss and damage is not a question of voluntary finance mechanisms provided by developed states to assist vulnerable nations such as his (aid), but a matter of *correcting* historical injustices and providing *what is*

ISSN: 1835-6842

owed to the communities at the frontline of climate crisis (reparation). These words are significant; they emphasise the duty to provide for those that have been wronged in the past. It was, and is, a call for corrective (reparative) climate justice.

By taking Ambassador Ishoda's statement about the nature of loss and damage as a harm that requires reparations seriously, this paper looks at the potential of corrective justice for permanent loss and damage by situating climatic existential harms in the context of nuclear legacy in the South Pacific region. The question of historical responsibility for climate harm has been present in climate justice discussions since its earliest days. It has more recently evolved into rich theoretical debates on principles such as polluter pays, ability to pay and beneficiary pays – each with their respective normative force. Few contributions in these dominant debates, however, have looked directly at the implications of colonial legacy for today's climate responsibilities.

Moreover, historical responsibility, when it has been discussed, has been limited to emissions, and has not considered other similarly relevant environmental and societal harms that might compound the contemporary situation in climate vulnerable societies. Drawing particularly from recent contributions by postcolonial, critical climate justice scholars, I wish to illustrate how climate change must be understood as a matter of postcolonial corrective (reparative) justice. This paper therefore takes an 'integrationist' approach to climate justice (Caney, 2018) and maintains that in the postcolonial contexts such as the Pacific, climate harms cannot be separated or isolated from the harms perpetrated via colonialism that continue to have an impact in many of these societies.

I use the Marshall Islands – the home of Ambassador Ishoda – as a case study through which I propose we can identify clear colonial wrongdoing that continues to impact the current predicament of this low-lying atoll state as it struggles with an existential climate threat. Decades of nuclear weapons testing in the Marshall Islands have severely damaged the land and livelihoods of the country that continues to call for the United States to pay compensation for the harm it has caused. Due to pre-existing vulnerabilities following from atomic testing on the islands, climate threats are now arguably more severe than they would have been had the testing not taken place.

This nuclear legacy therefore offers persuasive and additional justification for reparations in this case. While all historical harms relevant to climate justice cannot be so directly appointed to the specific liable agents (nuclear playgrounds in the South Pacific, such as France's liability to testing and its consequences in French Polynesia notwithstanding), this analysis hopes to provide insight to

the extent to which corrective justice is useful when arguing for reparations for permanent and irreversible loss and damage.

Loss and damage as a climate harm: contested liability

Already in 1991 Vanuatu, a Pacific SIDS, became the first country in the world to propose that the UNFCCC, which was still under negotiation at the time, should recognise permanent, irreversible loss and damage that goes beyond adaptation and mitigation responses to climate change. In a submission put forward on behalf of the Alliance of Small Island States (AOSIS), Vanuatu proposed that mandatory contributions by Annex 1 (industrialised) countries should be collected and 'used to compensate the most vulnerable small island and low-lying coastal developing countries for loss and damage resulting from sea level rise' (United Nations, 1991). While the final UNFCCC text of 1992 did not include a clause recognising loss and damage, a quarter of century later an article was finally included in the Paris Agreement in 2015. According to Article 8 of the climate treaty, the state parties should 'enhance understanding, action and support… as appropriate, on a cooperative and facilitative basis with respect to loss and damage associated with the adverse effects of climate change' (United Nations, 2015: 12).

Problematically, Article 8 does not provide a clear definition of what is meant by loss and damage, nor any exact set of measures that should be taken to address, avert and minimise these nebulous concepts – apart from the call for cooperation and facilitation (see e.g. Lees, 2016). Academic literature (Doelle and Seck, 2020: 669) has proposed two types of harms covered by the concept. The first type of harm is a permanent, or 'irrecoverable loss,' for example, the inundation of land due to sea level rise. The second type of harm is reparable or 'recoverable damage,' such as shoreline damage from storms. For SIDS, many losses and damages are already part of their everyday lived experience, and a significant amount of these are non-economic in nature (McNamara et al., 2021). The different types of loss and damage makes the issue of reparations for climate harm an increasingly complex matter, as it seems that what we are looking at cannot simply be rectified via financial compensation of any kind; one cannot put a price on the loss of an indigenous ways of life, land, or traditional knowledge, for example.

As noted by Sam Adelman, loss and damage 'was never envisaged by SIDS as an alternative to mitigation and adaptation but rather as *acknowledgement of harms suffered*, as a *justifiable source* of funding for rehabilitation, relocation and resettlement, and as an appropriate form of *corrective* justice' (Adelman, 2016: 53, emphasis mine). In corrective (reparative) justice, the relationship

between the wrongdoer and the victim of harm becomes important in deciding who has been wronged, by whom, in what way, and finally, what (if anything) will suffice as a remedy. Corrective justice, as explained by David Miller, 'essentially concerns a *bilateral* relationship between a wrongdoer and his victim and demands that the fault be cancelled by restoring the victim to the position she would have been in *had the wrongful behaviour not occurred*' (2021, emphasis mine).

One could argue that a multilateral global distributive justice, rather than corrective justice, provides a more useful foundation for accommodating calls for compensation on loss and damage – especially as harm relations in climate space are not often bilateral and causal but multilateral and complex.[1] Global distributive justice does indeed have some advantages to corrective justice, especially as it seems to allow a broader set of accountable agents to carry the burden of (and blame for) climate injustices. Without wanting to undermine those advantages, this paper concentrates on the prospects of corrective climate justice in the context of irreversible and permanent loss and damage.

Developed countries – especially the United States – are adamant that Article 8 of the Paris Agreement does not involve or provide a basis for *any liability* or *compensation* on their behalf (Fry, 2016: 108). In this sense, Article 8 continues a vague distribution of 'common but differentiated responsibilities' (United Nations, 2015) (following, one could argue, the principles of global distributive justice) in climate politics, providing no tangible enforcement mechanism that would appoint clear responsibility for climate harms. Likewise, scholars, practitioners and developing country delegations continue to argue that climate justice can only actualise when fair compensation is provided to those most vulnerable to climate change. The responsible agents are, in turn, those who have contributed to the harm – that is to global warming and greenhouse gas emissions – the most.

Since Paris, the parties to the treaty have continued to negotiate the exact content of the article on loss and damage, and tried to agree upon details regarding the funding mechanism that would allow permanent and irreversible harms to be appropriately addressed. In 2022, the COP27 in Egypt finally decided on the opening of a new 'loss and damage fund', 'in which countries responsible for high carbon emissions will compensate vulnerable countries suffering from climate impacts' (Wyns, 2023: e21). The outcome document of the conference,

1 I would like to thank here an anonymous reviewer for reminding me that the difference between the two forms of justice is important to be made clear.

however, followed the previous line of appointing no direct liability to any specific states, and therefore made no mention of *who* should pay funds for this new financial mechanism (Panwar and Wilkinson, 2022).

As the climate regime seems incapable of providing for responsibility for climate harms, a way forward could be to see climate change in a broader historical continuum of pre-existing harms, as suggested by the opening quotation of this paper. A significant amount of loss and damage now prevalent in many vulnerable societies has historical roots, going beyond the current threats created by emissions and global warming. In the South Pacific in particular, a great amount of damage to environment and livelihoods was caused by decades of nuclear weapons testing conducted by the United States, the United Kingdom and France between 1946 and 1996. In the half century following the Second World War and the first use of atomic weapons, these powers detonated over 300 nuclear devices in the region. The major test sites were in Australia, Marshall Islands, Kiribati, and French Polynesia, with devastating fallout experienced throughout the region.

In these 'nuclear playgrounds' (Firth, 1987), climate change has now become a threat multiplier, revealing 'double exposure' (Leichenko and O'Brien, 2008) not only to climate change, but also to the continuous impacts of the nuclear arms race, militarisation and imperialism (Teaiwa, 1994). While the history of atomic testing continues to have consequences for the environment, health, and livelihoods of Pacific peoples, it also affects the ability of these island communities to respond to climate change due to already jeopardised food and water security, contaminated land that can no longer be safely lived on, and ubiquitous and continuous health complications (Vaha, 2023). Therefore, climate change exponentially increases the risk of irreversible changes in the environment now negotiated under loss and damage.

Loss and damage in the framework of colonialism: a call for reparations

While political theorists have long acknowledged retrospection as well as a need for fair distribution and accountability to climate harms in the context of emissions, very few Western narratives have directly approached the impacts of colonial history on climate change and loss and damage. Contrastingly, scholars and activists focusing on the Global South have emphasised the importance of historical responsibility in contemporary discussions of climate justice, and unapologetically remind us that we cannot discuss climate change without openly addressing the systematic subjugation and injustices of the past that go *beyond* the distribution of greenhouse gas emissions. The historical facts

about the distribution of advantages and disadvantages, Olúfemi O. Táíwò argues, continue to accumulate not only according to individual differences (race, ethnicity) but also according to regions (Global North vs. Global South) (2022: 74). It is this contextually informed standpoint – a key to our understanding of fair distribution of burden to climate harms among individuals as well as states – that calls for acknowledging reparations as central to climate justice.

Táíwò proposes what he calls a constructive view on reparations. According to this view, reparations are concerned with just world-making as a part of the broader struggle for social justice (2022: 74). Because the transition from the current unjust world order to the just one will not be costless, we must consider how the benefits and burdens between different actors will be redistributed. Táíwò argues that this new world-making – 'a politically serious reparations project' – must focus on climate justice (ibid.: 157). He connects climate justice to racial justice and maintains that while the connection between climate crisis, trans-Atlantic slavery and colonialism might largely be contingent, it is nonetheless crucial to the project of building a more just world for all:

> 'Had some things gone differently even decades ago – had the countries and corporations of the Global North polluted less, had the fossil fuel interests not worked along with coal and freight rail companies to orchestrate misinformation campaigns, protecting their short-term financial gains at the cost of their and our collective future – the relationship between reparations and climate crisis could well have been different' (ibid.: 158).

Táíwò's point about alternative trajectory is important. While world history *could* have been different, it is not, and these factual circumstances must be considered when appointing liability to current predicaments. It is the case that the European industrialisation – and later the Western dominance in world markets, consumption, extraction as well as emissions – made the world what it is today and changed its racial, cultural, political, social, environmental and economic relations fundamentally. The colonial powers played an undeniably important role in this story.

Táíwò brings his analysis directly to the discussion about loss and damage and raises an often-asked question: 'Figuring out who should pay for the loss and damage of climate change brings up familiar problems in distributive justice: should rich countries pay because they're richer, because they are more responsible?' (2022: 178) These are, of course, questions that political theorists addressing the polluter pays principle and other accounts of responsibility to climate change have tried to answer before him. What Táíwò, I think, adds

ISSN: 1835-6842

to the existing debates on climate justice is the explicit acknowledgement that climate harms cannot be separated from the wider structural and systematic wrongdoings of our colonial past.

In Western climate justice literature, accountability for climate change has usually been discussed in the three different forms mentioned earlier: historically informed responsibility based on the polluter pays principle; the beneficiary pays principle, according to which those who have benefited from the processes leading to anthropogenic climate change are liable to compensate for it; and the ability to pay principle, which looks at who among all the potential agents have capacity and ability to contribute to the costs. While these are the dominant approaches to climate responsibility, it does not mean that the reparative accounts would be entirely missing from the literature either. Indeed Adelman (2016) suggests an alternative of corrective justice and proposes that his approach, through providing a legal basis for liability based on harm, can accommodate the other three accounts as well. The argument for corrective justice and compensation for loss and damage, Adelman says, is compelling for *all* accounts of climate justice: 'Developed countries bear the preponderance of historical responsibility for GHG emissions and the loss and damage that results. To the extent they have benefited and thereby have the ability to pay, they are ethically obliged to compensate SIDS as a matter of corrective justice' (ibid.: 38).

Adelman's approach is, however, limited to emissions as the only decisive factor for climate responsibility. Táíwò and other scholars arguing for reparations wish to add another, often-ignored dimension. Not only are the industrialised, developed countries liable for reparations because they have benefitted from industrialisation and emissions *before* others (historical and beneficial accounts) – or because they can pay – but also 'because they've *inherited more of the liabilities* from global racial empire' (Táíwò, 2022: 178, emphasis mine). This reason cannot be directly or simply reduced to any of the three main accounts discussed in contemporary climate justice literature, as it must go beyond emissions. The importance of Táíwò's proposal, for me, is its recognition that at least *some* harms are not necessarily directly linked to emissions or global warming, yet they have left vulnerable communities in countries such as SIDS more exposed to climate harms than they would have been *had colonialism never happened*. It is this previous exposure, now exacerbated by the threat multiplier of climate change, that provides justification for corrective justice (and not emissions alone), as I will illustrate by using the atomic testing and its relevance to current climate vulnerabilities in the Marshall Islands as my case study.

ISSN: 1835-6842

Keston Perry (2021) similarly argues that climate loss and damage is directly connected to colonial practices, past and present. Extractive industries, altered land settlement systems, and underfunded social and political infrastructure in former colonies have increased the vulnerability of these societies to climate change and maintain what he calls 'the coloniality of climate'. According to Perry, climate colonialism is very much present throughout the contemporary UNFCCC system, from funding mechanisms to the UN sustainable development goals. Because of the voluntary nature of climate finance contributions – despite the institutionalised 'common but differentiated responsibilities' (United Nations, 2015) – vulnerable postcolonial societies continue to be at the mercy of developed nations, many of which have been imperial powers in the past, and some of which still administer colonised territories or hold a significant neo-colonial power. There is no genuine system of liability in place that could be enforced in the global climate space. To address loss and damage within these colonial structures and institutions of climate politics, a framework for corrective justice is required, as only through reparative setting can we challenge the existing structures of world politics and seek to correct historical injustices. 'Reparatory justice can shatter above-described colonialities towards a new development horizon,' (Perry, 2021: 367) transforming the discourse from one of (voluntary) aid to one of what is owed to those who have been harmed.

Understanding loss and damage through colonial history is particularly important in places where imperial arrangements still exist, for example the French overseas territories and American unincorporated territories and free associations in the Pacific, of which the Marshall Islands is an example. It is equally important in the framework of postcolonial developing states, many of which still rely heavily on structures created at the time of decolonialisation and on financial and technical support (development aid) by former colonial powers that often has implicit or explicit political conditionalities (strings) attached.

Another scholar who has recently made convincing arguments about the significance of recognising colonialism in the climate space is Farhana Sultana. In her critical analysis of COP26, Sultana demonstrates how the whole event could be portrayed as a play of climate colonialism in which different imperial actors from multinational corporations to powerful governments perform their superiority and control over marginalised communities in the Global South (Sultana, 2022: 2). Referring to Táíwò, she emphasises how decolonising climate essentially requires not only the recognition of existing problems but working towards both distributive justice *and* reparations and restitution (ibid.: 6). Sultana also directly discusses loss and damage, noting that 'the debates around climate reparations remain contentious, as loss and damage acknowledgement

ISSN: 1835-6842

has not been followed through with sufficient financial support'. Importantly, she then states that reparations are more than just a call for financial compensation, they are 'about supporting world-making and material changes that account for histories of slavery, colonialism, and imperialism across Asia, Africa, and Latin America (ibid.: 7).'

A counterargument to the relevance of colonial injustices as justification for reparations should also be considered. Simon Caney presents a powerful argument against reparative justice, arguing that we can (and should) recognise the importance of history and past injustices (such as colonialism) without reparations and corrective justice (Caney, 2006: 477). Caney, who is one of the most prominent voices in Western climate justice debates, argues that one can acknowledge the moral importance of past injustices without accepting the case for reparations (ibid.: 464). According to Caney, both the Causal Account (according to which those who have caused most emissions should be liable to make reparations to those now most vulnerable to climate change) and the Beneficiary Account (according to which those that have benefitted the most from the injustice caused by climate change should pay reparations) fail to sufficiently appoint liability to *specific* actions, making calls for reparations difficult. Accounts calling for reparations, Caney argues, are particularly problematic from the intergenerational perspective, as today's liable agents are not necessarily the ones that were causing the harm in the past. It is the appointment of relevant duties to *specific* duty-bearers – hugely important for corrective justice – that Caney finds problematic in the context of multifaceted climate complexities.

While I am sympathetic to Caney's criticism of reparations to climate harms and agree with his general observation about the difficulties of the attribution of liability to specific agents, it also seems that climate injustices are historically, spatially and racially produced in a significant way, as argued by scholars whose work has been looked at in this section. Past injustices make *specific peoples* 'more disproportionately vulnerable to climate impacts, which exacerbates impoverishment and vulnerability' (Sultana, 2023: 120). Climate change does not impact all of us in a same way and there are normatively relevant reasons for that. Postcolonial communities and countries in the Global South are particularly burdened, as are many minority communities in the Global North (ibid.). While appointing direct causal liability to different actors and beneficiaries in world politics might be difficult, we cannot pretend that the unjust relations of the past that now make those vulnerable even more vulnerable, did not exist. We cannot also ignore the fact that the injustices that increase climate vulnerability are not all related to past (or current) emissions. Recognising and acknowledging the impact of colonial history is important for fair and equitable

climate politics.

The authors discussed here offer persuasive reasons to accept the framework of reparations in the context of climate change due to the colonial injustices that have left some communities – especially those in the postcolonial contexts – more vulnerable to the threats now posed by global warming. By looking at the Marshall Islands, its nuclear legacy and current exposure to climate threats, I wish to continue and add to this important body of work. What cases such as the Marshall Islands illustrate is how contemporary threats can indeed be linked to the colonial practices of the past, and how claims for corrective justice can be meaningfully made in these circumstances. Most importantly, I wish to emphasise that the Marshall Islands offers a haunting, timely reminder that these colonial practices have a continuous impact on the ability of some states and communities to respond to climate threats, and loss and damage. These injustices can provide a basis for liability and reparations in the framework of corrective justice.

Through the critical work of scholars such as Táíwò, Perry and Sultana we also come to realise that there are foundations not only for monetary compensation for climate harm, but for a more profound rethinking and remaking of the global structures of (climate) politics. Colonial impacts on climate policies must be ended by allowing the vulnerable postcolonial societies *themselves* to take leadership and ownership of their situation, and to *themselves* identify the appropriate responses to loss and damage. If these communities call for reparations (as they increasingly now do) it is the duty of the international community to respond to that call. Some demands might be at odds with the structures of our modern multilateral state system, but they should nonetheless be considered. I will return to some of these innovative proposals in the last section of this paper.

Reparations for existential threats: how to remedy climate harms?

> 'I have no problem whatsoever saying that this is about reparation, compensation and liability, and responsibility. The developed world has caused climate change, and the developing world is paying the price. If people can't see the reality of that then there is something wrong (Sturgeon, 2022)'.[2]

Before elaborating the case of the Marshall Islands in detail, it is useful to think in more general terms of the content of reparations for loss and dama-

2 Then First Minister of Scotland Nicola Sturgeon was reported saying this at the COP27 in Egypt (Loss and Damage Collaboration, 2022).

ISSN: 1835-6842

ge in the postcolonial context of climate change, keeping in mind that some losses and damages are indeed irreversible and permanent, and many of them non-economic in nature. Recognising that reparative efforts are not limited to financial compensation, and can be forward-looking (Burkett, 2009: 510). This section lays down some general principles for a more just world guided by corrective justice.

As mentioned above, reparations are important legal tools. A definition provided by Maxine Burkett articulates that 'reparation, broadly defined, describes programs that are justified by past harms and are also designed to assess and correct the harm and improve the lives of the victims into the future' (Burkett, 2009: 522). Burkett goes on to define climate reparations as 'the effort to assess the harm caused by the past emissions of the major polluters and to improve the lives of the climate vulnerable through direct programs, policies and/or mechanisms for significant resource transfers, to assure the ability of the climate vulnerable to contemplate a better livelihood in light of future climate challenges' (Burkett, 2009: 523). Here, Burkett limits her own analysis to wrongdoing related to emissions, which as I suggest above may not be sufficient when considering loss and damage in the context of postcolonial states and communities with histories of other relevant wrongdoing and harm. International law, however, recognises some elements of reparations that can also be applicable in this broader context.

The United Nation's *Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law (hereafter the Basic Principles)*, for instance, provides five key elements of remedy and reparation in the framework of severe human rights violations. Adopted by the United Nations General Assembly resolution 60/147 in 2005 (United Nations, 2006), these principles are created to be applied in post-conflict situations. While it is obvious that they cannot be directly transferred to remedies for climate loss and damage, they expand our discussion beyond the liability to emissions and can therefore help us to acknowledge the full scale of harm affecting vulnerable communities such as SIDS. I will evaluate each of these elements in turn to gauge their appropriateness for reparations for climate harms in the context of loss and damage.

The first element of remedy is restitution, according to which the original situation that existed before gross violations of rights should, whenever possible, be restored. According to the *Basic Principles*, 'restitution includes, as appropriate: restoration of liberty, enjoyment of human rights, identity, family life

and citizenship, return to one's place of residence, restoration of employment and return of property' (United Nations, 2006: 7). The UN's rights-based approach to remedy and reparations in cases of severe human rights violations requires restoring the *original* situation whenever this is possible. This, of course, is the most difficult and demanding condition for reparations in the context of irreversible and permanent loss and damage. Burkett (2009: 531) argues that restitution in the context of climate change is *de facto* impossible because we cannot return to the situation that existed before the acceleration of anthropogenic global warming.

That does not necessarily mean that nothing can be done in terms of restitution in the case of climate loss and damage. Acknowledging the rights of people suffering from loss and damage – a potential loss of life and health, as well as a variety of non-economic losses, such as the loss of one's cultural heritage and way of life – must be the first step for any meaningful account of restitution. Here, the discussion must be informed by the technical and economic aspects of climate negotiations for a broader understanding of the various forms loss and damage takes – economic and non-economic alike (McNamara, 2021). Halting extraction and other environmentally harmful practices, for instance, must be a central element of restitution, as well as improvement of bottom-up mechanisms regarding consultation. As Sultana reminds us, it is most often marginalised groups that are the most vulnerable to climate change. Moreover, restitution might include an international enforcement mechanism of climate action that guarantees that those currently reluctant to act ambitiously enough are in fact obliged to do so. Such a move away from voluntary contributions might have to be the first step, no matter how difficult this is to enforce in the contemporary state-based order.[3]

The second key element of reparations is compensation, monetary or otherwise. Compensation should not be limited to physical or mental harm, but should also include lost opportunities (in employment, education and social benefits through forced migration for example); material damages and loss of earnings (sea-level-rise, relocation) including earning potential; moral damage (loss of cultural heritage and knowledge); and the cost of any required legal or expert assistance. Compensation is perhaps the element that has been most discussed in literature on climate loss and damage and is closely linked to restitution in this case. Yet, there is some difficulty when it comes to establishing what could

3 Here, a forthcoming advisory opinion on the relationship between climate change and human rights, which the International Court of Justice was mandated to give by the UN General Assembly Resolution 77/276 of March 29, 2023, followed by a successful international campaign led by – once again – Vanuatu, could be ground-breaking.

ISSN: 1835-6842

be a fair compensation for permanent loss and damage, especially if we consider some of the adverse effects of climate change irreversible.

Edward Page and Clare Heyward suggest that 'the international community's response to loss and damage should aim to compensate victims of climate change, particularly those residing in developing states, for the unjustified and unexpected disruptions in ways of life it causes' (2017: 357). They develop a normative account of compensation that takes into consideration the human ends that are violated or jeopardised by loss and damage, thereby justifying international compensatory mechanisms. This is a useful place to start thinking about fair compensation for climate vulnerable societies. What is important for any form of compensation as an element of corrective justice is that it is based on community needs. Key here is redirecting the emphasis away from the voluntary contributions of developed nations to the requirements and demands of justice by the most vulnerable states. As scholars referenced in the previous section suggest, the status quo is not serving the interests of the most vulnerable, and therefore is merely repeating the injustices of the past.

Third, rehabilitation should be offered, including medical and psychological care, as well as legal and social services. In the framework of climate harm, financial, technical and professional assistance must be provided for affected communities, taking into consideration the needs on the ground. The current UN system is still very much a top-down organisation in which local communities struggle to have their voices heard and needs fulfilled, as pointed out by Sultana and Perry. The UNFCCC itself maintains the distinction between developed and developing countries (Annex 1), and while developing countries have been successful in pushing through matters important to them by coalitions and alliances (such as AOSIS and Pacific SIDS), the big emitters still have the power to veto any decisions considered too harmful or costly for them through the voluntary nature of national contributions. Financial, technical and professional support must acknowledge local realities and circumstances, providing contextualised solutions. The Green Climate Fund, for instance, has proven to be almost entirely unreachable by many SIDS for the simple reason that the projects on the ground are never 'big enough' to pass the funding criteria (UNCTAD, 2022). This is counter-intuitive regarding the purposes of the fund and illustrates the lack of contextual understanding. For reparative justice to materialise, these missteps must be corrected by a genuine focus on bottom-up solutions.

Fourth, reparations must fulfil the requirement of satisfaction (Burkett, 2009: 531). The satisfaction of a remedy can be measured by various means, inclu-

ding actions aimed at the cessation of continuing violations, a public apology, and judicial and administrative sanctions against persons liable for the violations. Acknowledgment of historical responsibility is crucial for satisfaction of corrective justice, as is the acknowledgment of continuous climate harms. The 2010 *People's Agreement of Cochabamba*, which frames the terms for corrective climate justice for developing nations, demands that 'developed countries, as the main cause of climate change, in assuming their historical responsibility, must recognize and honour their climate debt in all of its dimensions as the basis for a just, effective, and scientific solution to climate change' (quoted in Perry, 2021: 368). What is required, then, is not only financial and technical assistance directed at vulnerable societies, but a meaningful recognition of harm for what it is and has been.

A good example of the lack of meaningful recognition comes from the Pacific and takes us to the nuclear legacy. In 2021, French President Emmanuel Macron visited French Polynesia and in relation to the history of French atomic testing in the Pacific region stated that 'France owes a debt' to its Pacific overseas territory. 'This debt,' Macron stated, 'is from having conducted these tests, in particular those between 1966 and 1974' (France24, July 28, 2021). Without going into details on what that debt entails – other than the reference to nuclear testing conducted during this specific period – and without providing an actual apology, Macron acknowledged the tests, yet provided no satisfactory remedy (Bolton, 2022: 86).

Similarly, admission of historical and continuous climate debt is yet to happen and, as has been mentioned before, the developed states do not wish to assume any liability to climate loss and damage as this would be against their national interests. As small or unimportant as a public apology may sound in terms of practical solutions to climate change, it can have immense importance for the affected communities, especially in a postcolonial setting. As we will soon learn from the case of the Marshall Islands, a great amount of resentment against the US and the UN still exists because of a distinct and ongoing lack of recognition of responsibility.

Finally, any meaningful remedy must guarantee non-repetition of wrongdoing. A guarantee of non-repetition in the context of climate change requires international commitment to halt global temperature rise to 1.5°C compared to pre-industrial levels. At COP26, SIDS were actively promoting '1.5°C to Stay Alive'. Contemporary climate science, including various climate reports, clearly indicates that halting temperature rise to 1.5°C is crucial for future existence of low-lying atoll states such as the Marshall Islands, the Maldives, Kiribati and

Tuvalu. Any guarantee of non-repetition of loss and damage must, therefore, include a stronger commitment to prevent further global warming and environmental damage. The Paris Agreement, with its 2-degree commitment, is simply not ambitious enough (IPCC, 2023). A guarantee of non-repetition demands further ambitious goals such as the rapid phasing out (in contrast to phasing down) of the use of fossil fuels and international commitment to restructure current global frameworks of climate action and sustainable development.

This section has outlined some elements of a reparative framework for climate justice. It has done so at the general level, suggesting some content relevant to climate reparation discussions. In the final section of this paper, I will look at the specific case of the Marshall Islands to argue that the colonial history of atomic testing provides a basis for liability and corrective justice in this case. I suggest that nuclear legacy has made the atoll nation more vulnerable to the climate crisis than it had been if the testing had not taken place, illustrating how climate change is a threat multiplier to existing vulnerabilities created in the past, not an independent and isolated threat.

Reparations for double exposure: The Marshall Islands, nuclear legacy and climate crisis

'During a meeting, one of our leaders admitted our capital city may need to change. Imagine that. Imagine changing the location of your capital city due to climate change, as if we're just moving houses. Be we're not just moving houses. We're considering changing ancient customary land laws, arguing for loss and damage financing to go towards preservation of cultural stories rooted in shorelines that are disappearing. The worst-case scenario is already here' (Jetñil-Kijiner, 2022).

In October 2022, the UN Human Rights Council adopted a declaration regarding technical assistance and capacity-building to address the human rights implications of the nuclear legacy in the Marshall Islands. In this declaration, the members of Human Rights Council recognised that nuclear testing in the island nation had 'immediate and continuing effects on human rights that resulted in fatalities and serious health complications, and that the radiation had led to environmental contamination and the loss of livelihoods and lands' (United Nations, 2022b). The Human Rights Council was explicitly taking a stand on losses caused by nuclear testing that took place in the Marshall Islands in 1946-1958 – a period during which the country was under the United Nations trusteeship. The country conducting the atomic tests was the United States.

The Marshall Islands, as other low-lying atoll states, is also in the frontline

of climate change. President Hilda Heine on October 10, 2019, tweeted: 'Our parliament has officially declared a national climate crisis', making the Marshall Islands the first country in the world to declare climate emergency. Her tweet continued by indicating the climate harm: 'as one of only four low-lying coral atoll nations in the world, the failure of the international community to adequately respond to the global climate crisis of its own making holds particularly grave consequences' (Heine, 2019). Resolution 83 declaring the climate emergency, which was passed by the country's parliament Nitijeļā (2019), argues that low-lying atoll states such as the Marshall Islands face extreme vulnerability and special circumstances, 'including projections for the significant or total loss of land mass and the implications for the security, human rights, and wellbeing of the Marshallese people'.

Also in 2019, the Marshall Island's National Nuclear Commission (NNC), appointed by Nitijeļā, published *A Strategy for Coordinated Action for Years 2020-2030*. In the strategy, a connection between nuclear weapons testing, human rights and the contemporary existential threat of climate change is made with explicit reference to the US atomic testing program – proposing to look at these questions not only together, but through the framework of reparative justice as well. The strategy quotes the 2012 report by the UN Special Rapporteur, according to which 'nuclear testing resulted in both immediate and continuing effects on the human rights of the Marshallese… The effects of radiation have been exacerbated by near-irreversible environmental contamination, leading to the loss of livelihoods and lands… many people continue to experience indefinite displacement' (NNC, 2019: 3). The strategy goes on to explore, in detail, the different forms of loss and damage caused by atomic testing and evaluates its current monetary value by illustrating the shortcomings of the Nuclear Claims Tribunal, which was established with an agreement between the Marshall Islands and the US at the time of Marshall Islands' independence in 1986, to provide compensation for the victims of nuclear testing. The purpose of the tribunal was, as defined by the Compact of Free Association (COFA) between the two countries, 'to render *final* determination upon all claims past, present and future, of the Government, citizens and nationals of the Marshall Islands which are based on, arise out of, or are in any way related to the US nuclear testing program' (emphasis mine).[4]

4 The Nuclear Claims Tribunal was a *traditional legal body of corrective justice* as its mandate was to compensate for the harm and damage caused by the atomic testing program. Many adjudicated claims, however, remain unpaid as the tribunal ran out of funds allocated to it already in 2009. It was clear from the beginning that the $150 million US dollars originally paid by the US government was severely undermining the true value of loss of land and damage to health and livelihoods of the Marshallese people (NNC, 2019: 11).

ISSN: 1835-6842

The NNC strategy powerfully illustrates how colonial injustices continue in the Marshall Islands and supports the suggestion that we cannot talk about climate change impacts and loss and damage in the postcolonial context without recognising the ongoing impacts of colonial practices. In the case of the Marshall Islands, the connection between colonial racial injustice and contemporary climate challenges is strikingly easy to make. The country was chosen as the site of the US nuclear testing program, official US documentation shows, because of its geographical distance from the mainland United States, due to its trusteeship status as a non-sovereign territory, and for the opportunity to use the Marshallese people as guinea pigs to study the impact of atomic fallout. The notorious Project 4.1 was established by the US military to collect scientific evidence on the health impacts of atomic testing on individuals during the Bravo experiment conducted on March 1, 1954. Medical research performed on the Marshallese people after Bravo unequivocally proved there were significant health risks (Ruff, 2015; NNC, 2019: 14). Nevertheless, the reports related to Project 4.1 were classified confidential for decades, and the concerns of Marshallese people about their health were consequently ignored (NNC, 2019: 16).

In addition to the health impacts on people at testing sites and nearby atolls – health impacts that continue to this day with high numbers of cancers and birth anomalies afflicting the Marshallese population – the US atomic testing program also had a direct impact on the environment (Ruff, 2015). Some test sites completely disappeared, and ancestral homelands were vaporised by atomic fallout (NNC, 2019: 18). The people of the Rongelap, Enewetak and Bikini atolls were displaced, some of them never able to return home. For many Marshallese, '[the] ability to use their land for economic or subsistence activities has been greatly compromised by the unpremeditated levels of radioactive contamination throughout their respective atoll environments' (NNC, 2019: 18).

One of the most infamous environmental risks in the Marshall Islands that also has a direct connection to climate threats is a concrete structure built by the US government in 1977 to house the radioactive residue on Runit Island in Enewetak atoll. There are continuing concerns that the Runit Dome is cracking and leaking radioactive waste into the surrounding waters. The risks associated with the dome are now exacerbated by the rising seas (Wall et al. 2015). As provocatively stated by Michael B. Gerrard (2015: 93), the Runit Dome would not fulfil the modern requirements of disposal of household waste in the United States, yet its continuous impacts on the Marshallese communities are largely ignored.

In 2023, the Marshall Islands renegotiated the terms of the COFA with the US

government. The Marshallese benefit from the access to the US labour market under the agreement and are provided with a wide range of migration opportunities as well as funds for post-testing clean up and health services, and in return the Marshall Islands continue to serve as an important military and strategic base for the US. During the 2023 COFA negotiations, the Marshallese government repeatedly requested that the US recognises the legacy of its nuclear program in the region and provides the Pacific nation more financial and technical support, including direct aid to climate action and poverty alleviation. Due to its continuous impact at the time of climate crisis, the nuclear legacy was, understandably, the key concern for the Marshallese government throughout the negotiations (Rose, 2022).

As Ambassador Ishoda stated in 2021, loss and damage are not a question of aid, but of reparations. The recent Human Rights Council resolution on the Marshall Islands did not mention reparations in any way, shape or form. Interestingly (albeit unsurprisingly given the power structures of the UN), the resolution does not assign liability to the US at all, but recognises instead the responsibility of the United Nations, encouraging the organisation 'to assist the Government of the Marshall Islands to address the adverse impact of the nuclear legacy' (United Nations, 2022b: 3). The declaration further states that the NNC should be supported both in advancing its national strategy for nuclear justice and, pursuant to transitional justice, in its efforts to address the nuclear legacy.

As powerfully demonstrated by authors such as Táíwò, Perry and Sultana, addressing justice in the framework of climate change requires us to look at uncomfortable questions of imperialism and race. Immediate criticism of the Marshallese government's call for assistance with its continuous struggle with nuclear legacy by the nuclear weapons countries is a timely reminder of existing colonial structures and attitudes. As reported by *Islands Business*, an independent journal based in Fiji, the nuclear powers raised their concerns about the motion put forward by the Marshall Islands to the UN Human Rights Council. The fear among the nuclear powers, sources from Geneva reported, was that the resolution could open the door for future accountability and legal litigation, which would not be in the interest of these states (Islands Business, October 6, 2022). Commensurate with the non-liability stance adopted by the developed nations in Article 8 of the Paris Agreement, the nuclear weapons states do not want to be held accountable for the losses and damages their atomic arms race caused these vulnerable island societies, many of which are now at the frontline of climate crisis.

ISSN: 1835-6842

In its national nuclear justice strategy, the NNC states that 'the Marshallese people continue to search for ways to remedy damages that were inflicted on them by the US nuclear testing program' (NNC, 2019: 12). While the United Nations as an organisation clearly failed in its duty of trusteeship by letting the US conduct its harmful atomic testing program in the Marshall Islands, the US also owes reparations to the Marshallese for direct violations of their human rights during the atomic tests. The US also owes a debt to the island country through the ongoing environmental damage and high risk caused by the reportedly leaking Runit Dome.

A fundamental element of postcolonial corrective justice is that those effected are the ones to decide the sufficient forms of remedy and restitution. I do not therefore want talk on behalf of the Marshallese people as to what the sufficient corrective justice in their case would look like. Taking the conversation back to the previous section, however, corrective justice could include (but not be limited to) the recognition of nuclear harm and its complex yet at times direct relationship to contemporary climate challenges. Due to testing, some atolls in the Marshall Islands were deemed to be uninhabitable, increasing the pressure on the limited inhabitable atolls. Population growth in the centres such as the capital Majuro has led to challenges regarding food and water security, sanitation and adequate housing, all exacerbated by the rising seas and other climate change impacts such as saltwater intrusion and increased frequency of severe tropical storms. To remedy these impacts, sufficient technical and financial support to the Marshall Islands must be provided to build climate resilience, acknowledging the harm caused by the atomic testing that now limits the alternatives available.

To remedy the nuclear harm, given that it cannot be undone, the militarisation of Marshall Islands should also cease. The military program and missile testing (albeit not nuclear) continue in Kwajalein atoll at the US Army Base. In fact, it seems that the Pacific has once again become increasingly militarised due to geopolitical competition. As recently illustrated by Na'puti and Frain (2023), the US is actively building an 'oceanic security state' in Micronesia, in a stark contradiction to Indigenous environmental perspectives. Corrective justice in this case would require the US to phase out its military program in the Marshall Islands as it continues to have negative environmental impacts. Halting these military activities would provide both for remedy and the guarantee of non-repetition.

As stated in the NNC Strategy, the US has continued to fail to take responsibility for its testing program (NNC, 2019: 12). At the discussions leading to the

Human Rights Council resolution to address the nuclear legacy in the Marshall Islands, the US delegate was said to be asserting that 'the United States has accepted and acted on its responsibility to the people of the Republic of the Marshall Islands concerning nuclear testing' through the 1986 compact (Arms Control Association, 2022). The information published about the 2023 COFA treaty reveals that the renewed agreement provided 700 million US dollars for a repurposed trust fund to be used for people 'who have suffered because of U.S. nuclear or other military activities.' While there is some increase in funding from the US to crucial sectors such as climate change, it was acknowledged by the Marshall Islands Ministry of Foreign Affairs Jack Ading in the aftermath of negotiations that the nation's nuclear legacy has not been resolved (Honolulu Civil Beat, October 18, 2023). This implies that neither the compensation nor satisfaction criteria of corrective justice have yet been comprehensively addressed.

During the 77th session of UN General Assembly in September 2022, then President of Marshall Islands David Kabua, together with the Prime Minister of Tuvalu Kausea Natano, launched a *Rising Nations Initiative* putting forward a four-point plan for low-lying, climate vulnerable atoll nations. The plan's purpose is to reaffirm the international community's commitment to preserve the sovereignty of low-lying atoll states threatened by sea-level-rise; to launch an adaptation program increasing resilience and protecting livelihoods on the islands; to create a repository for the islands' cultural heritage; and to support the island nations towards acquisition of UNESCO World Heritage Status (France24, September 21, 2022). As stated by Prime Minister Natano in Tuvalu's address to the UN General Assembly, the *Initiative*

> 'is about Sovereignty, Dignity, and Integrity. We need a global settlement that guarantees nation states such as Tuvalu and the Marshall Islands a *permanent existence* beyond the inhabitable lifetime of our atoll homes, irrespective of the onslaught of climate change and sea level rise. It must recognize and protect our cultural integrity, our human and economic capital, and our sovereignty. It must be co-created and enacted with the peoples and governments of Island nations, not visited upon us by others' (Pacific Islands Forum Secretariat, 2022, emphasis mine).

While perhaps controversial from the perspective of the structures of the contemporary international order, the *Rising Nations Initiative* is fundamentally important from the standpoint of corrective climate justice for the low-lying atoll states such as the Marshall Islands and Tuvalu, as it aims at the fulfilment of non-repetition criterion. The initiative calls for recognition of the dignity and

integrity of these communities now facing the existential threat of climate change through no fault of their own. Respecting this call by looking at the ways in which the world order can be restructured to entail the demands of low-lying atoll states is an inherent part of any meaningful framework of reparative justice in the context of climatic loss and damage.

Conclusions

As the critical climate justice scholars remind us, climate justice cannot be satisfied through the status quo, which in many ways simply replicates the injustices of the past. In this paper I have viewed loss and damage through the lens of corrective justice and argued, guided by postcolonial scholars, that to meaningfully discuss losses and damages associated with climate change, we must also recognise colonial histories that continue to play a significant role in our international institutions and practices. By looking at the case of the Marshall Islands and its nuclear legacy, I illustrate how we cannot ignore imperial wrongdoings when assessing what is due to the Marshallese people in their fight against climate change today, demonstrating how interwoven the colonial history of atomic testing is with the country's current climate predicaments. After suggesting that there is a case to be made for reparations in the context of climate change in general, I propose content for inclusion in climate reparations, and have hopefully provided food for thought in terms of further discussions on loss and damage and corrective justice in world politics. The vulnerable societies, after all, will continue their call for reparations, not just aid. Given the history, they are entitled to do so.

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