OVERVIEW

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# Who is the climate-induced trapped figure?

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#### Abstract

Many will remember the 1990s alarmist narratives of how a human tide of up to a billion climate refugees would flood "our" borders by 2050. By 2011, a new character joined the discourse: the trapped figure. No longer would climatically vulnerable people be forced to move, they could also end up immobile. This review examines the narratives that surround the trapped figure. The article highlights the trapped figure's (i) characterisation, (ii) geography, and (iii) storytellers. The material includes the 2011 Foresight Report, 64 English peer-reviewed journal articles, and seven UNFCCC policy reports. The textual analysis furthers our understanding of the values that shape the meaning of the trapped figure within the wider discursive economy. Out of the 64 articles, 48 located the trapped figure in Asia, while 34 placed the figure in Africa. Meanwhile, the majority of articles-62 in total-were written by scholars based at European research institutes. The study shows that the trapped figure, much as the mythical climate refugee and migrant, is constructed as both a victim in need of rescuing and as an ambiguous security threat. It is ethically problematic that planned relocation was often put forward as an effective tool to "move" the figure out of harm's way. The review also found a range of binary opposites in the discourse on trapped populations, including those of order-disorder, freedom-unfreedom, and victim-savior. This suggests that however wellintentioned the liberal discourse on trapped populations appear, it remains embedded in power relations which demands for critical scrutiny.

This article is categorized under:

- Social Status of Climate Change Knowledge > Sociology/Anthropology of Climate Knowledge
- Climate and Development > Sustainability and Human Well-Being
- Perceptions, Behavior, and Communication of Climate Change > Perceptions of Climate Change

Climate, Nature, and Ethics > Ethics and Climate Change

#### K E Y W O R D S

climate change, climate policy, climate refugees, displacement, human mobility, humanitarianism, immobility, loss and damage, otherness, trapped populations, white saviourism, UNFCCC

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# **1** | INTRODUCTION

We often hear how climate change will generate a migration crisis (Lustgarten, 2020; Walker, 2021). However, more recently migration and development experts are reframing the climate-induced mobility emergency to a crisis of immobility. Rather than moving masses, the urgency relates to the vast number of the world's poorest who will be unable to escape. Over the last decade, the latter has come to be referred to as "trapped populations." The trapped figure, a character desiring to move but who is unable to leave, first appeared with the release of the 2011 UK GOV Foresight Report on Migration and Global Environmental Change. The Foresight Report described those, who, in an effort to migrate away from environmental risk, often inadvertently, ended up in places of even greater risk. In other words, they became "trapped." By introducing this new concept, the Foresight Report would expand the science and policy debate around migration and displacement to include those unable or unwilling to leave areas of environmental risk (Black et al., 2011; Foresight, 2011). Trapped populations have since become a major object of analysis among those seeking to understand the relationship between climate change, mobility, and, now, immobility.

The purpose of this article is to scrutinise the values and meanings attached to the trapped populations concept or the "trapped figure." In doing so, the point is not, however, to trivialise the real conditions of vulnerability faced by millions around the world, but to raise important considerations concerning the usefulness of this category. The hypothesis is that at stake in the trapped debate are important issues of power and representation. These often go unaddressed in wider science and policy discussions about the impacts of climate change on some of the world's most vulnerable. The discourse surrounding trapped populations is an expert discourse that reinforces the status of the expert as someone best equipped to represent and adjudicate the fate of the world's vulnerable people. As a result, rather than simply accepting the trapped category as a given, researchers ought to pay greater attention to the means by which the trapped figure is called into being. To substantiate this claim, this article will explore how, the original formation of the trapped figure in the 2011 Foresight Report, alongside the academic and policy literature, have come to shape the characterisation and geography of the concept (Ayeb-Karlsson et al., 2018; Black et al., 2013; Black & Collyer, 2014; Nawrotzki & DeWaard, 2018; Zickgraf, 2019).

However, another important consideration sits in the background of this assessment. About a decade into the 2000s, just as the concept of "trapped populations" entered the lexicon of environmental migration, planned relocation would also become a prominent terminology among the international climate policy discourse group (Butros et al., 2021; Eckersley, 2015; McAdam, 2014; UNFCCC, 2010; Warner, 2012). It may be tempting to suggest that the discourse of planned relocation was a "natural" reaction to the attention now being paid to the trapped figure. After all, if vulnerable people become trapped by climate change, then surely the solution would simply be to relocate them to safer locations. At the same time, however, many cautioned against the potentially harmful effects of large-scale resettlement (Bettini et al., 2017; Kothari, 2014; Mayer, 2017; McDowell, 2013). The way that the discourse on trapped populations would coincide with an emerging policy discussion about resettlement raises important questions about the discourse and its implications for policy. We must ask, for example, who is this trapped figure? For whom are trapped populations considered to be a problem? Does their presence, or indeed, the threat of their presence warrants their relocation? Is this new involuntarily immobile figure in need of being turned mobile? And what "justifies" such mobilising interventions?

Imaginably, the trapped figure (a stagnant mass of people) posed less of an "security threat" than the moving climate migrant or refugee attempting to cross country borders (Smith, 2007; Weiner, 1992). However, it seems as if the trapped narrative spawned a similar alarmist rhetoric (Ayeb-Karlsson, 2020a; Bettini, 2013; Hartmann, 2014). Thus, the trapped figure is becoming another urgent policy planning challenge for the "international community" (Findlay, 2012; Foresight, 2011). This conceptual development within climate change science and policy is reinforced by the trapped figure's appearance as a key concept within the Intergovernmental Panel on Climate Change (IPCC, 2014, 2022<sup>1</sup>).

It is important to acknowledge that the trapped figure was not conjured from nothing. In many ways, it was prefigured by decades of policy and academic discussion around the climate migrant and refugee (Black, 2001; El-Hinnawi, 1985; Myers, 1997; Piguet, 2013). This discourse was oftentimes fuelled by underlying fears of excessive migration. As some early reports warned, for example, "here comes the flood" (Bogardi & Warner, 2009; Myers, 1997), while others suggested that a "human tide" of a billion climate refugees would inundate "our" borders by 2050 (Christian Aid, 2007; El-Hinnawi, 1985; Jacobson, 1988). These alarmist narratives have been widely discredited (Black, 2001; Dun & Gemenne, 2008; Kibreab, 1997; O'Brien et al., 2007), but the discourse carried significant weight and reappears still today. We often come across articles referring to "climate refugees" and climate-induced "mass migration,"<sup>2</sup> and for some reason, persistent scholars keep counting those "imaginary numbers" of climate migrants that "do not add

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up" (Gemenne, 2011; Kelman, 2019). Moreover, as some have argued, these alarmist narratives are not helped by recent claims of "climate emergency" and "mass extinction," which exacerbate public anxieties about climate change (Hulme, 2011, 2019; McHugh et al., 2021).<sup>3</sup> Concerns around the harmful effects of such narratives upon young people have also been raised in studies on eco-distress and climate anxiety (Bailey et al., 2021; Baker et al., 2021; RCPsych, 2021). In this context, it is not surprising that the concept of the trapped figure elicits similar anxiety.

It may also be worth approaching these alarmist narratives from a different perspective. Some argue that images of extreme climate migration can serve as tools for action, awareness, and activism in a context where climate denialism was (and remains) frighteningly widespread (Bettini et al., 2017; Malm & The Zetkin Collective, 2021; McNamara, 2007; Ranganathan & Bratman, 2021). In this way, more progressive narratives became avenues for proactively reducing social inequity while allowing people to express feelings and concerns that support their emotional wellbeing (Bettini et al., 2017; Hickman, 2020; Parsons, 2021; Ranganathan & Bratman, 2021). Protecting the *rights* and *agency* of vulnerable people facing climatic changes is a fine balance. It is therefore vital to see beyond the simplified language that describes climate-induced movements and nonmigration. The storylines observed in media and academia today are not new, nor are they a coincidence. Descriptions of victimising that dehumanise people are counterproductive, harmful to their identity, and can limit their access to social, financial, and institutional support (Cannon & Müller-Mahn, 2010; McNamara, 2009; McNamara & Gibson, 2009). At the same time, the argument that vulnerable populations are adaptive or resilient can easily result in the reduction of financial safeguarding for those already vulnerable who we need to support the most (Cannon & Müller-Mahn, 2010; McNamara, 2009; Ranganathan & Bratman, 2021).

Similar narratives to those surrounding the climate migrant, refugee, and trapped figure, have surrounded us for generations (Goldberg, 1992; Said, 1978; Spivak, 1988). To date, climate migrants are often narrated as either helpless victims or as a threatening and faceless mass of people moving toward the Global North. These discourses do not appear by chance and are in this textual analysis viewed through a lens of binary opposites that will help us critically reflect on wider questions such as whether the current political environment is (re)creating Otherness<sup>4</sup> (Baldwin, 2022; Foucault, 1972, 1981; Said, 1978) and if so, why and by whom?

A full elaboration of this idea lies beyond the scope of the analysis, but it suffices to say that "the other of climate change" serves as a necessary supplement to climate change political thoughts (Baldwin, 2022; Said, 1978). The Other is the category humanism must invent in order to confront the crisis of climate change. It is not simply the figuration of an exotic outside. Even more powerfully, the Other is that which supplies the climate change political narrators, with its ethics and politics. For example, one version of the climate change other, the climate refugee, reinscribes Pacific islanders within a Eurocentric hierarchy that authorises an ethics of western interventionism (Farbotko & McMichael, 2019; McNamara, 2007).

This article's understanding of the trapped figure, and the related idea of involuntary immobility, draws from a similar conception of Otherness. For example, policy narratives of the trapped figure are often structured by an important political distinction between freedom and unfreedom that many argue lies at the heart of liberal political thought (Hindess, 2001; Kipling, 1929; Losurdo, 2014). According to this reading, the trapped figure, by virtue of its immobility, stands as an instantiation of unfreedom. Unable to move, it is said to lack agency and thus the capacity to relocate out of harm's way. Nor can it be expected to understand the science of climate change, let alone how to respond appropriately. From this perspective, the trapped figure is inscribed within a specific form of liberal discourse, it exhibits framings, not unlike those used to construct the climate refugee or migrant (Baldwin, 2013, 2017; Bettini, 2013). Thus, for example, because immobility is easily construed as a condition of despair, those who are "trapped" are presumed to be in need of being rescued or liberated from their entrapment, presumably by someone on the other side of the ledger such as a western policy maker. The trapped figure is also presumed to be suffering from some sort of pathology if refusing the assistance of those who offer help (Cole, 2012; Hindess, 2001). In other words, the discourse on climate-induced immobility has the appearance of being just another version of "white saviourism"<sup>5</sup> which state actors use to legitimise interventions into the lives of those who they wish to target through, for example, planned relocation and forced resettlement.

To better elaborate on this hypothesis, the article will analyse the values, meanings, and descriptions that surround representations of the trapped figure. The analysis is based on a sample of 64 published articles as well as the Foresight Report and six reports either published by or submitted to the United Nations Framework Convention on Climate Change—mainly in relation to the UNFCCC's Warsaw International Mechanism (WIM) on Loss and Damage. To assemble this sample, various databases were searched, including Web of Science, Google Scholar, and CliMig, for peer-reviewed, English-language journal articles that made at least one reference to the word "trapped" in the context

of the "trapped populations" concept (e.g., involuntary nonmigration and nonevacuation behavior). After various failed attempts to identify articles published prior to the Foresight Report, the search criteria were narrowed down to articles published between 2011 and 2020. This corroborates with Ayeb-Karlsson et al. (2018), the only other identified literature review on trapped populations which found 21 publications that made references to "trapped" populations three or more times. This review will further our understanding of the trapped figure as the latter did not analyse UNFCCC policy texts.

The textual narrative analysis of the Foresight Report is important as it provides the original conceptualisation that most academic articles build on. In addition, this review sample includes our own previously published articles on "trapped populations" for the simple reason of transparency and auto-critique. We note, however, that removing our own articles from the sample would not alter the trends we identify (visible in Figure 2 and Table 1). The UNFCCC WIM material investigated the trapped figure's existence and role within climate policy. The climate policy reports are all openly available online through the UNFCCC and their task force members' websites. The selected text extracts are included in the analytical sections with key narratives indicated in bold.

#### 2 | THE CONCEPTUAL BIRTH OF THE TRAPPED FIGURE

The conceptual birth of the trapped figure can be attributed to the 2011 Foresight Report on Migration and Global Environmental Change (Black et al., 2011; Foresight, 2011). Its creation expanded what until then had been a narrow focus on the number of vulnerable people at risk of being displaced by or forced to migrate due to climate change. The trapped populations concept served as an acknowledgment that those deciding to stay behind or who are unable to leave may be just as vulnerable as those on the move. The Foresight Report offered the closest to a conceptual definition of trapped populations to date:

Those with lower wealth or capital face a double set of risks from future environmental change: their reduced level of capital means that they are unable to move away from situations of increasing environmental threats; yet, at the same time, this very lack of capital makes them even more vulnerable to environmental change. These populations are likely to become trapped in places where they are vulnerable to environmental change (Foresight, 2011, p. 14)

Perhaps, not surprisingly, the Foresight Report gave rise to a spate of research in the years following its release, as researchers sought to reframe their studies to capture immobile rather than mobile populations and better grasp this newly identified phenomenon. Ayeb-Karlsson et al. (2018), for example, identified 21 articles referring to the trapped concept published between 2011 and 2018, 14 of them referred to "trapped" more than three times, while the vast majority (18) were published between the years of 2013 and 2016. No trapped studies could be found prior to 2011, but several similar concepts, such as (in)voluntary immobility (e.g., Carling, 2002; Fischer & Malmberg, 2001; Hemerijck & Visser, 2000; John & Griffin, 1990; Lubkemann, 2008; Selikson et al., 1988), stayers (e.g., Gray, 2002; Laoire, 2001), stranded migrants (e.g., Collyer, 2010; Garey, 1936) and nonmigration (e.g., De Jong, 2000; Mehlum, 2002) long predate the Foresight Report. For its part, the Foresight Report would make an important conceptual distinction between "immobile" populations—those who choose to stay in a place—and "trapped" populations—those unable to leave (Figure 1).

The conceptual innovations of immobile and trapped populations were thereafter refined, developed, and expanded by numerous scholars (Adams, 2016; Adger et al., 2015; Ayeb-Karlsson et al., 2018, 2020; Black et al., 2013; Black & Collyer, 2014; Collyer & King, 2015; Cundill et al., 2021; Farbotko & McMichael, 2019; Mallick et al., 2021; Nawrotzki & DeWaard, 2018; Schewel, 2019; Tebboth et al., 2019; Zickgraf, 2019). Still, the narrative produced by the Foresight Report continues to be heavily reproduced in the trapped populations literature. Many scholars even use the concept with quotation marks (e.g., "trapped populations" or populations "trapped") while directly or indirectly citing the report (e.g., Afifi et al., 2013, p. 13; Gray & Wise, 2016, p. 556; Mallick & Schanze, 2020, p. 1; Milan & Ruano, 2014, pp. 61–62; Penning-Rowsell et al., 2013, p. S49; Warner & Afifi, 2014, p. 13). Other scholars have avoided the trapped concept altogether, preferring instead terms such as (forced) nonmigration or immobility. This may partly be due to the complexity in ascertaining whether the act of staying is, in fact, involuntary or a matter of choice (Farbotko & McMichael, 2019; Mallick & Schanze, 2020; Wiegel et al., 2021). Indeed, as the Foresight Report itself makes clear:

TABLE 1 An overview of the continental trapped figure geography according to the 64 sampled journal articles

	Trapped institutional geography	Number of publications		Trapped empirical geography	Number of publications
1	Europe	62	1	Europe	3
2	Oceania	7	2	Oceania	3
3	Asia	10	3	Asia	48
4	Africa	1	4	Africa	34
5	North America	12	5	North America	5
6	South America	1	6	South America	10
7	Antarctica	0	7	Antarctica	0

*Note*: The institutional geography refers to the authors' country affiliations, while the empirical geography indicates where these academic scholars have deemed people "trapped" (see also Table S1).

A relevant "human mobility" option to consider in the context of environmental change is, therefore, where individuals or populations are trapped. A further important "non-migration" outcome to consider is those who choose to stay despite worsening environmental conditions (Foresight, 2011, p. 107).

Many scholars were also critical of the notion of trapped populations early on including the concept's ambiguous framing and potential neoliberal tendencies, making its theoretical and practical application difficult (Baldwin, 2016; Felli & Castree, 2012).

It is certainly important and wise to critically elaborate on the complexity of how to accurately and appropriately distinguish between those who *choose to stay* in risky locations and those who are *involuntarily immobile* (Ayeb-Karlsson et al., 2018, 2020; Black et al., 2013; Black & Collyer, 2014). A stronger recognition of the subjective values that constitutes safe–unsafe locations could help clarify some of these distinctions. In this sense, we must appreciate that some will consider it safe to live with and accommodate around climatic changes while others will consider them a reason to relocate. That aside, it must also be acknowledged that the threshold for when a risk becomes unbearable or a place unhabitable is highly socio-psychological and changes over time. Some people may similarly cope with certain urban or environmental risks that other people perceive as intolerable.

# **3** | WHO IS THE "TRAPPED" FIGURE?

How do researchers account for immobility or what immobilises trapped populations? Who precisely is the trapped figure? To answer these questions, we first need to consider textual narratives of the trapped figure from the Foresight Report. Emerging from this analysis is a sense of the trapped figure lacking financial means:

Those with lower wealth or capital face a double set of risks from future environmental change: their reduced level of capital means that they are unable to move away from situations of increasing environmental threats; yet, at the same time, this very lack of capital makes them even more vulnerable to environmental change. These populations are likely to become trapped in places where they are vulnerable to environmental change (Foresight, 2011, p. 14).

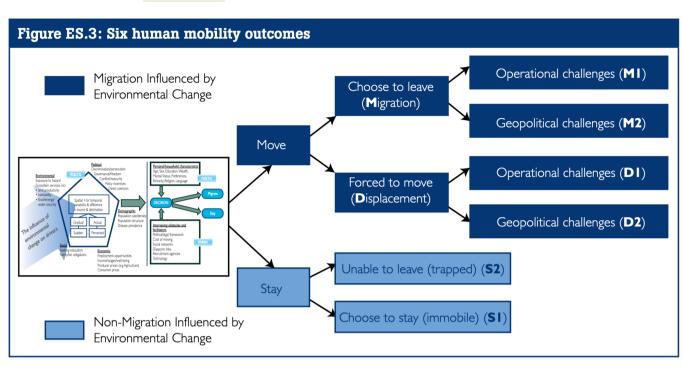
An associated reduction in financial assets can reduce the ability of individuals to move in a planned, safe way and lead to them effectively becoming trapped (Foresight, 2011, p. 21).

As another example, if environmental change causes a reduction in financial capital, which leads to households being trapped in vulnerable locations in mega-deltas, this has implications for human security, vulnerability, economic development and health (Foresight, 2011, p. 126).

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**FIGURE 1** An overview of the six human mobility outcomes including the inability to leave (trapped) and the choice of staying (immobile) indicated as staying or nonmigration influenced by environmental change (Foresight, 2011, p. 15)

An important finding is that poorer households are likely to be "trapped" in circumstances where they are at once more vulnerable to environmental change and less able to move away from it (Foresight, 2011, p. 67).

That the trapped figure lacks financial resources is perhaps to be expected. What may not be anticipated, however, is that the Foresight trapped figure often was framed to be trapped due to conflict:

It is important to recognise that conflict can equally cause people to be trapped in areas as be displaced, thus making conflict-related movements particularly unpredictable, dynamic and hard to analyse (Foresight, 2011, p. 60).

External political circumstances, particularly conflict, can cause populations to become trapped in environmentally vulnerable locations in mountains (Foresight, 2011, p. 98).

/.../poor populations who are most vulnerable to conflict tend to be trapped in conflict areas, whereas those forced to leave have a limited choice of destinations (Foresight, 2011, p. 116).

These are just a few examples that illustrate how from very early on the trapped figure was narrated as immobilised by poverty and conflict. However, as academic discussion about the figure evolved, several additional factors were added to explain the figure's immobility. These include a range of factors, such as access to social networks, legal barriers, place attachment, culture, gender, capability, identity, honour, and various psychological elements, for instance, emotion and trauma:

Research into the situation of those who are trapped in complete immobility presents the greatest difficulties. The Foresight report considers their difficulties as largely economic. As the review of resource constraints in the previous section demonstrated, this can take many forms; constraints may not be directly financial and may include things such as access to geographically distant social networks (Black & Collyer, 2014, p. 301).

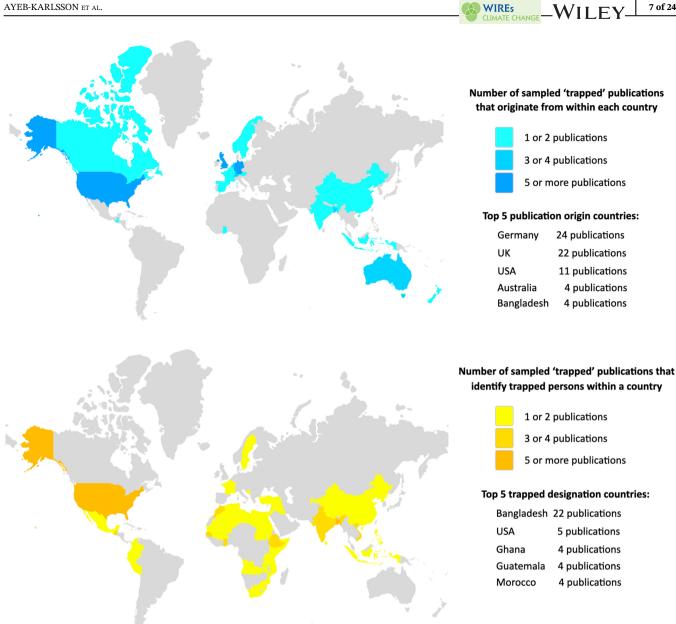


FIGURE 2 The two maps illustrate in which countries the academic institutes that applied the trapped concept are located (in blue) and where these academic scholars deemed populations trapped (in yellow). Darker shades of blue and yellow indicate higher frequencies of occurrence. The results are derived from the 64 English language peer-reviewed articles that refer to the trapped concept at least once since its inception in 2011 and until 2020 (see also study selection in Table S2)

Straightaway, then, it is appreciated how trapped populations are explained not solely in relation to poverty, but that poverty itself can be linked to structural considerations such as a household's ability to access global labour markets. The findings also suggest that alongside poverty, psychology plays an important part in a trapped figure's immobility:

Households that cannot migrate: The third group includes trapped populations that struggle to survive under adversity and cannot easily use migration to adapt to the negative impacts of climatic events. They may have strong social ties and are emotionally attached to their resources which restrain them from moving even under adverse events (Bhatta et al., 2015, p. 14).

In the Indonesian case people showed to be much more attached to their place of residence by feelings of belonging as well as belief-systems. Here the concept of mental thresholds as put forward by van der Velde and van Naerssen (2007b) seemed to be at work. Additionally, immobility and "trapped populations" stood

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out as a constitutional part of the nexus between environmental change and migration (Hillmann & Ziegelmayer, 2016, p. 133).

Forty per cent of the population is in location because of social and affective attachment to place, "trapped" by their own internal attachment or fear of the outside world. This represents 74 % of the dissatisfied population (Adams, 2016, p. 442).

The psychological trauma from previous cyclone strikes left people feeling so anxious and emotionally paralysed that some of them stopped evacuating. The fear of dying after, for example, having witnessed the death of family members, ended up trapping people mentally (Ayeb-Karlsson, 2020c, p. 22).

What all these scholars point to is that immobility is irreducible to structural factors such as poverty and conflict, but it is also a marker of psychological distress. Several other factors have been used to explain immobility:

While nonsignificant climate effects provide an initial clue about the holding power of places, a closer look at the actual characteristics of places that trap, or immobilize, populations is necessary (Nawrotzki & DeWaard, 2018, p. 542).

The dominant framing of trapped populations is a simplification, potentially constraining on the agency of people concerned. In fact, people may be immobile for reasons that are not only related to socio-economic status or the political realities of moving (Adams, 2016). People bear certain climate change-related impacts to livelihoods which they deem tolerable to avoid those they consider unacceptable, namely loss of home and culture (Oakes, 2019, p. 497).

Gender has been shown to be immobilising or "trapping" people in different ways during the cyclone strikes in Bangladesh. Women and men faced psychologically and emotionally paralysing effects from their expected gender roles. When the disaster strikes, not all people had the same ability to move (Ayeb-Karlsson, 2020b, p. 22).

Aspiration without sufficient capabilities to leave causes people to be trapped (involuntary nonmigration) in the face of environmental change (Mallick & Schanze, 2020, p. 2).

Perhaps to sum up the many elements that end up trapping the figure, we need to reframe the focus from immobilising factors to the noneconomic losses that people experience:

People reported facing noneconomic losses due to the move, such as identity, honour, sense of belonging and mental health. These psychosocial processes helped explain why some people ended up "trapped" or immobile. The psychosocial constraints paralysed them mentally, as well as geographically (Ayeb-Karlsson et al., 2020, p. 1).

However, if immobility must be explained beyond just poverty and conflict, the analysis around 'who the trapped figure is' shows that trapped populations tend to be de-individualised. For example, researchers often describe the trapped figure using collective nouns such as "population," "household," "group," "people," and only sometimes as "individuals." This is important because it tells us that while for some researchers, nuanced people-centered experiences and personal immobility narratives occasionally do matter, for the preponderance of researchers, immobility is best conceptualised as a collective experience:

Consequently, in the decades ahead, millions of people will be unable to move away from locations in which they are extremely vulnerable to environmental change. To the international community, this "trapped" population is likely to represent just as important a policy concern as those who do migrate (Foresight, 2011, p. 9).

Tens of millions of people may find themselves trapped in vulnerable areas and unable to migrate (Geddes et al., 2012, p. 962).

In Vietnam, HHs [HouseHolds] that suffer from poverty and do not benefit from the economic boom are often left behind (trapped populations) (Warner & Afifi, 2014, p. 7).

Growing numbers of people are becoming trapped in their own countries or in transit countries, or being forced to roam border areas, unable to access legal protection or basic social necessities (Humble, 2014, p. 56).

Some of these individuals may be "trapped" because they lack the means to move (Mallick & Schanze, 2020, p. 1).

Somewhat unexpectedly, the trapped figure is not strongly gendered nor age-related. Some scholars do indeed refer to women's, children's, and the elderly's increased risk of ending up trapped. Importantly, however, in the context of Bangladesh, limited research encourages greater attention to the intersectional dimensions of gender and social identity in studies investigating the reasons behind people's immobility:

The socio-economic, cultural and religious values in the region have resulted in its women and children being more vulnerable to adverse situations in comparison to men. These dynamics form the vicious cycles where women and their children get trapped (Bhatta et al., 2015, p. 15).

The trapped group has intermediate income including women who are generally less likely to move, due to socio-cultural and economic reasons, as are children and the elderly, and therefore local adaptation efforts should target these groups specifically. Given that men's migration could contribute to the further deprivation and risk that women face, the trapped population needs to be provided with greater social protection and opportunities for livelihood security (Bhatta et al., 2015, p. 17–18).

Given the policy importance of detecting trapped populations, it makes sense that studies of the climatemigration relationship routinely consider and test for the presence of heterogeneous populations, each characterized by differential risks to climate change, to identify specific groups, e.g., women or children, most susceptible to being trapped in place (Nawrotzki & DeWaard, 2018, p. 534).

The gendered power system affected women and men differently (not simply negative for women or positive for men). The system also aligned with other social roles in the way that age and marital status, for example, could influence someone's (im)mobility. Unmarried women did not have the same mobility options as married women (Ayeb-Karlsson, 2020b, pp. 21–22).

Finally, the analysis showed that the trapped figure is represented overwhelmingly as an object of humanitarian concern and, thus, as a victim. This is clearly evident in the Foresight Report, which describes trapped populations as "silent victims" for whom "the sooner action is taken, the sooner human suffering will be alleviated." However, this victimisation narrative is extended by various scholars in relation to, for example, stranded migrants in transit facing exploitation and abuse:

It may seem perverse to categorise "nonmigration" as a "human mobility outcome", but its relevance is acute: it is often those trapped in areas of environmental danger, and denied opportunities for diversifying their livelihood through migration, who will increasingly be the silent victims of environmental change (Foresight, 2011, p. 36).

Yet, perhaps more significant is that people will increasingly be trapped in vulnerable situations, where there are few safe migration options but staying also represents a danger because of the environment. The sooner action is taken, the sooner human suffering will be alleviated (Foresight, 2011, p. 22).

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/.../environmental change may well exacerbate the number of poor trapped in environmentally vulnerable and degraded rural settings, with little scope for moving to areas with better opportunities (Foresight, 2011, p. 176).

As border security increases and borders become less permeable, cross-border migration is becoming increasingly difficult, selective and dangerous. Growing numbers of people are becoming trapped in their own countries or in transit countries, or being forced to roam border areas, unable to access legal protection or basic social necessities./.../ These trapped migrants are vulnerable, exposed to the violations and abuses that are typical for those moving through countries irregularly, including: not having access to basic necessities; discrimination and abuse because of their foreign origin and irregular status; human trafficking (which exposes migrants to coercion, deception and physical and sexual abuse); dangerous or forced labour; and organ theft (Humble, 2014, p. 56).

Trapped populations are to be found not simply in rural areas or urban informal settlements, but also at other moments in the migration continuum. In this sense, entrapment is not simply an unfortunate byproduct of local environmental risk, it is also a function of direct state intervention:

The transitory settlement of West Africans in Moroccan cities has led to noticeable changes in the appropriation and degradation of spaces and places in the absence of interventions by the Moroccan government to offer legal protection and institutional support for most of African immigrants, while Europe increases its measures to prevent them from entering. West African immigrants become trapped in this situation and most often experience hostility, racism and violence (Sow et al., 2015, p. 1)

These findings lead to the conclusion that the core framing of the trapped figure is that of victimhood. In many ways, this is not surprising but it is significant because of what it tells us about the relation of power within which the figure is embedded. Most notably, the language of victimhood authorises developmental and humanitarian interventions on the part of international agencies and in many cases western governments. However, another aspect of this relation of power is that if the victimhood of trapped populations goes unaddressed, such populations stand to become full-blown humanitarian emergencies. The trapped figure represents a humanitarian concern, an imaginary fragile group of help-less victims that needs to be saved:

People who are trapped may become more prone to humanitarian emergencies and possibly even displacement if their situation worsens, or if extreme events occur. In such cases, human survival may depend upon unplanned and problematic displacement (Foresight, 2011, p. 16).

The existence of conflict will, in many situations, mean that populations are trapped in vulnerable situations, where deterioration in environmental conditions may lead to humanitarian emergencies and unplanned displacement (Foresight, 2011, p. 165).

At the same time, the very existence of the trapped figure also represents another ambiguous humanitarian concern; a group that could become a dangerous security threat if not controlled and carefully managed:

A danger inherent in focusing on "numbers of environmental migrants" is that it could mean neglecting the major humanitarian issues surrounding those who stay behind, and indeed those who are unable migrate and who become trapped in parlous environmental circumstances (Foresight, 2011, p. 29).

These "trapped" and "immobile" populations are hidden from high-level estimates, yet they represent a policy concern just as serious as, if not more serious than, migration. It follows that the numbers which truly matter are populations which are in situations of environmental vulnerability: whether they migrate or not should not be the primary concern (Foresight, 2011, p. 191).

In this way, the trapped figure is Othered, in a manner similar to that of the climate refugee and migrant, in the language of both fear and victimhood (Ayeb-Karlsson, 2020a; Baldwin, 2013, 2017, 2022; Bettini, 2013). On this

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basis, the trapped figure is best construed as a "humanitarian other" whose principal attribute is that of ambiguity. The polarised combination of binary opposites becomes an ambivalent construct that is difficult to plan around theoretically as well as practically. The trapped figure is both a victim in need of sympathy and a character who may pose a threat.

This observation may seem pedantic to some, but it is profoundly significant. The narrative creates the character as an object to be feared (i.e., too many "trapped" populations will threaten social order), but also urges for sympathy as the trapped figure is in need of care and concern (i.e., these desperate and vulnerable people require "us" to save them). In this way, the figuration of immobility authorises new forms of development and humanitarian intervention where governments, international agencies, and nongovernmental organisations actively can seek to resolve this ambiguity in ways that may not necessarily conform with the prevailing political desires or aspirations of those characterised as "involuntarily" immobile.

This in turn raises important questions about who benefits from the trapped category, those who the category seeks to describe, or those, such as western development agencies, raising these questions. The point is not to discredit those who seek to assist the world's poor, but to direct consideration to the very terms that draw this category of difference into being. There are valid concerns around the aims of such new humanitarian interventions, how they could impact people deemed involuntarily immobile, and who may benefit, behind the scenes, from turning the trapped figure mobile:

A proactive approach to migration in the context of environmental change will reduce the chances of populations being trapped and/or being displaced in circumstances that raise wider geopolitical challenges; a proactive approach can also build on and maximise the benefits from migration, building resilience and transforming adaptive capacity (Foresight, 2011, p. 193).

The narratives re-establish already existing power relations, but this time in the context of climate change (Baldwin, 2016; Wainwright & Mann, 2013, 2015). In a way, the discourse implies that those who are "trapped" are forced to inhabit the terrain of unfreedom until the time of their salvation by the humanitarian westerner. In other words, immobile populations are the very opposite of free—they are "trapped." Thus, their freedom from their condition of entrapment requires the benevolence of those who themselves are "free"—it has become a modern form of "white saviourism" (Cole, 2012; Hindess, 2001; Kipling, 1929).

This victimisation and humanitarian concern will guide us towards the geography of the trapped figure, namely, where people are deemed involuntarily immobile and who is narrating these storylines.

# 4 | THE GEOGRAPHY OF THE "TRAPPED" FIGURE

In this section, we consider the geography of the trapped figure. In many ways, the themes of victimisation and humanitarianism help us understand where involuntarily immobile populations are to be found and who narrates them as trapped. As with the previous section, the analysis begins with the Foresight Report.

The original Foresight framing identified diverse areas and places at risk of generating trapped populations. These areas of risk stretched from the drylands, mountains, low-elevation coastal zones (particularly small island developing states), urban informal settlements, and floodplains:

Conclusion: trapped populations are an issue in drylands under most future scenarios (Foresight, 2011, p. 76).

Although many of the drivers are very different in drylands, certain key themes are similar. For example, in both ecological regions, there is a risk of trapped populations in most scenarios. In low-elevation coastal zones in particular they are likely to reside in both rural and urban areas (Foresight, 2011, p. 90).

An important difference from both drylands and low-elevation coastal zones is that there are relatively fewer urban locations in the mountains, so the main concerns of "non-migration" are around being trapped in vulnerable rural locations (Foresight, 2011, p. 101).

> Many populations will be at risk because safe migration channels from small island environments and marginal agricultural lands in the world's drylands and mountain regions are unavailable to them. This means they may become trapped in poor areas where they are likely to be more vulnerable to increasingly worse environmental conditions (Foresight, 2011, p. 104).

> Informal growth means that many people living in cities are trapped in particularly vulnerable areas, such as low-lying slums, which are less likely to have benefited from city defence funds (Foresight, 2011, p. 88).

By 2060 there are 232 million people living in floodplains in urban areas in Asia, Africa and Latin America and the Caribbean (126 million more than in 2030), and a significant proportion of this group are likely to be trapped in vulnerable living conditions, such as low-lying slums and squatter settlements next to water hazards (Foresight, 2011, p. 89).

The environmental change–migration–conflict nexus is complex, non-linear and context specific. However, it is clear that strategic priorities must include a focus on urban tension and conflict, which will largely occur in cities, and a focus on populations which are trapped in circumstances of poverty, conflict and environmental change (Foresight, 2011, p. 149).

Yet in this scenario there will also be a significant number of people trapped in urban locations because of high population growth (Foresight, 2011, p. 192).

There is an urgent need for a focus on the resilience of populations that are moving to, or are trapped in, urban areas that are vulnerable to global environmental change, particularly in low-income countries. Cities in such countries have been identified as a particular concern in this report, where policy innovation is urgently needed (Foresight, 2011, p. 201).

Several references to cyclone or hurricane-induced trapped populations were also made in the Foresight Report. These included Myanmar and the US, where race and social marginalisation were said to be important factors trapping populations in areas of environmental risk:

For example, in the case of Hurricane Katrina in New Orleans, it could be argued that the group that posed the most significant policy challenges was not those who were displaced but those who became trapped amid a complete breakdown of public services, severe damage to property and contamination of land and water supplies as a result of the release of large quantities of oil. Broadly speaking, whether New Orleans residents were "trapped" or not depended on race and class, as these factors influenced access to private transport and social networks that could facilitate evacuation (Foresight, 2011, p. 119).

Another example of a population trapped in a place vulnerable to an event projected to become more frequent in the context of global environmental change is that of the Burmese, who experienced the devastation of Cyclone Nargis in April 2008. Not only did Nargis leave at least 130,000 people dead, but the inaccessibility of affected people to international humanitarian assistance threatened a separate wave of death from lack of food and water and the spread of disease in the aftermath of the disaster (Foresight, 2011, p. 119).

Despite this original geographical framing, the trapped figure in academic studies following the Foresight Report is almost exclusively related to rural nonmigration. In more recent years, however, a handful of publications would identify trapped people in urban areas (Ayeb-Karlsson, 2021; Ayeb-Karlsson et al., 2020) or link them to involuntary non-evacuation behaviour (Ayeb-Karlsson, 2020b, 2020c; Logan et al., 2016; McCaughey et al., 2018).

One striking key finding from the analysis is that the literature following the Foresight Report overwhelmingly located trapped populations in South America [e.g., in Guatemala (Afifi et al., 2015; Milan & Ruano, 2014), Peru (Adams, 2016), and Colombia (Matias, 2020)], Africa [e.g., in Morocco (Sow et al., 2015), Ghana (Hillmann & Ziegelmayer, 2016), Senegal (Zickgraf, 2019), Zambia (Nawrotzki & DeWaard, 2018), Ethiopia (Hermans &

Garbe, 2019), and Burkina Faso (Gray & Wise, 2016)], as well as in the Middle East (Geddes, 2015), and Asia (Bhatta et al., 2015), including Vietnam (Warner & Afifi, 2014), Bangladesh (Ayeb-Karlsson, 2020b; Penning-Rowsell et al., 2013), Indonesia (McCaughey et al., 2018), and Tajikistan (Blondin, 2020). At the same time, none of the study samples identified involuntarily immobile populations in Europe or Australia, while the articles placing them in the US referred mainly to Afro-Americans (Figure 1). Moreover, when trapped populations *were* identified within the northern hemisphere, they were narrated as millions of people stranded along the borders of Europe while awaiting an opportunity to enter (Geddes, 2015; Hauer, 2017; Logan et al., 2016).

This textual analysis pays attention to both the empirical and institutional geography of the trapped figure. It is equally important to investigate who or what geographies deem people involuntarily immobile as where people are trapped. What the analysis suggests is that not unlike the discourse surrounding the climate migrant or climate refugee, the literature on trapped populations illustrates a clear north–south division in which the vast majority of articles are written by researchers from northern institutions about vulnerable populations in the southern hemisphere. The trapped literature clearly illustrates a strong north–south division (Table 1) where the trapped figure is primarily identified within the Global South, 92 study references placed the trapped figure in Asia, Africa, or South America while only 11 located trapped populations in Europe, North America or Oceania, while deemed trapped by scholars from the Global North, 81 article author affiliations were of researchers based at institutes in Europe, North America, or Oceania while only 12 were of institutes in Africa, Asia, or South America (Figure 2).<sup>6</sup>

The trapped geography through the discrepancy in numeric and cartographic form is clear, but more than simply a question of quantity or number, this finding tells us what is at stake in the science and policy discourse on trapped populations. It raises important questions concerning who has the power to represent whom. One could even go so far as to suggest that the discourse exhibits what the critical development literature often describes as "white saviourism" which may have important implications for policy. The trapped populations concept could turn into a powerful tool for northern governments or institutions. It could be misused by those in power to legitimise the interventions into the lives of those they wish to target for planned relocation. The idea of the trapped figure may in this way serve northern financial or political benefits while claiming that such large-scale resettlement is for their own good and protection. This is not a foregone conclusion, as the discourse on trapped populations is structured by such power asymmetry, it is all the more reason to bring ethical scrutinise to bear on the terms by which vulnerable people are narrated. This brings us to the final analytical element, namely, how trapped populations are conceptualised within a UNFCCC climate policy context.

# 5 | THE TRAPPED FIGURE IN UNFCCC CLIMATE CHANGE POLICY

In 2010, a year prior to the release of the Foresight Report, climate change-related "displacement, migration and planned relocation" would feature for the first time within the framework of international climate change policy in paragraph 14f of the UNFCCC Cancun Agreement. Paragraph 14(f) reads as follows:

14. Invites all Parties to enhance action on adaptation under the Cancun Adaptation Framework, taking into account their common but differentiated responsibilities and respective capabilities, and specific national and regional development priorities, objectives and circumstances, by undertaking, inter alia, the following: (f) Measures to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration and planned relocation, where appropriate, at the national, regional and international levels; (UNFCCC, 2010, p. 5).

At the time, this was a ground-breaking statement within the UNFCCC framework. It meant that policymakers authorised researchers to examine the displacement and relocation experiences of people, governments, and organisations with a view to informing potential large-scale resettlement in a climate-changed future (McAdam, 2014; Odeyemi, 2021; Warner, 2012). It set off a wave of responses that cautioned against large-scale relocation as an adaptation measure for vulnerable people, and urged for lessons to be drawn from development-forced displacement and resettlement (Arnall, 2014, 2019; Barnett & O'Neill, 2012; de Sherbinin et al., 2011; Kothari, 2014; Mayer, 2017; Rogers & Xue, 2015; Stojanov et al., 2017; Wilmsen & Webber, 2015).

It is important to critically assess whether these policy texts indirectly, despite perhaps from well-intentioned efforts, advocate for a normalisation, justification, and generalisation of relocation and resettlement by UN organisations. This can be problematic as relocation governance often is born out of an incredibly complicated, sensitive, and infectious history that takes us back to the idea of "divide and conquer no matter the cost"; a hark back to colonial times.

In academia, planned relocation was sometimes put forward as a way to protect trapped populations by supporting and enabling their adaptation:

Planned relocation in the context of disasters and adverse effects of climate change can be relevant in a range of situations, including:

- 1. As a preventive measure by moving people anticipatorily out of areas at risk of disasters, environmental degradation, or adverse effects of climate change, including when habitability is irreversibly threatened;
- 2. As a response and solution to allow displaced people to rebuild lives when a disaster or future risks associated with disasters, environmental degradation, or adverse effects of climate change threaten human security at origin or render places of origin unfit for habitation; and
- 3. As a protection measure for so-called trapped populations to enable them to better adapt to the effects of disaster and climate change (Ferris & Weerasinghe, 2020, pp. 137–138).

Besides entering into academic writing, the trapped figure also surfaced within UNFCCC policy documents following the 2011 Cancun Agreement. Three years after Cancun, during COP19, the Warsaw International Mechanism (WIM) for Loss and Damage associated with Climate Change Impacts saw the light of day. In a 2013 UNFCCC working document related to Non-Economic Loss and Damage, the following paragraph describes the trapped figure as "an unclear case" of "people whose mobility is restricted," hence they are not migrants "but nor can they be displaced despite potentially suffering human mobility related loss and damage":

Voluntary migration and planned relocation tend to be identified as adaptation measures, and therefore they reduce exposure to some types of loss and damage. However, that is not to say that they cannot be harmful in themselves in some contexts. For example, planned relocation may impair agency if it is against the will of the residents. As voluntary migration and planned relocation can be considered forms of adaptation, rather than responses to the limits of adaptation, their status as a type of loss and damage is further complicated. Trapped populations are also an unclear case. These are groups of people whose mobility is restricted, and so cannot migrate as a form of adaptation but nor can they be displaced (Warner & Afifi, 2014), despite potentially suffering human mobility-related loss and damage. Overall, human mobility is a continuum, and loss and damage is not clearly defined, and so, while displacement is the clearest case of loss and damage in human mobility, it is not necessarily the only case (UNFCCC, 2013, p. 28).

This trapped representation in a UNFCCC context is important as the specific paragraph reappears in other UNFCCC WIM related documents. The UNFCCC trapped figure is an interesting policy character. In line with the academic discourse, it is a victim potentially suffering harm if not saved. Its restricted mobility disables the character's ability to adapt without assistance. The binary description of the trapped figure portrays a permanently immobile state. Interestingly, this immobile figure cannot also be displaced.

Imaginably, an individual identifying as trapped may also identify as displaced. However, not in the clear-cut black and white policy world that hold climate change order, and plausibly also due to the anxiety triggered by any potential disorder, these two figures belong in separate boxes. The binary reproduction of order-disorder should be understood as central to race. Race is a worldview that seeks to create categories of differences between people (Goldberg, 1992; Said, 1978). The conceptual power and knowledge dynamics are here useful as forms of representation (Foucault, 1972, 1981). The hegemonic knowledge makes the categories needed to rule—knowledge is difference-making (Goldberg, 1992; Said, 1978; Spivak, 1988). In this way, the trapped figure does not pre-exist this structural construction, but the character comes into being through the construction of knowledge. The conceptualisation of the climate refugee, migrant, or trapped figure, is being made up in order to authorise and sustain a particular form of liberal government (Wainwright & Mann, 2013, 2015). Most of the references made to the trapped figure in a UNFCCC context, fall under the 2017 five-year rolling work plan of the WIM Executive Committee that relates to the thematic expert groups in the two workstreams seeking to enhance cooperation and facilitation on (i) noneconomic loss and (ii) human mobility, including migration, displacement, and planned relocation. The trapped figure particularly appears in UNFCCC WIM documentation, and reports prepared by WIM expert members, to inform the activities of the task force on displacement to avert, minimise and address displacement related to climate change:

However, many of the most vulnerable will be unable to move as vulnerability is inversely correlated with mobility, leading to those being most exposed and vulnerable to the impacts of climate change having the least capability to move [Foresight, 2011, IPCC, 2014, P767; on trapped populations see also below under "Challenges"] (UNFCCC, 2016, p. 3).

"Trapped" and immobile populations—We know that the most vulnerable groups are often unable to move when affected by the impacts of climate change and environmental disruptions. Thus research needs to pay attention not just to those who move, but also to those unable to do so and how they can be supported to move when that is their desire (UNFCCC, 2016, p. 9).

Yet, it is not generally the poorest people who migrate, as migration demands resources. In this respect, non-migration can be associated with increased vulnerability to environmental risks. Such pressure on the most vulnerable households' livelihood can lead to the emergence of trapped population and constitute a threat to human security (UNFCCC, 2016, pp. 14–15).

Article 8(j) considers indigenous and local communities. Such communities are often considered highly vulnerable communities to climate change (based on where they live) as well as other socioeconomic issues such as urbanization, land-use change, and natural resource depletion. As such they may be exposed to a range of migration outcomes such as forced relocation, adaptive migration, trapping due to lack of social and economic means, or forced displacement (IOM, 2018, p. 45).

Less vulnerable households that decide not to migrate preemptively of the slow onset induced disaster may then become displaced or trapped if they misperceived their ability to cope with the slow onset induced disaster. However, many of the trapped or immobile populations are people who are unable to move out of areas where their survival may be endangered because they lack the resources to move (IDMC, 2018, p. 5).

They use (usually) internal displacement as a survival strategy in an overall setting of erosive coping measures which leave or trap such households at the margins of decent existence./.../Displaced persons often are the poorest households and may have no choice but to settle in environmentally hazardous areas, because these are the only places available to them. They have the least access to options to move to urban areas, few or no livelihood diversification opportunities, no land, little education, and most often move to other rural areas. When they move to urban destination in the context of slow onset events it's often to seek assistance. In this context they are generally forced to settle in peripheral areas, or informal settlements like slums, which are the most exposed to environmental risk (such as flooding, landslides) (IDMC, 2018, p. 14).

Trapped populations "[G]roups of people whose mobility is restricted, and so cannot migrate as a form of adaptation but nor can they be displaced (Warner & Afifi, 2014), despite potentially suffering human mobility-related loss and damage." 351 (PDD, 2018, p. 82)

As noted, there are many similarities between how the trapped figure is narrated within academia and UNFCCC policy. The trapped figure within UNFCCC policy is described as a suffering victim whose endangered survival renders the character to be in constant need of support and assistance. In line with the academic literature, the trapped figure is ambiguous, and framed as a challenge and threat to human security. When it comes to the question of how to best support the trapped figure, planned relocation is often put forward as an "option to protect those who are trapped," "a measure to move at-risk populations out of harm's way," and as "a useful tool to protect many of the most vulnerable":

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Literature further recognizes that there is a "tipping point" at which communities fall from voluntary adaptive migration into forced displacement, when coping capacities are exhausted communities fall into a gradual process of impoverishment and become displaced. Literature further identifies planned relocation as a last resort option for protecting those trapped in areas highly affected or prone to the adverse effects of slow onset events (UNFCCC, 2018, p. 15).

When relocation is planned for and implemented in a way that fully respects human rights of affected communities, it can be considered a useful tool to protect many of the most vulnerable to slow onset events that are or will be unable to move, before they are forced to be displaced or when they're trapped. Governments may undertake relocation as an anticipatory measure where slow onset events threaten to render certain areas uninhabitable. /.../Literature provides a range of case studies and recommendations to support government on planning for a participatory and voluntary relocation as a measure to minimize displacement and move at-risk populations out of harm's way and mitigate risks for those it is intended to benefit, including the disruption of livelihoods and loss of income, socioeconomic networks and cultural heritage (IDMC, 2018, p. 25).

Planned relocation is understood as: "a planned process in which persons or groups of persons move or are assisted to move away from their homes or places of temporary residence, are settled in a new location, and provided with the conditions for rebuilding their lives. Planned Relocation is carried out under the authority of the State, takes place within national borders, and is undertaken to protect people from risks and impacts related to disasters and environmental change, including the effects of climate change. Such Planned Relocation may be carried out at the individual, household, and/or community levels." Planned relocation can be described as a forced or voluntary movement depending on the circumstances. As guidance explains: In some cases, Planned Relocation will be initiated by persons or groups of persons and will reflect their level of risk tolerance. In other cases, States will decide that people must be moved for their safety and protection, even though they may oppose Planned Relocation. In all types of Planned Relocation, distinctions between "forced" versus "voluntary" movement are somewhat artificial. Arguably, all those who participate in Planned Relocation are being compelled to move by forces beyond their control disasters and environmental change, including the effects of climate change. Climate change may also result in factors that restrict mobility. Trapped populations are described as "[g]roups of people whose mobility is restricted, and so cannot migrate as a form of adaptation but nor can they be displaced (Warner & Afifi, 2014), despite potentially suffering human mobility-related loss and damage" (PDD, 2018, p. 14).

It is clear that the policy texts are written from a well-intentioned standpoint. Some reports also note the difficulty in differencing between forced and voluntary planned relocation. That said, it becomes highly problematic to propose that planned relocation provides a 'solution' for "trapped" or immobile populations while also framing trapped people as upcoming challenges. Key lessons presented in these reports include successful case study examples of government-led relocation and lessons learned from effective resettlement programs. These proactive adaptation success stories occupy a sensitive space. The examples can easily be flipped around and become dangerous blueprints or tools for political and financial gain of those in power (Kothari, 2014; Rogers & Xue, 2015).

# 6 | DISCUSSION

After analysing the international discourse surrounding the trapped figure, a clear pattern starts to emerge. The discourse is certainly well-intentioned, it reflects, as all forms of political discourse, the wider relation of power that brings it into being. In this way, knowledge about trapped populations is not the mirror image of an objective condition but produces the very category it seeks to name. By analysing the discourse, we can start to assemble a clearer picture of what the category represents, who defines it and why, and with what consequences. What we observe is that the discourse on trapped populations constructs the trapped figure as impoverished, victimised, cut off from any wider social and support network, psychologically vulnerable, and therefore a figure that needs to be intervened upon in order to rectify their unfortunate circumstance.

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Judging by this analysis of who is producing the literature on trapped populations, knowledge about the trapped figure is largely the result of western researchers and involuntarily immobile populations are overwhelming to be found in the Global South. This does not invalidate the findings of western researchers. It does, however, reflect that knowledge about trapped populations reinforces a long-standing relationship of power in which western researchers and experts are understood to be better positioned to represent the interests of the poor in global climate change and displacement policy than the poor themselves. It is therefore imperative that we scrutinise the discourse on trapped populations in order to understand the locational imperatives of those driving this policy discourse.

However, above all, these issues matter inasmuch as they are central to the way the discourse on trapped populations appears in actual climate policy. A climate policy context that justifies governance-led relocations to protect and safeguard "involuntarily" immobile people is troublesome. Important questions must be raised in relation to (i) who has the authority to define unhabitable risks or locations; (ii) who by extension can determine where a person is allowed to stay or call home, and thus (iii) who can legitimately determine who is "involuntarily" immobile or trapped, and therefore should be moved out of harm's way. The gravity of the way that the trapped figure is framed lies in the narration of immobility as a problem, as an issue that needs to be put right, or as a non-white mass of Others that must be made "free" by way of the logics of white saviourism (Cole, 2012; Kipling, 1929; Milazzo, 2019). Legal climate policy documents that condemn masses of immobile (or mobile) people in the Global South to a state from which they need rescue, through externally determining interventions, are a serious cause for concern. When placed in the wrong hands, the legitimacy offered by these policy texts can easily be turned into weapons.

In the same way that the trapped figure triggers fear and worry, including for their "protection," the language describing most climate change characteristics and scenarios foster alarm and anxiety (Ayeb-Karlsson et al., 2018; Bettini, 2013; Hulme, 2019; McHugh et al., 2021). These are unhelpful and ill-founded narratives. Ultimately, any involuntary immobility must be determined through self-identification on the basis of a person's own subjective interpretation of their situation and their own mobility intentions (Ayeb-Karlsson, 2020a, 2021; Black et al., 2013). Research designs that incorporate the role of discourses and subjectivity should therefore be prioritised. Currently, alarmist and binary narratives around safe-unsafe locations, or populations, are determining who is considered "trapped."

To end this analysis, an evident question needs to be raised; Have these "new" involuntarily immobile masses of stagnated people simply created yet another crisis for the future? The storyline feels new, but also very familiar; the human tide has become standing water. The trapped figure is dehumanised in similar ways to the Other. The unique human value is lost in this process that transforms the trapped figure into a faceless and voiceless mass without dignity. Why do these involuntarily immobile populations trigger fear? The analysis showed how the victimisation of the trapped figure accumulates concern for its growing population as the climate keeps changing. However, the binary representations of order-disorder, where the trapped figure is framed as a challenge and as a human security threat, indicate that the figure feeds into another kind of fear. The securitisation that surrounds the trapped narrative, and other characters born out of the climate change discourse (i.e., the climate refugee and migrant), turns their representation into dangerous and hazardous entities (Brzoska & Fröhlich, 2016; Butros et al., 2021; Hartmann, 2014; Selby et al., 2017; Warner & Boas, 2019). In the case of a moving population, it represents an uncontrollable tide, flood, or wave of Others. It is important to acknowledge the similarity of values and meanings tied to the trapped figure as an involuntarily immobile and frustrated mass of Others that may come loose (Baldwin, 2017; Bettini, 2013). What happens when the angry stranded migrant uncontrollably turns mobile? Disorder. It is easy to imagine what this may look like as it closely aligns with the media visualisations of "our" borders being overtaken by running Syrian migrants in Hungary or of over-crowed rubber boats making their way towards Greece or the UK.

The trapped discourse, therefore, implies a solution that makes perfect sense. Trapped populations must be rendered mobile through western managed and controlled strategies of assisted migration, planned relocation, and resettlement. Academic scholars and policy makers must therefore become critical friends that point out toxic storylines and that start reproducing healthier narratives. This can be achieved by questioning alarmist media, academic, or policy images, that justify western management of movements as they see fit. We must all try to remind our colleagues, as well as ourselves when we fall back into these familiar and comforting storylines. The narratives can be tempting to lean into as they often suggest to be contributing to the greater good by protecting the most vulnerable, while actually turning a blind eye to the abuse of power that often proceeds them (Wainwright & Mann, 2013, 2015).

# 7 | CONCLUSION

The trapped figure, climate migrant, and refugee, all feed into similar political forces. The trapped storyline is very similar to the general migrant rhetoric in the way that it urges for humanitarian concern but also for fear. There are widespread political and financial gains to be made from such discourses of fear. These are exemplified by the ways that climate denial is used to justify land grabbing, rainforest removal (such as the Amazon), endangerment of Indigenous People's water sources (such as in North Dakota), and other natural resource exploitation. A reckless approach to the trapped figure could in this way render it a dangerous policy tool. For example, framing people residing among rich natural resources as involuntarily trapped and in need of a savior to be set free can be used to "justify" planned relocation and large-scale forced resettlement based on shaky humanitarian foundations. Therefore, next time a population is deemed trapped, we must think carefully about what gains a powerful elite could make from their removal.

# **RESEARCH RESOURCES**

The authors have no nonmonetary resources to declare.

# AUTHOR CONTRIBUTIONS

**Sonja Ayeb-Karlsson:** Conceptualisation (lead); data curation (lead); formal analysis (lead); investigation (lead); methodology (lead); visualisation (lead); writing – original draft (lead); writing – review and editing (lead). **Andrew Baldwin:** Conceptualisation (equal); writing – original draft (supporting); writing – review and editing (supporting). **Dominic Kniveton:** Writing – original draft (supporting); review and editing (supporting).

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# **CONFLICT OF INTEREST**

The authors declare no conflict of interest.

# DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created. The textual material is openly available online.

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#### ENDNOTES

<sup>1</sup> We were unable to identify any extensive references to "trapped" or "immobile" populations in the IPCC Assessment or Special Reports prior to 2022. The 2014 Working Group II contribution to the Fifth Assessment Report refers to trapped populations three times while making no references to immobility (although "poverty traps" is used throughout the report). A notable shift in language was introduced with the 2022 Working Group II contribution to the Sixth Assessment Report of the IPCC that refers to "trapped" 13 times and "immobile" populations 14 times throughout eight of its 18 chapters (see chapters 4, 6–8, 10, 12, and 16–17).

- <sup>2</sup> A quick search for recent journal articles applying concepts such as "climate refugees" and climate change-induced "mass migration" for example identifies Ravi (2021), Holtug (2021), and Kwak et al. (2021).
- <sup>3</sup> For more recent illustrations of "Climate Emergency," "Mass Extinction," and "Mass Migration" in the media see, for example, The Guardian (Harvey, 2021; Walker, 2021), BBC News (McGrath, 2021), CNBC (Newburger, 2021), New York Times (Lustgarten, 2020), and CBS News (Cohen, 2021), or for examples within academia see more recent McPherson (2020), Raven and Wagner (2021), or for the arrival of the sixth mass extinction see Barnosky et al. (2011).
- <sup>4</sup> In Orientalism (Said, 1978, pp. 9–10), EW Said uses the *Oriental East* (binary opposite to the Western Self) to illustrate the social construction of the Other and its characteristics (Otherness). He argues that "the Orient is not only adjacent to Europe; it is also the place of Europe's greatest and richest and oldest colonies, the source of its civiliations and languages, its cultural contestant, and one of its deepest and most recurring images of the Other. In addition, the Orient has helped to define Europe (or the West) as its contrasting image, idea, personality, experience."
- <sup>5</sup> The terms white savior and white saviourism, as well as notions of a "white savior complex" (see Cole, 2012) and Kipling's (1929) "White Man's Burden," refers to a racialized disposition associated with whiteness in which "white" people attempt to assist non-white people, albeit with the self-serving effect of shoring up their moral, political or ethical virtue (e.g., Aronson, 2017; Losurdo, 2014; Milazzo, 2019; Spivak, 1988).
- <sup>6</sup> We chose to include our articles referring to the trapped concept in the study sample for transparency. We also acknowledge that as scholars based at European institutes researching involuntary immobility or trapped populations in the southern hemisphere, we are part of the problem. Rather than avoiding a concept entirely, we feel that critical self-reflection and attempts to widen the concept can help its transformation. As all language is part of the same structure, simply avoiding a particular term will not enable an escape from the discourses that make it problematic. Ultimately, removing our lead- and co-authored articles from the study sample does not change the trends (see Fig. 2 and Table 1). Bangladesh would still remain the country with the most empirical trapped references (16 instead of 22), while the institutional trapped geography would continue to be strongly reproduced by scholars in the UK (14 instead of 22) and Germany (18 instead of 24).

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# SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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