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Disaster mobilities, temporalities, and recovery: experiences of the tsunami in the Maldives

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Large-scale disasters are frequently portrayed as temporally bounded, linear events after which survivors are encouraged to 'move on' as quickly as possible. In this paper, we explore how understandings of disaster mobilities and temporalities challenge such perspectives. Drawing on empirical research undertaken on Dhuvaafaru in the Maldives, a small island uninhabited until 2009 when it was populated by people displaced by the Indian Ocean tsunami of 2004, we examine what such understandings mean in the context of sudden population displacement followed by prolonged resettlement. The study reveals the diversity of disaster mobilities, how these reflect varied and complex temporalities of past, present, and future, and how processes of disaster recovery are temporally extended, uncertain, and often linger. In addition, the paper shows how attending to these dynamics contributes to understandings of how post-disaster settlement brings stability for some people while producing ongoing feelings of loss, longing, and unsettlement in others.

Introduction

Allah had never given us a more beautiful and calmer day. There was no wind, no clouds. But I had an uneasy feeling, it seemed too calm. It was beyond my imagination that a huge earthquake had occurred somewhere in the world and that this was going to change our lives forever. I noticed water coming into my house, but after about five minutes it receded. Hearing people shouting, I went outside and saw that the whole ocean had dried up. The reef was completely exposed, and people were walking from Kandholhudhoo to Bandaveri, the neighbouring island, which you can normally only reach by boat because the ocean in between is so deep. This was not just another sea surge that commonly affected the island, the exposed reef told me that this was not a normal event. Soon, I saw an enormous wall of water surging towards the island. And then it happened, right before my eyes. The great wall of water fell onto the island, submerging it and engulfing me. You can't imagine the power of those waves. Someone

grabbed my hand, pulling me to a nearby tree, saving me just before I would have been swept away over the sea wall into the open sea. My nephew managed to save my children and we tried to make our way to the mosque as it had two storeys and is in the middle of the island. There was debris scattered everywhere: tin roofs, wooden planks, dhonis, tables, chairs, beds. I saw children being pulled out of the water. We arrived at the mosque where the island office staff had told everyone to gather. Oh, the scene was so terrible, your heart would have broken. I remember the day of the tsunami as if it happened yesterday. Even now when I hear songs composed to commemorate that day or watch video clips of the event it fills me with sadness. It seemed impossible that something like that could happen, especially on such a beautiful, calm day (Maryam, elderly woman, 17 May 2022).

The island of Kandholhudhoo in Raa Atoll in the Maldives was severely affected by the Indian Ocean tsunami on 26 December 2004. Although its residents were familiar with storms, tidal surges, and flooding, the scale of the devastation wrought was unprecedented. There was extensive damage to buildings across the island and three people died as a direct result of the tsunami (Fritz, Synolakis, and McAdoo, 2006). All of Kandholhudhoo's approximately 3,600 inhabitants were made homeless and had to be evacuated, compelled to abandon their island home. After spending the day of the tsunami sheltering in the mosque, residents were separated and disbursed to five neighbouring islands, where they stayed for more than four years in internally displaced person (IDP) camps constructed by the International Federation of Red Cross and Red Crescent Societies (IFRC). Eventually, in 2009, they were reunited and settled on Dhuvaafaru, a 'new' island on the eastern edge of the same atoll, not far from Kandholhudhoo. On Dhuvaafaru, they moved into newly built houses and attempted to remake their homes and rebuild their livelihoods. However, while relocation to Dhuvaafaru has brought stability for some, others feel unsettled, continuously haunted by terrifying memories of the tsunami and what occurred in its wake. They experience an ongoing sense of loss and longing for Kandholhudhoo, feelings influenced by memories of their former lives and intensified by the abrupt abandonment of their home island.

These contrasting experiences highlight the importance of examining longer-term recovery processes following large-scale disasters, in addition to the usual focus in the literature on the immediate aftermath (Jackson, 2021). Furthermore, some scholars have argued that studies have not adequately contextualised the social dimensions of recovery (Tierney and Oliver-Smith, 2012). In recent years, researchers have demonstrated the varied and multiple temporalities that disasters embody and how these lead to diverse narratives when people recount their experiences (Hernández, 2022). There has long been a tendency to forge temporal distinctions between so-called rapid- and slow-onset disasters (IFRC, 2014), such as floods and droughts respectively, even though the former is increasingly recognised as the result of multiple, smaller, slower events occurring in the immediate or more distant environment. Disasters have also been portrayed not as short-term, bounded events, but rather as open-ended processes with manifold and extended temporal frames. These include 'deep' temporalities of disasters in 'relation to

coloniality, racial capitalism, and vulnerability to the impacts of toxic pollution and climate change' (Sheller, 2021, p. 67). Moreover, and closely linked to questions of temporalities, mobilities researchers have contributed to understandings of disasters through observing and analysing the impacts of such events on the movements of people (Linder and Murton, 2022). Researchers highlight how population displacements are not always characterised by unilinear movements from a single place of origin to a single destination but can emerge as a series of movements over an extended period. In addition, and of particular relevance to small islands, the exigencies of non-human movements, such as shifting patterns of tides, waves, beaches, and vegetation that influence the form and extent of the causes and consequences of disasters, are increasingly considered, as are the mobile objects and technologies of externally provided post-disaster assistance (Easthope and Mort, 2014).

Building on these insights, this paper brings together understandings of disaster temporalities and mobilities. Drawing on empirical research undertaken on Dhuvaafaru, it illuminates the diversity of forms of disaster (im)mobilities, how these reflect different temporal moments characterised, such as hasty dislocations followed by periods of waiting in temporary accommodation, and how the effects of disasters are temporally extended when processes of resettlement are prolonged. Through interviews, informal discussions, and observations of daily life on Dhuvaafaru, we also explore how disaster mobilities and temporalities shape enduring feelings of loss and longing. We suggest that attending to these dynamics facilitates understanding of how disparate impacts and experiences of recovery unfold. Mobilities, when looked at from this perspective, are central to the disaster event itself and to the processes of recovery, remembering, and commemoration that follow. Disasters are thus often open-ended, leading to multiple, long-term, and ambivalent emotions as people are settled in reconstructed spaces while simultaneously feeling unsettled by memories of, and place attachment to, a lost space. The paper also demonstrates how multiple movements on, around, and between islands before, during, and after a disaster requires specific understandings of archipelagic mobilities due to entanglements between people, land, and sea. In the Maldives, such entanglements manifest through people's deep connection to the ocean as a source of life and livelihood—but also with the potential to unleash destructive force.

The empirical data used in this paper was collected during three trips to Raa Atoll over two years, between 2020 and 2022, during which we visited Ungoofaaru Island, the atoll's capital, Kandholhudhoo, the abandoned island, and Dhuvaafaru, the 'new' resettled island. On Ungoofaaru, we held meetings with the Atoll Council to learn about the day of the tsunami, the decisions made regarding temporary relocation, and the development of Dhuvaafaru. Additional information was gathered through photographic evidence held within the Raa Atoll Council's archives. On Kandholhudhoo, we explored the abandoned island, observing the remnants of the ruined settlement and seeking to understand the form and extent of the destruction caused by the tsunami and what continues to draw Kandholhudhoo's residents to make return visits. On Dhuvaafaru, a total of 30 people were interviewed. Discussions with residents focused on people's experiences during five temporalities of the tsunami: life before the disaster; the day of the tsunami; their time

in the temporary shelters built by the IFRC; moving to Dhuvaafaru; and their attempts to rebuild their lives.

A snowball approach was used to identify respondents willing to share their experiences (Atkinson and Flint, 2001). This was adopted as it became evident that some people were unwilling to speak openly on this deeply sensitive and emotive topic, while others felt that they had already shared their accounts numerous times over the years with local and international media and no longer felt the need or desire to do so again. The snowball sampling technique allowed the researchers to identify individuals who were willing and comfortable to speak about the tsunami and its aftermath. Emphasis was on identifying a diverse range of individuals differentiated by gender, age, livelihood activity, and socioeconomic background to ensure multiple and various accounts of the disaster (Few et al., 2021).

Interviews, which were mostly conducted in Dhivehi, the Maldivian language, were recorded with participants' consent and later translated into English and transcribed. In addition, the extensive media coverage of the tsunami and reports produced by government and disaster agencies were consulted. In the quotes below, respondents' names have been changed to maintain anonymity.

This paper is structured as follows. The next section contextualises the study within existing literature on disaster mobilities, temporalities, and recovery. Section three examines the range of mobilities experienced by the people of Kandholhudhoo following the tsunami of 2004, and the different temporalities of population displacement and resettlement. Section four looks at the various mobilities and temporalties involved in creating a new home on Dhuvaafaru. In section five, a sense of loss, forms of remembering, and processes of recovery are revealed through respondents' accounts. The paper concludes by illuminating how bringing together considerations of disaster mobilities and temporalities can deepen understandings of how disasters unfold and the processes of recovery that follow.

Understanding disaster mobilities, temporalities, and recovery

Literature on population displacement has demonstrated how disasters give rise to varied and multiple forms of spontaneous and planned mobility (Black et al., 2013; McNamara and Des Combes, 2015; Lu, Zhang, and Sertajur Rahman, 2017). This movement, often a 'survival tactic employed in reaction to disaster or imminent threat' (Hammond et al., 2005, p. 21), normally occurs in the context of rapid-onset events such as a flood or hurricane when people are compelled to move themselves and their possessions out of harm's way. Researchers have also highlighted issues associated with immobility, when populations are either unwilling or unable to move out of areas subject to extreme environmental events (Findlay, 2011). Disaster-related mobility and immobility are shaped by existing patterns of inequality and disadvantage, and influenced by manifold, intersectional factors. For instance, Thiede and Brown (2013, p. 803), examining the effects of

racial inequalities and socioeconomic status on disasters and population displacement, showed that, following Hurricane Katrina in the United States in 2005, poorer, Black residents 'were least likely to evacuate prior to the storm and, among non-evacuees, most likely to have been unable to evacuate'. Disparities between affected populations when local and external aid is mobilised as part of a post-disaster response can further deepen already existing inequalities. For example, Badri et al. (2006) illustrated how, following the Manjil earthquake in Iran in 1990, gender inequalities in mobility options, access to resources, and representation and voice were reinforced as women continued to suffer disproportionately in relation to men in the post-disaster government resettlement scheme.

While much scholarship has focused on mobilities before, during, or immediately after a disaster, less attention has been paid to movements of people and things over longer time frames of recovery processes. This is despite Linder and Murton's (2022, p. 121) assertion that '[r]ecovery in the wake of disasters – whether epidemiological, environmental, seismic, political, or otherwise – is not only related to mobilities; it is often fundamentally about mobilities'. Following a disaster, various forms of movement are instigated by the impacted population, usually in an attempt to return to 'normal' as quickly as possible. But, as we show below, this is often not possible. For instance, after the dispersal of populations away from the disaster area, which frequently leads to the breakdown of familial and community relations and support networks (Black et al., 2013), the trauma experienced by those affected means that families often restructure their spatial mobilities to keep each other close by for long periods (Rushton et al., 2022). Indeed, as Richardson and Maninger (2016) suggest, maintaining a sense of community can aid recovery. Moreover, people are sometimes affected by a series of displacements, requiring settling and resettling multiple times over protracted periods. Disasters, therefore, as well as being short-term events, disrupt pre-existing ways of movement over the medium and long run, sometimes leaving people waiting in makeshift shelters for months or years before being resettled more permanently elsewhere.

A key element of recovery mobilities following a disaster is the need to develop livelihoods, especially on islands where the main source of income, fishing, involving many days spent at sea, may no longer be possible. Finding new livelihood strategies in the wake of a disaster can be challenging, especially in a different and unfamiliar physical and social environment, one in which the material resources on which displaced people depend have been left behind, lost, or abandoned (Connell, 2016). When examining the scope for people to choose where they move to after a disaster, and the extent and speed with which they are able to rebuild their lives and livelihoods, the discrepant mobilities of disaster recovery and remobilisation become all too apparent. While those with established and extensive social networks, contacts, and funds are typically able to recover some semblance of their former lives, others with limited resources can struggle, suggesting that post-disaster recovery is a strongly differentiated process, both between and within communities and households. Indeed, as Smith (2006, p. 3) wrote in the aftermath of Hurricane Katrina: 'At all phases, up to and including reconstruction, disasters don't simply flatten landscapes, washing them smooth. Rather they deepen and erode the ruts of social difference they encounter'. An attentiveness to people's (im)mobilities following

disasters, therefore, can expose these 'uneven rhythms and refractions of recovery' (Linder and Murton, 2022, p. 127) and challenge understandings of 'normal' mobilities systems (Linder and Murton, 2022).

Closely linked to comprehending disasters through a mobilities lens, the temporality of disasters can further deepen understandings of recovery processes. Staupe-Delgado and Rubin (2022) argue that disaster temporalities have conventionally been viewed in a linear fashion. This is because disasters are often 'experienced viscerally and rationalised within a narrative arc of before, during and after' (Jackson, 2021, p. 2) that is compartmentalised into distinct periods. However, disasters are also sites where 'past, present and future compact in dense "involutions"', temporality made 'turbulent and chaotic, as well as smooth and laminar, as different futures (e.g., new procedures, potential disasters) and pasts (e.g., prior experience, standard models) are rendered both more proximal and more distal' (Michael, 2014, p. 244). This alternative depiction complicates and confounds the conventional, linear model of disaster temporalities, providing new ways of conceptualising calamitous events. For example, building on these ideas, Mika and Kelman (2020) introduce the notion of 'shealing', which is a portmanteau of 'slow healing'. Shealing refers to individual and collective efforts to rebuild lives post disaster and, the authors suggest, 'offers a more nuanced conceptual vocabulary which . . . accounts specifically for the complex, asynchronous, non-linear, and open-ended character of recovering from disaster' (Mika and Kelman, 2020, p. 647).

In addition to the linear model outlined above, disasters are often characterised by time compression, when activities 'that traditionally take place over time are instead compressed to a limited space and time period' (Finucane et al., 2020) and which produces multiple, extended, detailed, and intensive accounts of the catastrophic moment. Under such circumstances, decisions to flee or abandon a place are made in haste, with limited discussion, simply out of a necessity to save lives (Arenstam Gibbons and Nicholls, 2006). Disasters, however, have also been viewed as temporally extended, never ceasing or having a 'a foreseeable end' (Wagner, 2010, p. 23; see also Ullberg, 2018). This suggests, in turn, that full recovery from disasters is not possible for many individuals and groups; the notion of 'recovery' instead serving the interests of civil society organisations and governments concerned with identifying and achieving a measurable endpoint to post-disaster interventions. Such a conception of open-endedness is summed up by Few et al. (2021, p. 3) as follows:

> *Disaster impacts are never short-term. The crisis does not come to an end when the immediate physical effects of a hazard cease or when the last survivors have been rescued, buildings have been made safe, relief supplies have been set in place, and the news cameras have moved elsewhere. Impacts on lives, livelihoods and wellbeing extend through time. In some cases, and for some population groups, restoring economic resources, utilities and welfare services can take many years. Individual trauma and social disruption of course can last much longer. Recovery from disasters is an inherently prolonged and uneven process.*

Disasters, therefore, are not only characterised by a compaction or speeding up of time, but also by a suspension of time, or as Baraitser (2017, p.2) puts it: 'Modes of waiting, staying, delaying, enduring, persisting, repeating, maintaining, preserving, and remaining – that produce felt experiences of time not passing'. This is, according to Lynch's (1972, p. 44) classic text, a 'heightened sense of the flow of time', a suspension of quotidian life coupled with indeterminacy of what will come next and uncertainty over when and how it might all end. Especially important in this respect is what happens to people's homes. While the unmaking of home is often sudden and abrupt in the immediate aftermath of a disaster, the making of a new one, physically and metaphorically, is a long process (McKinnon and Eriksen, 2023). Frequently, a clean-up operation occurs during which the remnants of buildings and infrastructure are demolished and removed. Yet, as Schlunke (2016) asserts, it can be important to 'stay with ruins' after a disaster, rather than rushing to clear things away and start anew, as the latter denies and obfuscates the sense of loss and longing experienced by survivors. This emphasis on taking time 'challenges dominant reconstruction trends, where swiftness and distancing from the disaster's assumed time and site can be defining principles' (Mika and Kelman, 2020, p. 649).

Understanding the processual, non-linear, and extended temporal frames of disasters is especially important for comprehending and realising recovery. Following Zavar and Schumann (2019), we suggest that there is greater need to be attentive to the varied and multiple meanings of loss, trauma, and memory and how these shift over time after a disaster. While research on disasters often focuses on the immediate concerns of providing shelter and physical safety, and on medium-term interests in developing livelihoods, it can fail to consider the time needed to realise psychological recovery. Work by feminist geographers has extended thinking on the expression of emotions within the socio-spatial contexts of disasters. Emotional geographies offer a rich understanding of people's realities in post-disaster environments, highlighting the physical and emotional labour involved in recovery processes (Rushton et al., 2022) and life-changing experiences (MacKian, 2004). Indeed, disasters are frequently linked to increased rates of depression, anxiety, and suicide (Bryant and Garnham, 2015). It is also important to note, however, that disasters can be accompanied by more positive sentiments, such as hope. As we show below, for some, the disruptions caused by disasters provide an opportunity to start afresh, and to break with undesirable past relationships or ways of living.

Scholarship on affective place-making is also useful in considering recovery processes (see, for example, Edensor, Kalandides, and Kothari, 2020). Forging multiple connections and entanglements is central to creating an affective place post disaster. Indeed, a sense of place emerges through processes, encounters, and connections and the extent to which they invoke particular affective and sensorial resonances. Importantly, affective relationships with people and places of the past and affiliations that are shared with others in the present, enable this affective place-making process that is ceaselessly being reconstituted. As scholars have argued (Edensor, 2012; Kothari, 2021), atmospheres and affects are profoundly shaped by past experiences and affective place-making and emotional engagements with and in place are central to those displaced by disasters, as they attempt to remake their homes into a realm of comfort and safety.

When assessing affective place-making and geographies of emotion in relation to longer-term disaster recovery processes or non-recovery, the construction of personal and collective memory, and associated social practices of memorialisation and commemoration, are meaningful. Indeed, there is a rich body of work on the post-disaster commemorative landscape (Simpson and Corbridge, 2006; Simpson and De Alwis, 2008; Logan, 2015), one 'replete with memorials that help communities collectively remember destructive events and recover psychologically' (Zavar and Schumann, 2019, p. 157). Reflections and representations of the past are expressed in, and shaped by, formal and informal remembrance practices that organise memory and 'make' history within and beyond affected populations (Bos, Ullberg, and 't Hart, 2005). Eyre (1999, p. 23) identified several such practices, 'including contributions to disaster funds, a routine media discourse (consisting of interviews with "heroes", attributions of blame, calls for accountability and for lessons to be learned) and, later on, coverage of inquests and inquiry procedures'. These practices are socially enacted through 'technologies of memory' (Sturken, 1997, p. 9), referring to 'objects, images and representations such as oral and written narratives, physical places, ceremonies, and architecture' (Bos, Ullberg, and 't Hart, 2005, p. 8). Religious and quasi-religious forms of symbolism, in particular, are 'often included in spontaneous expressions of grief, more formally organised official memorial services, anniversary events and permanent memorials' (Eyre, 1999, p. 23).

Rituals and commemorative events provide ways for survivors to express grief and reflect on their loss. Indeed, studies of other post-tsunami contexts, such as in India, Japan, and Sri Lanka, reveal how personal and public acts and objects of memorialisation become intwined with people's efforts to remake their everyday lives (Samuels, 2016; Martini and Gasparri, 2021). Disaster healing, however, can be slow, even intergenerational, with visits to disaster areas or memorial sites being important components of this process (Mika and Kelman, 2020). Moreover, individuals and groups often want to memorialise disasters so that future generations will know what happened and understand their history. As Hernández (2022, p. 3) writes: 'Disastrous events and the community's collective recollection of them become important markers of their joint social identity . . . socializing those who were too young to remember, and constructing a joint past they all seem to recall'. For some, however, commemorating and narrating the past are unwelcome reminders that can inhibit recovery, especially when wanting to forget distressing experiences. Instead, affected people might adopt strategies of 'silencing' or 'absencing' rather than remembering (Monteil, Barclay, and Hicks, 2020). Methods of absencing might include avoiding talk of the past to prevent its impact on the present or staying away from the disaster site to evade unwanted reminders.

As shown above, disasters are frequently characterised by rapid, slow, and serial mobilities as well as by periods of waiting and immobility. Moreover, disasters occur within complex involutions of past, present, and future in which time is both compressed and stretched and organised into collective memory practices. In the following section we explore these varied and multiple forms of movement and their associated temporalities in greater depth. Specifically, we draw on the empirical material to highlight the diversity of disaster mobilities in all phases of recovery and how mobility-related processes

extend in time long after the immediacy of the disaster event has receded. This is especially the case in relation to everyday forms of movement through which people attempt to restore normalcy in their lives in new physical and social contexts. While many people recounted their stories of the Indian Ocean tsunami of 2004 by dividing their experiences into 'before', 'during', and 'after' moments, all their accounts reveal how these phases are entangled in complex ways.

Mobilities and temporalities of displacement and resettlement

In this section, we highlight disaster mobilities at the time of the tsunami and in the period after the immediacy of the disaster event has receded. We reveal how these movements reflect temporalities that encompass rapid and chaotic dislocation, extended periods of being unsettled, 'standing by' and waiting, and a more orderly and managed relocation to a permanent island home.

Long before the tsunami occurred, Kandholhudhoo, the abandoned island, was regarded as especially vulnerable to the unruly sea. It is located on the exposed, western edge of the Raa Atoll and its reef was extensively mined for construction materials by its residents. This resulted in Kandholhudhoo having little protection from the storm surges that regularly occurred during monsoon seasons, often resulting in island flooding. These effects were likely made worse by sea-level rise (Mycoo et al., 2022). Moosa, a tourist resort worker in his mid-thirties, recounted that: 'We experienced surges before the tsunami. We lived very close to the beach, so we had to endure many instances of flooding due to tidal waves. It happened every year'. These tidal events produced forms of everyday mobility that were disruptive, but mostly manageable. Residents, for example, were accustomed to retreating inland and moving furniture and equipment during storm surges. As Nizam, a schoolteacher in his thirties, said: 'If it got rainy or windy, we would move our fridge and other electrical equipment to a higher level to prevent them getting damaged by the salt water. We often needed to barricade the doorways with sacks to prevent seawater from entering our homes'.

These regular events were exacerbated by Kandholhudhoo's high population density, with approximately 3,600 people living in an area of less than nine hectares. This was felt intensely owing to the island's irregular settlement pattern. Unlike most other islands in the Maldives, which are organised in a grid configuration, Kandholhudhoo was composed of a series of winding lanes, some of which, as explained by Umar, a man in his early forties, 'were too narrow even for a coffin to be carried'. This irregularity was due, in part, to the ad hoc reclaiming of land from the sea, which was necessary to accommodate a growing population, but which meant that some people lived very close to the water's edge. As Umar explained: 'People would just get rocks and coral from the reefs and reclaim the land on which to build a house'. Consequently, due to the mined reef and land reclamation, the Maldivian non-governmental organisation Bluepeace (2009) had warned for several years before the tsunami occurred that, '[i]n Kandholhudhoo, houses were located

within ten feet from the sea, and without the protection of the house reef, the island lay like a ticking bomb'. The Atoll and Island Authorities had already agreed that inhabiting the island was no longer feasible and a survey to assess the community's perspectives on moving to a different island was being prepared. Many of Kandholhudhoo's residents, however, were resistant to moving and settling elsewhere. Kandholhudhoo is closely situated to good fishing grounds, which is important for its economy. Moreover, many families had lived on Kandholhudhoo for generations, their dead were buried there, and they had a strong affinity to their island and the surrounding sea.

Because of its geography and high population density, Kandholhudhoo was severely affected by the tsunami as compared to many other Maldivian islands. There had been little or no indication that a disaster was imminent. The moment when the tsunami hit is characterised by time compression, followed by a period of waiting and indeterminacy. As seawater rushed over the island, people scrambled to escape the flood. These are moments that they remember vividly. As Leela, an elderly woman, underlined: some 'swam for their lives while others jumped on to *dhonis*' and were swept out to sea'. Other residents climbed trees or ran to the mosque, one of the very few two-storey buildings on the island. When the waves receded, some people ventured out to look for missing relatives and friends and to salvage possessions. There was little that people could do except wait in the mosque for outside help to arrive, an extended period of uncertainty that was difficult to endure. As Niuma, a community leader in her seventies, commented, 'the water had only touched the outer walls of the mosque and receded. So, we waited inside. We were in fear that the waves might come again'.

By early afternoon, a sense of urgency and haste replaced the period of waiting as the Island Office began hurriedly to move people off Kandholhudhoo. *Dhonis* arrived throughout the afternoon and, as Haidar, a long-serving civil servant who was closely involved with the process of relocation stated, people moved to the homes of 'friends or family or even people we didn't know' on five neighbouring islands in Raa Atoll: Alifushi, Hulhudhuffaru, Maduvvari, Meedhoo, and the atoll capital, Ungoofaaru. This transfer process was rushed and disorganised, however, as recalled by Amna, a schoolteacher in Dhuvaafaru, who was still a teenager when the tsunami struck: 'There was a lot of chaos. We all wanted to leave as soon as possible. The whole island was destroyed, and we felt traumatised. We knew we couldn't live there anymore'. Some residents got on to boats believing that they were heading to a particular island only to discover along the way that they were being taken elsewhere. However, as Khalid, a middle-aged man, said, '[a]t that point I didn't care which island we were going to, we just wanted to leave Kandholhudhoo as quickly as possible and before sunset'. By dusk, most people had left, although around 150 remained on the island. They wanted to stay with the ruins of their former lives for a few days longer, to look for missing family members, or to salvage what they could of their belongings.

Following dispersal to neighbouring islands, Kandholhudhoo's former residents were unable to 'get back to normal', instead entering a phase of extended waiting and uncertainty. After a few weeks of staying in people's homes, each family was allocated an IFRC tent in one of the refugee camps. They believed that the camps were going to be short-term accommodation, but they remained in them for four years. Not knowing how long they

would have to stay in the camps made it difficult to start remaking a home and begin to feel settled. This had lasting consequences for Kandholhudhoo's former residents. Indeed, as Pérez Murcia (2019, p. 1,515) reminds us, '[s]tudies on displacement have largely failed to fully understand the material and symbolic impacts of living without a place called home'. Many people, used to living on Kandholhudhoo alongside neighbours in a particular physical and social setting, were traumatised, disorientated by their sudden displacement and the loss of their home. Having been dispersed to multiple islands, they felt the absence of their community keenly. As Amna emphasised: 'I missed my friends. On Kandholhudhoo all the neighbourhood children grew up together. We were so close. But then we were separated, all going to different islands, we lost that bond'.

Being separated also proved problematic when trying to restore their livelihoods, which involved adjusting to new and unfamiliar forms of mobility. For example, Haidar explained that the fishermen 'couldn't find enough people to work on the *dhonis* because we were now dispersed across five islands'. And Yoonus, an elderly fisherman, underscored that 'life for us was often hard in the camps. We were staying very far from our old fishing grounds and had to travel much further to reach them or look for new ones'. Nonetheless, despite these challenges, some described their experiences on these islands as positive, and they began to feel hopeful about the future. According to Nizam: 'They were the kindest people, and I was welcomed at the school there. Even though the tents were made of tin, and they were very hot, we were happy living in them. We could see a way forward'. In this regard, the refugee camps resembled sites where the past, present, and future came together in complex ways; while some life possibilities and aspirations were closed off, others were sustained and new ones opened up.

During this waiting period, the Ministry of Planning and National Development, working with island leaders, identified the uninhabited island of Dhuvaafaru as the most suitable new home for Kandholhudhoo's former community. The two islands are on opposite sides of the same atoll and only 25 minutes apart by boat. Compared to Kandholhudhoo, Dhuvaafaru, at 44 hectares in surface area, is large and had potential for land reclamation to accommodate population growth. The island is also surrounded by reef, which reduces its vulnerability to storm surges, and has a lagoon, where fishermen could moor their boats. The subsequent development of Dhuvaafaru was the largest single post-tsunami reconstruction project in the Maldives and is the biggest single construction project undertaken in the history of the IFRC. The island was laid out in a grid pattern with wide streets lined with more than 600 houses. Each family was allocated a house via a lottery system that considered the number and ages of household members.

So it was in December 2009 that the Kandholhudhoo community was moved once again. Reunited after four years apart, they were brought together from across five islands and settled on Dhuvaafaru. As Salma, an elderly woman, recalled: 'We were told to pack our things and put our house number on our belongings'. Then, with the assistance of the army, coastguard, and police, the former IDPs moved into their new homes. This time, their movement was slower, carried out with less urgency and better organised as compared to when they had evacuated Kandholhudhoo. Thus began another movement and another attempt to settle, but this time on an island that was to be their permanent home.

Prolonged 'unsettlement': attempts to settle and create a new home

Initially, people were excited to move to a permanent island home and to come together as a community. A ceremony to inaugurate Dhuvaafaru was held in March 2009. A celebratory mood filled the air, accompanied by singing and dancing, decorated trees, and streets lined with colourful banners. As Amna recollected: 'Everybody took part enthusiastically, dressed in patriotic colours'. For many, this symbolised the start of a new life, an improvement on their previous existence on Kandholhudhoo, and the promise of an enhanced future. Haidar remarked: 'Compared to Kandholhudhoo, I would say Dhuvaafaru is 100 times better. We wouldn't have a house as big as this one. Life here is much better than before. I would say the move to Dhuvaafaru is a blessing in so many ways. The tsunami disaster was not a good thing but moving here was'. In addition to improved housing, many feel that Dhuvaafaru is an easier place to work. Leela, for example, prefers the large, open area outside her new house where she can gather coconut husks to use as fuel and process and cook fish to sell. She said: 'Earlier, when we were living in Kandholhudhoo, we had to travel to a nearby uninhabited island to process, salt, and cook fish. Now we can do all this here on the island. It makes life easier'. Other residents are pleased with the extensive and easily accessible sports facilities on Dhuvaafaru because, as Haidar commented, they 'bring a lot of happiness for our youth. They have some space to play. Huge football grounds. It's wonderful'.

These examples demonstrate the different ways in which mobilities, and a new sense of space, contribute to feelings of belonging and optimism. And yet, after the initial euphoria had subsided, it took a long time for people to remake a home, physically, socially, and psychologically, and some still feel out of place and uncomfortable. The reasons for this prolonged 'unsettlement' on Dhuvaafaru are complex but can, in part, be explained by the design and internal space of the new houses, which many felt were not suitable for their way of life and significantly complicated their domestic practices. There was particular concern among women that the new kitchens were integrated into the main structure of their houses; traditionally, kitchens are used to prepare smoked fish, which cannot be done close to the living areas of the house. Furthermore, some were disappointed by the lack of outdoor space in the immediate vicinity of their homes and the small size and proximity of the bedrooms that allowed for little privacy. As a result, people began to modify their houses to befit their needs and lifestyles. As Moosa noted: 'If you walk around the island today, you won't see many houses in the original design and some people have created space for a garden'. Yet, despite these changes, he added: 'Many of our houses don't feel like home yet, they don't have the same atmosphere as before'. These modifications and attempts to recreate a home reveal the importance of understanding everyday domestic mobilities in the resettlement process. As Pink and Leder Mackley (2016, p. 171) argue, 'everyday atmospheres of home are made, maintained, and improvised through habitual routines of movement'. Importantly, this has implications for how these spaces are designed and consideration must be paid 'beyond what people do *in* their homes, towards how they move *through* and make the atmospheres *of* their homes' (Pink and Leder Mackley, 2016, p. 171).

Another dimension of day-to-day movement that has changed considerably is how people move through Dhuvaafaru. As outlined above, the island is significantly larger than Kandholhudhoo and is arranged in a much more uniform manner. Despite the recent modifications to people's homes, buildings on Dhuvaafaru are more homogeneous in size and style and more widely spread apart. This more regularised configuration, while conducive to a simpler, 'modernised' transport system, resulted in major challenges for some residents in navigating the space following relocation. For instance, although Amna was excited that there are now cycles, scooters, and cars on Dhuvaafaru, and enjoys travelling on the 'beautiful wide roads' rather than having to squeeze through the narrow lanes of Kandholhudhoo, she used to get lost when she first relocated. The uniformity of the island's grid street plan and the absence of distinct markers on the landscape, such as differently painted and shaped houses, vegetation, and shops, means that it is easy for people to feel disorientated and lose their bearings. Some elderly residents, who prefer walking to get around, find it difficult to cover the longer distances on foot. Leela, for example, complained that she gets cramps in her legs when traversing Dhuvaafaru to visit friends and family. And Shifa, who has difficulties negotiating the layout of the island, summed up these experiences when she said: 'The funniest thing was that I didn't know how to find my house if I went out. All the houses looked the same. I would accidently go into other houses thinking it was mine. I had no sense of direction'. One factor that contributed to this confusion was that on Dhuvaafaru, traditional house names had been substituted with serial numbers to identify individual housing units. Over the years several households have reinstated house names following official land registration processes making their houses more personalised and recognisable. While road construction work is currently being carried out and signage installed, no public transportation services are available on the island.

In addition to these challenges of moving around the island, Dhuvaafaru's location in the atoll has necessitated the adoption of new livelihood mobilities, particularly in relation to fishing. Yoonus pointed out that, due to the proximity of good fishing grounds near Kandholhudhoo, '[w]e were able to go fishing and return the same day, or even come back to the island for lunch in between. It was that close'. And Yoosuf, a civil servant in his thirties, recalled that, when he was young, 'I could even see people fishing out at sea while I was still on the island'. Now, however, fishermen must travel much further to find good fishing grounds, which means spending longer periods of time out at sea and away from family. As Leela lamented: 'My husband has to go fishing much further and often has to be away at sea for a week or more and during that time I am all alone'. And Yoonus recalled: 'Back in Kandholhudhoo, we were able to go fishing daily and come home by sunset. But since moving to Dhuvaafaru our trips might take a week or more depending on the catch'.

As well as changes to people's livelihood activities, many residents claim that shifting mobilities have contributed to a lack of social cohesion on Dhuvaafaru and feelings of isolation as connections with friends and neighbours who no longer live close by have been lost. Indeed, these multiple mobilities have led to a lessening of intra-community mixing and mingling. As Talbot (2012, p. 3) wrote in an IFRC post-resettlement study: 'Some

families who lived close to each other originally had to be separated when the houses were allocated on Dhuvaafaru. This has caused some readjustment'. Haidar remembered how, on Kandholhudhoo, '[n]eighbours would always come and visit each other, and the houses were so close by that if one house cooks something, they would share it with the other house'. This sense of isolation has been exacerbated for those living on the northern side of Dhuvaafaru, as most of the island's municipal buildings and shops are located to the south. As Khadeeja remarked: 'Those living on the island's northern side are left feeling like we are on an uninhabited island. You do not feel safe sitting out at night as it is so empty and quiet'. And Nizam said that residents living near the centre of the island 'don't know many houses on the northern side of the island. I don't even visit that side much'.

Overall, these experiences, grounded in changing mobilities and influenced in part by imperfect housing design and an unfamiliar, dispersed island geography, have extended and exacerbated feelings of uncertainty and dislocation originally brought about by the tsunami but now continuing in the present. As we have shown, a combination of multiple, shifting, and uncertain mobilities are shaping how the past is being remembered and contributing to an ongoing sense of loss and longing. It is to these latter processes of recovery that we now turn.

Processes of recovery: the implications of loss, longing, and remembering

In this section, we explore how disaster mobilities and temporalities influence, and are shaped by, memories of the past and ongoing feelings of loss and longing for former lives on Kandholhudhoo. The stories and testimonies of Dhuvaafaru's inhabitants reveal that, although the tsunami 'event' has passed, its impacts continue to extend into the present and affect people's perceptions of the future. What is more, new mobilities, which manifest through repeated return trips to Kandholhudhoo, are a key part of the process of holding on to, and remembering, the past.

As outlined above, processes of recovery from disasters are often portrayed as 'moving on' physically, by being resettled, and 'getting over' things psychologically, as feelings of rupture begin to dissipate. Many of Dhuvaafaru's residents, however, continue to feel traumatised by their experiences of the tsunami, which extend well beyond the event itself. They are fearful of another tsunami because, although Dhuvaafaru was promoted by the government and IFRC as a 'safe island', its low-lying topography means that it is still vulnerable to storm surges and sea-level rise. As Neena, a woman in her forties put it, 'a lot of us were psychologically affected by the day's events, we are still scared. We get scared at the mention of rough weather, the sound of strong waves or any other loud noise. It is still there. I don't think it will ever go away'. Others, like Yoosuf, have noticed that they avoid certain activities: 'Sometimes a year would pass, and I realised I hadn't been in the sea or been swimming. I just don't really feel like it anymore'. Consequently, many of those who experienced the tsunami and subsequent displacement and resettlement

feel unable to let go of the past. Nizam recounted: 'We have been living in Dhuvaafaru for 13 years and I'm not entirely used to it yet. I had so much love for my home island, which we had to abandon. And then I got very attached to Alifushi [the refugee island] but had to leave that place too. So, I am now just taking life one day at a time'. These comments reflect an unwillingness by some to project forward, instead seeking to dwell in the present rather than plan for the future.

While for many of Dhuvaafaru's residents the past has an unwanted but continual influence on the present, for others, the intensity of the trauma has diminished, at least on the surface. Some have made a conscious decision not to speak about the tsunami, focusing instead on their new lives. To illustrate, Hawwa said: 'There is no need to discuss the past. I am content here. We will never be able to go back and repopulate Kandholhudhoo so it's no use talking about what has gone'. Similarly, Arifa, a woman in her sixties, stated that, when she gets together with her neighbours, they do not talk about the tsunami. This is because '[t]here is no point remaining in a state of despair—there is no need to keep reliving it. Day-by-day life goes on. Our lives are better now so it is easy to move on. I have forgotten how I used to live on Kandholhudhoo. The more we talk about it the more difficult it is to move on'. Others, however, feel that it is important to remember the tsunami and narrate what happened to them as a way of 'letting go'. For example, Niuma said: 'I am very happy to talk about Kandholhudhoo because it is not good for me to continue to feel sad. Slowly, slowly, I am feeling better. I give a lot of interviews to the press, and we talk among ourselves a lot. We cry and we cannot forget it; we tremble when we hear the word "tsunami" but we know it helps to talk'.

Short- and long-term psychological support were made available to affected groups by the government and administered by local social workers and international organisations. Some of the affected populations were also given scholarships to receive international training in psychology and counselling so that they could support others in their community. Moosa, a recipient of one of these scholarships, feels that the training was immensely useful: 'At first, I didn't know what psychology is, but later I had developed a strong passion towards community work. I am very happy I got to study in that area so that I can serve the community'.

In addition to these ways of recalling or absencing the tsunami event, people remember their former island to different degrees. For many, perceptions of present-day life are influenced by nostalgia about their former home. More generalised memories of childhood, school days, and playing with friends become entangled with memories of a life that has been lost. Several people recalled fondly how life was better on Kandholhudhoo, not necessarily out of longing for their former island home but more related to a wistfulness for a childhood passed and of despondency towards wider societal change that had taken place in the intervening years. According to Neena, Kandholhudhoo represents a 'different time. . . . We would wake up early morning and go to play out in the streets with our friends. Now the children play these kinds of games on their phones and stay indoors. They do not go out. I will always miss Kandholhudhoo'. While these intergenerational shifts would most likely have taken place irrespective of the disaster and its effects, the increasing use of digital technologies and mobile phones makes many elderly

people nostalgic about their past, and so they tend to connect these changes with the impact of having been compelled to move from Kandholhudhoo. For others, particular moments or incidents in the present can invoke memories. For example, Shareefa, a community worker in her mid-fifties, recalled: 'I was in Malé when it went into lockdown due to the coronavirus pandemic. They took us to the quarantine facility. The place where they accommodated us was by the beach and looked exactly like our house back home. I felt so nostalgic. I called my mother to tell her about it and we reminisced about our life back home'.

Many of Dhuvaafaru's residents feel proud to have originated from Kandholhudhoo. For example, Moosa said: 'When people refer to us as Kandholhudhoo people it is totally different from the feeling we get when people say we are from Dhuvaafaru. I proudly tell everyone I meet that I am from Kandholhudhoo. I don't know how to explain it. It's very strange. I have an attachment and love to that island. Maybe it's because that is my birthplace, because it was my beginning'. Given these sentiments, many people on Dhuvaafaru actively find ways of keeping their memories of Kandholhudhoo alive, despite the bittersweet nature of their collective and personal recollections. There are also many young people now living on Dhuvaafaru who have no knowledge or experience of the tsunami and no memory of Kandholhudhoo. Although parents do not want to frighten their children, they want them to have some understanding of their past. Most children now learn about the tsunami at school and, as a result, have begun to ask their parents questions about what happened in 2004. Every year on the anniversary of the tsunami, families come together to watch the day-long commemorative coverage on television, during which they share their memories of the event with their children. Haidar explained that, as a result, 'the younger generations can understand what we have been through, learn from our experiences and not forget'.

Another way (related to mobilities) in which Kandholhudhoo is remembered and commemorated is through visits to the island. In the days and months following the tsunami, some people displaced by the disaster returned to Kandholhudhoo to collect bulky items, such as building materials and furniture, to furnish their new homes. Others tried to find treasured possessions. Arifa said, for instance: 'When we left, I didn't have anything on me. Not even my veil or slippers. I also lost my gold bangles. One day not long after the tsunami, I went back and dug the ground near where our house had been, and I found them buried in the sand'. Today, many people living on Dhuvaafaru periodically return to Kandholhudhoo, not to recover possessions but simply to move around the ruins of their former island home, reminiscing on where they used to live, work, and play. They go to see the remains of their houses, pray in the vestiges of the mosque, and visit the graves of family members in the cemetery. Some gather a few friends to have a picnic or take their children with them so that younger generations can experience first-hand where their families came from. For others, however, visiting Kandholhudhoo is a difficult experience and one that they avoid. Aisha, an elderly woman, for example, decided not to return to the island again after experiencing ghostly beings among the ruins. She said: 'I went back once but I kept hearing things, and I had a bad feeling. I heard echoes and voices of people calling and children crying. I sensed ghosts all around. It was eerily

quiet in the mosque, and I got scared, I felt like someone else was in there talking to me'. Other physical traces of the tsunami are evident across the island, such as lines etched on the walls indicating 'where the waves had reached' (Ali, a man in his forties). There are also physical barriers to walking around Kandholhudhoo due to the uncontrolled spread of vegetation that has taken over sections of the island. According to Ali: 'It is now so overgrown with wild bushes that you can hardly find your way to familiar places'. As these accounts illustrate, choosing to move between Dhuvaafaru and Kandholhudhoo or deciding never to return are forms of (im)mobility that are fundamental to how people remember, forget, or avoid the past.

Beyond the disaster event: multiple mobilities and extended temporalities

In this paper, we have illustrated how bringing together understandings of disaster mobilities and temporalities provides a useful corrective to bounded portrayals of disasters and the recovery processes that follow. As we have argued, the latter are unable to address the extended, open-ended nature of disaster outcomes and the long-term impacts on survivors as they experience serial movements and adjust to new forms of mobility. Many survivors do not recover, or only enjoy very limited recovery; they continue to be haunted by events and effects, especially in relation to the mending of ruptured social networks, the healing of trauma, and the ability to move on with one's life in the aftermath of profound loss. This suggests, in turn, the importance of enhanced psychosocial support for affected populations that runs into the medium-to-long term (Mooney et al., 2011). We have also argued that people's experiences of displacement, serial movement, and relocation disrupt the idea of a unilinear trajectory from an unsettling displacement to a settled emplacement and challenge the notion of a single place of origin and destination. Such movements are, moreover, interspersed with extended, uncertain periods of waiting, and are rarely considered in understandings of disaster recovery. Together, these shifting temporalities, non-linear mobilities, and periods of immobility continue to shape the form and extent of recovery (or result in non-recovery) from large-scale catastrophic disasters in ways that are often underappreciated in the wider literature on such events.

Although people on Kandholhudhoo were mobile before the disaster, the tsunami closed off forms of everyday movement and daily routines and rhythms that were once commonplace, valued, and familiar. Additionally, the disaster produced new forms of mobility as people tried to adjust to their new physical and social environments, such as reorganising the spaces of their new homes and navigating the unfamiliar terrain of the new, larger island. As shown, multiple mobilities shaped people's experiences, including: displacement by the tsunami; moving to and from Kandholhudhoo; domestic mobilities in and around homes and compounds; livelihoods mobilities related to, inter alia, fishing; mobility in the sense of social mixing, such as moving between the homes of friends, relatives and neighbours; and the kinds of mobilities undertaken to access services and resources on the new island. The extent to which they become accustomed to these new

mobilities, and the time and emotional labour that it takes, are fundamental to understanding how people recover from disasters and contribute to deeper understanding of the different temporalities of recovery or why recovery fails to take place among some social groups and individuals. Overall, while focusing on large-scale, urgent displacements at the moment of crisis remains important, and continues to inform much of the literature on disasters and recovery, we emphasise, then, the significance of everyday (im)mobilities in comprehending longer-term processes of recovery.

These findings suggest that a greater focus on people's day-to-day spaces and movements post disaster is required by researchers, policymakers, and practitioners trying to understand why some people affected by disasters remain with feelings of loss, longing, and trauma, while others are able to overcome these effects relatively quickly. They also highlight the need for greater investment by external actors trying to facilitate population recovery in in-depth qualitative and ethnographic work aimed at uncovering these often hidden or overlooked forms of placemaking during processes of post-disaster resettlement. Similarly, recognising the importance of everyday mobilities to people's recovery processes emphasises the need for better understanding of how post-disaster settlements are designed and constructed by governments and aid agencies. As argued by Few et al. (2021, p. 14), the ways in which rehousing is represented and talked about in these circumstances 'tends to obscure socio-economic vulnerabilities linked to local livelihoods, place attachment and the psychosocial impacts of relocating, as well as homogenize differentiated needs and hopes'. As we have demonstrated through our empirical work, people's need for external assistance does not cease when new, post-disaster settlements are 'handed over' by national and local authorities. Instead, it continues into the foreseeable future as resettled people engage practically and on an everyday basis with their new and frequently unfamiliar physical surroundings and social contexts.

This paper also challenges the oft-assumed linearity of disaster events that invoke and reproduce a narrative arc of 'before', 'during', and 'after'. Although this arc commonly appears to be followed when people recount their experiences, closer examination reveals how these temporal moments are entwined. For example, on Dhuvaafaru, remembering the past by thinking, talking about, and visiting Kandholhudhoo has positively and negatively shaped feelings about the present and plans for the future. While the trauma associated with these practices of recalling and remembering can settle and provide security, memorialising and commemorating lost homes can also unsettle and destabilise on an ongoing basis. People's experiences of loss and longing further mingle with fond memories of childhood and distant, idealised ways of living, which can extend the 'holding on' process. Overall, these mixed experiences reveal that there is no single path to recovery following a disaster and no clear end point to the event. Moreover, some people will not fully recover, instead finding new ways of coping with past experiences. While previous fears and traumas can be overcome and talk of former lives and once inhabited places avoided, the past is still evident on Dhuvaafaru in the mobilities of the present and hoped-for futures, crystalised in the modified homes and salvaged possessions of people's everyday spaces.

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Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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Endnotes

[1] *Dhonis* are handcrafted wooden sailboats equipped with a motor that are used widely in the Maldives for fishing and transportation. They vary in size from 3 to 30 metres in length.

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