



Local Environment

The International Journal of Justice and Sustainability

ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/cloe20>

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To cite this article: Christopher Phillips, Conor Murphy & Patrick Bresnihan (2022) The impacts of and responses to place loss in a coastal community in Ireland, *Local Environment*, 27:7, 879-896, DOI: [10.1080/13549839.2022.2078294](https://doi.org/10.1080/13549839.2022.2078294)

To link to this article: <https://doi.org/10.1080/13549839.2022.2078294>



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The impacts of and responses to place loss in a coastal community in Ireland

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ABSTRACT

This paper explores the impact of place loss due to the loss of a beach from coastal erosion in the community of Courtown, Co. Wexford, Ireland. Using in-depth walking interviews and photo-elicitation, we investigate (i) the experiences and emotional challenges of place loss; (ii) the impacts of place loss and adaptive actions on people–place relationships and; (iii) how individuals re-imagine the future of place following loss. We find that place loss results in emotional responses consistent with solastalgia for many interviewees. Adaptation actions in the form of installation of rock armour to deal with coastal erosion were seen by many as undesirable and amplified the sense of loss experienced. For most, the lack of community engagement in decision-making has created a sense of powerlessness and anxiety around the future of place. Moreover, this sense of powerlessness is amplified for many by concurrent but unrelated policies that incentivised rapid residential development in the area, contributing to changing place identity and community cohesion. Our findings highlight that impacts of environmental change and adaptation on individuals, while significant on their own, unfold within and can be amplified by the context of on-going development issues and decision-making processes. Despite their sense of powerlessness, there is evidence that residents see rich opportunities to re-imagine place if decision-makers can create opportunities to incorporate the voice of local communities.

ARTICLE HISTORY

Received 10 July 2021



Accepted 6 May 2022


KEYWORDS

Place loss; solastalgia; place attachment; coastal erosion; adaptation

1. Introduction

Negatively perceived place change often results in adverse emotional responses and experiences of place disruption (Albrecht et al. 2007; Silver and Grek-Martin 2015; Phillips and Murphy 2021). Such experiences are becoming increasingly common in coastal locations with climate change and associated sea-level rise, intensifying storms, erosion and flooding (Solecki and Friedman 2021). Exposure to such risks is also expected to increase. In Ireland alone, circa 2 million people are expected to live within 5 km of the coast by 2050 (Department of Housing, Local Government and Heritage 2020). Sea-level rise and coastal erosion in particular are slow-onset impacts, incrementally changing everyday routines and environments (Giddens 1979; Solecki and Friedman 2021).

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 Supplemental data for this article can be accessed online at <https://doi.org/10.1080/13549839.2022.2078294>.

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The concept of “slow violence” describes slow-onset environmental changes that impact people gradually over time (Nixon 2011; Davies 2019). Davies (2019) highlights how gradual place change impacts people’s everyday lives causing suffering, while others highlight how unfolding changes challenge sense of place, local knowledge, social cohesion and place identity; impacts which are hard to quantify and often ignored in impact assessments and adaptation policies (Connor et al. 2004; Solecki and Friedman 2021). In addition to direct impacts, adaptation actions themselves can be distressing if local contexts of place are not adequately considered (Solecki and Friedman 2021). Clarke, Murphy, and Lorenzoni (2018) showed that coastal communities can perceive flood defences as negative place change impacting people–place relations. Batel, Devine-Wright, and Tangelan (2013) also discussed how local communities can oppose the construction of renewable energy infrastructure in places they live even though it is crucial for tackling climate change. Adaptation to climate change itself can cause transformations of place that affect people–place relations (Batel, Devine-Wright, and Tangelan 2013; Clarke, Murphy, and Lorenzoni 2018), yet the ways in which people interpret and respond to place disruptions remain poorly understood (Solecki and Friedman 2021).

Many scholars have shown that loss of valued places can cause strong emotional reactions and feelings of distress, grief, anxiety, hopelessness and sadness for some (Connor et al. 2004; Higginbotham et al. 2006; Marshall et al. 2012; Warsini, Mills, and Usher 2014). Macy (1995) discussed the experience of these emotions by people globally stemming from environmental change. Marshall et al. (2012) point to the rise in an emotional reaction towards ecological losses the authors call a “global mourning”, while Albrecht (2005) defined the concept of solastalgia to describe the “psychological desolation” experienced by residents of the Upper Hunter Valley, Australia as a result of undesirable change. Solastalgia manifests as a deterioration of one’s sense of place, leading to an inability to derive solace from one’s home following undesirable transformations (Albrecht 2020). Benham (2022) details how residents of Gladstone, near the southern Great Barrier Reef, experienced loss from the erosion of fishing and recreation opportunities with the loss of the reef. McNamara and Westoby (2011) discuss how environmental changes to Australia’s Erub Island in the Torres Strait have had negative emotional and psychological impacts on indigenous people, characterised by worry, sadness and distress. They highlight that such feelings are likely to be experienced by many globally as they are impacted by climate change.

Places hold personal connections, memories, identity and often underpin a sense of community (Agnew 1987; Cresswell 2014). They constantly change as they are made, maintained and contested, while particular interests and social power relations are embedded within them (Rose 1994; Massey 1995; Cresswell 2014). Many aspects of and interactions with place foster place attachment, with place identity and dependence being two important components described by scholars (e.g. Kaltenborn and Bjerke 2002; Clarke, Murphy, and Lorenzoni 2018). Place attachment is often heightened in places that offer recreational opportunities, hold personal memories and natural beauty and has been shown to be moderated by length of residence, cultural values, familiarity, sense of belonging, emotions and beliefs situated in environmental settings (Proshansky, Fabian, and Kaminoff 1983; Korpela 1989; Fullilove 1996; Hess, Malilay, and Parkinson 2008; Silver and Grek-Martin 2015; Beery and Jönsson 2017).

For others, sense of place may be more about social connections, memories and cultural practices which are not necessarily entrenched in one particular location, becoming mobile when faced with threats to place (Farbotko 2010). In many cases, people gain familiarity with place, begin to assign meaning to it and form intimate bonds that create a sense of attachment (Tuan 1977; Hess, Malilay, and Parkinson 2008). People–place relationships and interactions are understood to have important influences on psychological wellbeing, influencing how people navigate, cope with and perceive negatively perceived place change (Hess, Malilay, and Parkinson 2008; Massey 1995; Fresque-Baxter and Armitage 2012; Cresswell 2014; Bornioli, Parkhurst, and Morgan 2018; Solecki and Friedman 2021).

Despite this, adaptation often focuses on economic and material losses with many scholars calling for co-produced, place-specific strategies (Marshall et al. 2012; Barnett et al. 2016). Moreover, people

are often denied agency in adaptation planning, with some indicating that increasing community engagement with adaptation may help them come to terms with place loss and/or disruption (Marshall et al. 2012; Barnett et al. 2016). Work by many scholars shows that often the most at-risk groups are disproportionately impacted by place change as a result of uneven power dynamics and politics that determine who is prioritised and who is made vulnerable (Farbotko 2010; Farbotko and Lazrus 2012; Marshall et al. 2012; Barnett et al. 2016; Westman and Joly 2019). Moreover, climate change impacts and adaptation do not happen in a vacuum, but rather unfold within existing governance and power structures, with adaptation processes interacting with other pressures and changes faced by communities (Adger et al. 2013; Marshall et al. 2014; Solecki and Friedman 2021; Lambert et al. 2021). Too often, scholarship presents adaptation as a process that will unfold independent of other societal pressures.

Building upon a previous empirical study that sought to measure the impact of loss of place on the community of Courtown in the south-east of Ireland through the gradual disappearance of their beach, we use qualitative methods with selected members of the community to further interrogate the impacts of and responses to place loss. In particular, we investigate (i) the experiences and emotional challenges of place loss; (ii) the impacts that slow-onset environmental changes and adaptive actions have on people's place relationships; (iii) how other changes confronted by the community impact on adaptive processes and lastly; (iv) how individuals are re-imagining the future of place following the disruption.

2 Materials and methods

2.1. Location

Some of the most severe incidences of coastal erosion in Ireland have been witnessed along the soft shoreline of County Wexford in the south-east of Ireland (See [Figure 1](#)). Over recent decades Courtown's North beach has been severely depleted by coastal erosion (WCC 2014). Courtown thrived as a tourist destination in the 1970s and 1980s. In the late 1990s, both Courtown and nearby Riverchapel rapidly expanded due to residential development following the introduction by national government of the "Renewal Scheme for Traditional Seaside Resorts" in 1995 (WCC 2014). This encouraged extensive development of housing estates, with limited facilities/services provided and resulted in a dramatic transformation of Courtown and Riverchapel (Irish Times 2000; Mottiar and Quinn 2003). In recent years, loss of the beach has been amplified by strong storm events requiring extensive coastal protection works in the form of rock armour to be installed, which further transformed the area (see [Figure 2](#)). Stretches of coastline around Courtown, extending from Ardamine to the North beach in Courtown, are at significant risk of on-going coastal erosion.

Many residents are concerned for their properties, roads, natural amenities, and that significant loss of land will continue if action is not taken to better protect the area from rising sea levels, increased storminess and further coastal erosion (Lambe 2016). Presently, Wexford County Council focusses on maintaining existing coastal defences (rock armour) and dredging Courtown Harbour. Other coastal works plans have been in development for over a decade, including the construction of four break waters, a marina and beach replenishment (WCC 2014). Four offshore groynes situated approximately 150 m from the shoreline were proposed as part of a coastal protection scheme devised by RPS consultant engineers in 2008 (Lambe 2008; WCC 2014; WCC 2018) but have not materialised. The construction of a marina was also proposed but planning and funding acquisition was delayed by the economic downturn in 2008. A marina feasibility study was carried out in 2010, with a public consultation phase opened in November 2019. However, to date, no funding has been acquired.

Another important natural amenity in the locale is Courtown woods which extends through the historic estate of Lord Courtown, along the Ounavarra river to the sea front. Ownership of the woods is a point of contention. Having originally belonged to the estate of Lord Courtown, they were taken



Figure 1. Left – Courtown and Riverchapel location. Red line denotes the case study area.

over by Coillte (state-owned commercial forestry company) and eventually sold to Courtown Waterworld (leisure centre and swimming pool) (Walsh 2021). However, the recent liquidation of Waterworld has placed the woods in a precarious situation after being sold to a private consortium. Given the importance of the wood to the local community, there has been strong resistance to the sale of the woods, with a local petition to stop the sale gaining 8000 signatures.



Figure 2. Left – Image 1 of the north beach at Courtown 1967. Right – Image 2 of the north beach at Courtown 2015. Sources: Phillips and Murphy (2021), permission granted by Doyle, E and Comerford, P. TIFF file.

Work by Phillips and Murphy (2021) has quantitatively examined the emotional impacts of loss of the beach on the local community. Findings indicated that many within the community (42% of a sample of 271 residents) experience solastalgia, especially those who have lived in the area >20 years. However, despite feelings of solastalgia, residents also expressed moderate levels of place attachment and often held an optimistic outlook for the future. Phillips and Murphy (2021) suggested further qualitative work be conducted to “parse the complexities” of “emotional responses to environmental loss” and to further investigate relationships with place. Therefore, this study employs qualitative methods to further analyse the complexities of individual lived experiences of negatively perceived place change in Courtown and Riverchapel.

2.2. Data collection and participants

Given that Phillips and Murphy (2021) identify a greater incidence of solastalgia among long-term residents, a small number of long-term residents with detailed knowledge of the area were chosen for interviews over an extended period in 2020 (Breakwell et al. 2006; Mears 2012). Five participants were recruited through discussions with community members and earlier questionnaire surveys conducted by Phillips and Murphy (2021). The individuals selected reflect a variety of livelihoods and perspectives on community life, their knowledge and experience of beach erosion, local development plans, governance, local economy and day to day life experiences of Courtown/Riverchapel. The final set of respondents consisted of a local councillor, a business owner, a local lifeboat volunteer, a permanent resident of the community and a seasonal resident (originally from the locality). Attention was given to ensuring gender balance among respondents. Our deliberately small sample allows for deeper engagement with individuals over a longer period of time (Thomson 2010) and is used to explore issues of interest to individuals, draw upon commonalities and differences, and to build upon insights developed from a much larger sample of the community (270 respondents) through questionnaires deployed by Phillips and Murphy (2021).

Each participant took part in two interviews, each spanning 1–2 h, with some providing extra information outside of interviews in the form of written documents and pictures related to recent developments and the beach. The first interview employed photo-elicitation. Photos are a tool to aid the exploration of key concepts in more depth while allowing participants to comment on aspects and dimensions of their life portrayed in photographs which researchers may not have considered (Clark-Ibáñez 2004; Ryan 2009). We adopted a similar method to Clark-Ibáñez (2004), using photographs as a communication medium between the researcher and participant to prompt more in-depth discussions. All interviewees were shown the same two images; the first showing an expansive beach in 1967 and the second showing an eroded beach and rock armour in 2015 (see Figure 2). In addition, interviewees were encouraged to present their own photographs which represent their connection to place (see supplementary information). This was followed by an in-depth semi-structured interview where photographs were used to elicit memories and emotions (Stedman et al. 2004; Tonge et al. 2013; Briggs, Stedman, and Krasny 2014).

The second engagement involved walking interviews, allowing participants to engage with their physical environment and express their lived experiences while moving through it. This technique complements photo-elicitation, creating a discussion of physical/sensory aspects of place that photographs fail to capture. As walking interviews are conducted in place, participants have the opportunity to narrate their lived experiences of and interactions with place (Porter et al. 2010) while considering identity, community and place attachment. Interviews followed a route designated by the participant, beginning in Courtown Harbour, continuing to the beach and through the woods. The route chosen by the interviewees was similar and incorporated the beach, the Harbour and the woods. Slight variations in the route occurred such as starting point and the direction walked; however, all routes incorporated the same locations at some point in the interview. One interviewee slightly extended their route further south. The participant adopted the position of a guide while the researcher listened to their account of lived experiences of place, similar to the

format discussed by Kinney (2017). The interview structure was flexible to afford participants a greater sense of control allowing for responses otherwise unanticipated by the researcher (Clark and Emmel 2010).

Due to public health restrictions associated with the Covid-19 pandemic photo-elicitation and walking methods could not all be conducted in person. Both methods were revised for safety reasons and mostly completed online. Walking interviews were conducted with two participants in person when public health restrictions eased. Alternatively, interviewees walked alone, and an online interview took place afterwards to discuss their experiences. Public health restrictions prolonged the completion of interviews and resulted in the reduction of data the researchers intended on collecting, such as sensory data. However, restrictions had little impact of the integrity of the methods and results.

2.3. Analysis

Interview transcription was carried out verbatim with each interview transcript read individually in an iterative process to gain familiarity with the text. Following transcription, key quotes relevant to the research questions were extracted (Braun and Clarke 2006). Transcripts and key quotes were re-read to ensure the interpretation was accurate and consistent to form themes and sub-themes. Based on these themes, a narrative was developed exploring deeper emotional impacts and perceptions of place change. Results are presented around the key themes to emerge.

3. Results

3.1. Impacts of place loss due to coastal erosion

Photo-elicitation allowed participants to make comparisons between Courtown Harbour and beach in the past and present. We used photographs as a conversation aid, such as the postcard provided by one interviewee showing an expansive beach and prosperous Courtown (See Figure 3). Notably, participants discussed loss of the beach within the context of multiple complex changes the

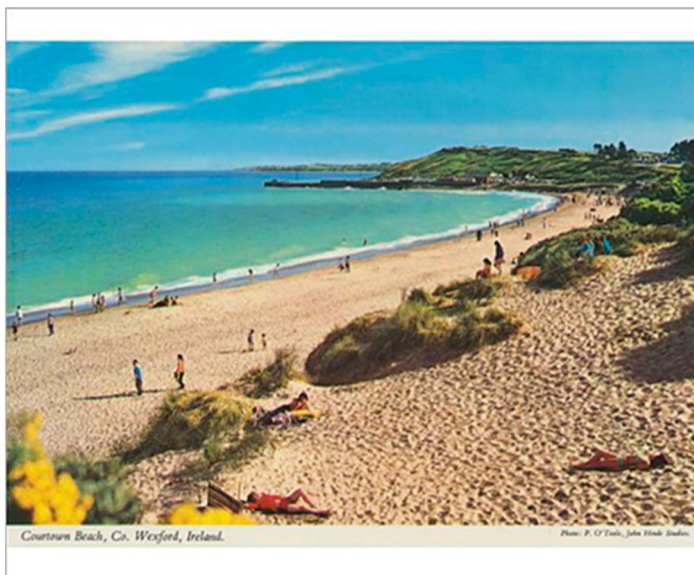


Figure 3. P. O'Toole and John Hinde postcard showing an expansive beach in the past. Source: John Hinde Limtex, County Dublin, Ireland.

community has undergone in recent decades, including environmental, developmental, social and economic changes resulting in the loss of its “seaside village” identity that some participants said has “completely changed”. Disappearance of the beach at Courtown has been “shocking” for some interviewees. Coastal erosion has transformed the area from a thriving tourist destination in the 1970s/80s with an expansive beach, to a “shadow of its former self” today, characterised as “a sliver of sand with grey and stark rocks”. Some interviewees gave their account of the time-frame of these changes:

The biggest change would have been between the mid-70s to mid-80s. That’s when it [the beach] really starts to go. And then really by the 90s it was pretty much gone ... I don’t think there was anything to speak of by the end of the 90s and definitely not after 2000 ... just little stamps of sand.

The experience of losing the beach has been painful for many and has impacted livelihoods, particularly for those who had small family businesses that relied on the beach for tourism, and childhood memories of the beach or connections to their identity. Such loss has also limited some interviewees’ ability to meet with family and friends as the beach was a frequent meeting spot for walks. Due to the loss of the beach some interviewee’s family members no longer wish to meet at the beach or walk along it, while some people feel there is not enough space to meet up with family. Loss of the beach has also impacted recreational activities and created an unfamiliarity with the area. One interviewee highlighted the impact on the business while another discussed the impact on recreation:

It [loss of the beach] affects business. If you talk to any of the businesses one of the biggest things people remember is the beach here in their youth ... and they are wondering where the beach is. Who took the beach?

It [loss of the beach] would impact my recreation by comparison to how it was when I was young. I have hugely happy memories of being on the beach and I was always very involved in outdoor pursuits ... and now you’re trying to find a spot where there’s no people ... because there isn’t room.

All interviewees discussed the stark environmental changes between the photographs shown to them (Figure 2) that elicited feelings of loss. One interviewee gave their account of the environmental changes that have occurred over time saying the installation of rock armour marked the end for them:

I remember when the rock armour arrived. Nobody liked it ... It just looked grey and stark. It kind of signified the end of the beach.

Due to loss of the beach, the area has lost its blue flag status and subsequently the lifeguard. Another interviewee discussed this while comparing past and present photographs (see Figure 2) of the beach.

There’s no beach there at all anymore. The beach is just completely gone. There’s not even a meter of beach, the sea just breaks onto the rocks, there’s no beach anymore. And we’ve lost the blue flag as well which makes things even worse ... because of that we’ve lost the lifeguard

According to interviewees the beach is the main issue for Courtown’s survival and losing it has led to its “stagnation”. This loss has impacted livelihoods, memories and created many emotional and physical challenges for the community.

The rock armour that was installed on the beach is heavily disliked by many who “don’t go down to the rocks.” Along with inadequate planning and maintenance, interviewees highlighted that not enough is being done to protect Courtown. Planning issues and lack of local consultation are blamed for enhanced erosion. Walking by the rocks provided one interviewee the opportunity to use them as a visual aid to discuss what he believed was a significant cause for the loss of the beach:

The beach was lost because of an engineer, a roads engineer down here many years ago when I was a teenager. He put rocks where they shouldn’t put rocks, and it lost the beach. The old fishermen told him at the time but he wouldn’t listen, [the fishermen] said he was going to destroy the beach.

Interviewees worry that valued aspects of Courtown are vulnerable to loss, while past and anticipated impacts to place cause emotional challenges. All interviews expressed sadness for the loss of the beach and shock towards developments that have negatively transformed Courtown; however, some expressed these emotions very deeply. While discussing photographs of the expansive beach of the past one interviewee expressed sadness that his daughter won't experience the same experiences that he did growing up and that she won't be able to share the same memories of the place:

I grew up here and ... my daughter is going to grow up here and its things that I remember that I'd love to share with her or I'd love for her to do or see that I had as a child. When I think of Courtown, I think of my childhood, because this is where I grew up, and I just want the same thing for her ... It just is deeply saddening that my child is going to grow up in a town that is renowned for its beach, and there isn't going to be one.

This person is disappointed in how the beach looks now and deeply saddened for its loss which they feel every time they visit. During an interview following a walk through Courtown Harbour, the interviewee compared pictures of the beach in the past to its present state. They discussed how the transformation has brought about a lower frequency of visitation for them and undermined their attachment to place:

I feel disappointment, sadness, like every day I go down there. I find myself wanting to go down there less because it just makes me so angry and just so annoyed that it is the way it is. There is nothing that you can really do. It's just so deeply saddening to see how far it [the beach] has turned from the way it used to be.

Photographs of the beach originally elicited happy memories which were "overshadowed" by sadness from loss. This feeling was shared by two interviewees. This loss has impacted happy memories and emotions. It has created feelings of unfamiliarity as the place has changed so much, along with feelings of worry, concern and sadness. While standing next to the rock armour during a walking interview one interviewee expressed such strong emotions for the beaches condition that it makes them feel physically sick:

As someone who grew up in the area, the woods was my play area, down here was my play area [the beach]. To, to see it today would make you physically sick.

Loss of the beach and the areas vulnerability has created deeply felt anxiety for some, with one interviewee having a "reoccurring nightmare" about Courtown being flooded by large waves. As they describe it:

[In the nightmare] I'm standing on the steps going down to the beach and there's a massive 40-foot wave coming towards me. I've been having this dream ... maybe once every year or two, since I can remember.

Visible disgust and shock were expressed by interviewees when shown pictures of the beach during photo-elicitation interviews. One interviewee noted while discussing a current picture of the beach that the adaptation actions in the form of rock armour have caused them distress:

I think it's distressing [the rock armour] because I think a lot of the work done in Courtown was actually detrimental to the beach. I don't think it benefited the beach. There were better ways to try and maintain the beach.

Some interviewees express distress, while others show anger towards the present-day condition of the beach and Courtown. The emotions being felt by interviewees such as sadness, distress, disgust, anger, physical sickness and anxiety are all emotions attributed to solastalgia (McNamara and Westoby 2011). Some interviewees feel powerless to change the outcome of processes occurring presenting emotional challenges and feelings of powerlessness. Strong emotional responses to coastal protections (rock armour) highlight issues regarding distress and disruption that adaptation actions themselves can cause.

The beach has also been a big part of all interviewees' identity, mostly in the past before it changed. One interviewee said it was part of who they were:

The beach is part of my own identity. It's part and parcel of who I am as I grew up. When I describe to anyone where I grew up, the beach would be a big part of who I am.

However, one person indicated during their photo-elicitation interview, that they were more attached to the beach in the past when they were younger. Now that it's gone their attachment to it has weakened. This person said:

I don't see the appeal anymore ... it's gotten to the point where there's no joy left in it. When I was younger I identified strongly with it [the beach]. I'm from Courtown, I grew up beside the sea and it was great but I just don't feel an attachment to it anymore. I feel like I've lost a certain amount of attachment towards the beach because of the fact that there isn't one anymore.

Another interviewee expresses their attachment to the beach; however, it is connected to the memory of how it was in the past:

I am very much attached to it. Loved it. Loved having it there, you know? It is a big loss ... to everyone, not just locals, to all the people that like to come out for a walk on the beach and yeah, it's a big, big loss.

3.2. Impacts of socio-economic change and new developments

Changes to place from coastal erosion have deeply impacted individuals emotionally resulting in experiences of solastalgia; however, experiences of loss have been compounded by frustration with subsequent policy decisions and socio-economic changes. The rapid expansion of Courtown and Riverchapel through residential development has resulted in a dramatic change to Courtown and Riverchapel that was badly communicated to locals (Mottiar and Quinn 2003; Irish Times 2000). Such place change has coincided with loss of the beach and further impacted place identity, intensifying existing experiences of loss and solastalgia. A common sentiment among respondents was how community perspectives have been ignored by decision makers. One interviewee highlighted the inadequate development and lack of support in decision-making:

They've [local and national government] evidenced in the past that they don't particularly have an interest in proper development. There was just insanity in building, and hundreds of houses were built without any support in the area, no schools, no shops ... there was nothing there. Nothing was there to support the people who are already trying to survive.

Another interviewee discussed similar points:

We had 54 housing estates built in a parish during the building boom. That is only starting to settle now, many years later. The school up here is bursting at the seams I don't know how they're going to reopen that school [post pandemic restrictions] because they are like sardines in it.

Following the rapid development of housing estates, the population increased substantially in the early 2000s with the influx of new residents dramatically changing the social structure of the area.

A lot of the houses were built in Riverchapel. I think it was over 1000 houses that were built. In a very short space of time that created, almost like a new dimension to Courtown and all of a sudden we have this big residential side to it, which we didn't have before. Before that we were a small community.

Some interviewees feel that the influx of new residents has caused a "chasm" between what longer-term residents and newer residents want for the area. They feel that newer residents do not view the same aspects of place as being valuable and are not emotionally impacted to same degree by loss of the beach. One person said:

We had a massive influx of people moving out of Dublin, down to Wexford ... we gained a whole new community. But this community now have nothing to do with tourism as a livelihood. So there's a complete disconnect between Courtown as a seaside resort, and a source of income and then this new group of residents who live here.

The structural and social changes occurred while the beach was disappearing, combined with a lack of facilities and economic decline.

it's not just losing the beach, there's two big things that happened in Courtown at once, losing the beach was one, but the second was the explosion of development in the area, and all the houses that were built in Riverchapel. Once that tax incentive ran its course, a lot of those properties went up for sale.

Courtown and Riverchapel's main economic functions include leisure, recreation and tourism with most facilities being centred on Courtown Harbour. Interviewees strongly attributed the economic decline to loss of the beach. A combination of transformations of place and policies that ran counter to local needs have changed Courtown from a thriving seaside resort into a "mass of countless houses that were built without facilities" with "grey and stark" rock armour instead of the expansive beach it once had. It has been compounded by policies that expanded residential development in the area and weakened the voice of residents that have been there for generations.

Interviewees highlighted limited communication, participation, representation and consultation regarding important local decisions (e.g. installation of the rock armour, pier works). As one interviewee noted:

It's a problem in more than Courtown, if the government actually listened to the people who live in the towns, and what their actual problems are and what their experience is ... their experience would tell them how to fix or how to even go about starting to fix it [Loss of the beach].

This interviewee also pointed out that local knowledge is not consulted enough:

People have been dealing with these issues. [People would say] I've been thinking about this problem for 30 years. Who've been fishing in Courtown and who've been sailing in Courtown for ... the better part of their life ... Ask the locals, what they would actually do to fix it and start from that.

Interviewees feel that greater communication and community involvement is needed, not just for important stakeholders "with the deepest pockets", but for the entire community, both long-term and newer residents. Feelings that local people are "not listened to at all" and their needs have not been addressed have emerged. Local consultation regarding the rock armour installation was inadequate, propagating a sense of powerlessness amongst some interviewees. One interviewee said decision makers are "going to go ahead and do it anyway". While another highlighted that "they [engineers and consultants] wouldn't listen to the local people." Another interviewee highlighted their frustration towards the lack of inclusion:

We're [Local people] not listened to at all at all. Everything is taken out of the local decision-making context. For one reason or another the engineers feel that they know more about the area than the locals and that's the fundamental problem.

They also expressed diminished trust in the local council and government to deliver on promises creating "frustration". They also believe the council is "disengaged" from the community. Some feel abandoned with "no voice at all" in government as one interviewee said:

People wonder you know, why aren't we doing something about it. We can voice as much as we like but unfortunately our voices are not being heard by council, councillors or otherwise.

Interviews show that there are many problems surrounding communication and consultation in decision-making processes for the area that appear to run counter to the community's needs.

3.3. Behavioural responses to change – adaptation and coping responses

Despite loss of the beach, the sea itself still holds a prominent place in some interviewee's sense of identity which was evident in the pictures they chose, and routes selected for walking interviews. Many people recall memories of eating "ice cream by the sea" where they would "go down and get an ice cream and walk along the sea front". Access to the sea is just as important as the

beach for some, and if they can see it and “dip a toe in the water” that appears to help them come to terms with negative emotions associated with losing the beach. One interviewee discussed this feeling:

I'm happy if I can just see the sea or walk out a little bit and just stand there for a few minutes and then carry on with the walk. If you didn't have that opportunity yeah you would miss that, because you feel like you can breathe.

However, since loss of the beach, dependence on it has changed for most interviewees. Some prefer to visit other beaches even if they must travel further to acquire experiences Courtown beach once provided. Others avoid the beach completely now. One person said:

I'd be much less likely to go down to the beach. Having dogs, I used to walk them on the beach but now I wouldn't really go down there. A trip to the Courtown would always have been a walk to the beach but it's not anymore, I don't go down to the beach anymore, it's just rocks.

Without the beach, one interviewee feels there is no reason to visit Courtown as it has lost its main attraction. The area is not appealing to them anymore. While another said, “why would you come to Courtown?” Those who are experiencing emotional challenges due to place loss “don't go down to the beach anymore”, they “don't go down to the rocks”. These expressions show a changing relationship with place following loss of the beach. Their dependence on the area is lowered because Courtown/Riverchapel no longer meets many residents' needs, with a lack of facilities/services and a severely eroded beach. One interviewee expressed a desire to leave Courtown:

If I won money, I wouldn't even think twice about moving out of it [Courtown]. There's nothing here for me anymore. I've got family that live here but other than that I wouldn't even think twice about moving.

Some participants express little or no change in feelings towards the beach or Courtown since the beach has disappeared. They tend to be involved in decision-making or have focused their attachment to the forest. The sea is ingrained in the identity of Courtown and people's attachment to it. Some interviewees discussed how they find themselves “gravitating” towards the forest more:

I find myself gravitating more towards the woods again ... it's kind of where the woods breaks on to the sea. That stuff hasn't changed so I find myself gravitating to those areas that were always the same.

It [the woods] was also another amenity that was underutilized, underappreciated and taken for granted. Now that the beach has gone, I think people are realizing how important the woods are and how unique it is to have woodlands, so near to the coast. It was a bit of a no brainer to refocus on to the woods which is adjacent to the beach so people still feel they're in the areas they like. It's just a matter of being in the woods now instead of on the sand.

The forest is being utilised more now as it offers opportunities and interactions with place (e.g. recreation, social gatherings, view of the sea) that the beach once did. Some interviewees appear to be re-orientating their sense of place as a response to place change.

However, there are concerns about future access to the sea and access to the forest as new development plans progress. The Courtown woods are in the process of being sold to private investors and some interviewees are concerned for its future. This process has been carried out without consulting the community, leading to protests and petitions in an attempt to stop the woods being sold. This form of proposed/anticipated risk associated with the future development of the area was feared by some interviewees. These actions are likely to further undermine place identity that are just beginning to recover from loss of the beach and exacerbate already present emotional challenges.

Hope that the future will be more positive as shared by most interviewees. One interviewee expressed the sentiment that hope for a better future is all they have left now:

There is hope but I have kind of come to accept that it is the way it is now. I have to hope, because otherwise my whole memory of what Courtown used to be I feel like is gone now. I feel like it's sullied my memory of Courtown and if I can I want to at least hope that my child can have the same positive experiences of Courtown that I did.

There are developments planned to re-vitalise the area and interviewees expressed hope that the “place will be re-imagined”. Some interviewees hold a positive outlook for the future for this reason. They view Courtown as having much potential and untapped resources that could re-vitalise and help re-imagine place:

I think this is one of those situations where we need to come together and re-imagine the place. I still think there’s an awful lot going for it. There is a whole untapped resource as far as the woods is concerned. Definitely less focus on the beach, but more focus on marine ecology and education and promotion about climate change, because, as somebody said Courtown is the poster seaside resort of what climate change has done. So why not use that as an educational tool for both residents and for visitors to come.

Some interviewees expressed a negative view of Courtown and its future either by being “afraid that there isn’t going to be a beach” at all or “worry that future development will strip” away what is left of Courtown’s identity. The forest is now being threatened by the encroaching sea, changes in ownership and future developments (See [Figure 4](#)).

Feelings exist that valued aspects of place are now vulnerable as proposed developments lead to anticipated risks and create emotional challenges. One interviewee during their photo-elicitation interview expressed worry that the forest is being impacted by erosion as the tree line has been pushed back:

That’s a really good picture to show the erosion [[Figure 4](#)], and that would have been our tree line, like literally 10 years before that and you can see the trees have fallen over in it. It was shocking the rawness of the erosion there and that’s got a lot worse actually since and just a lot more trees have fallen down.

As well as re-imagining Courtown, some interviewees wish to increase community cohesion and bridge the gaps between the old and new communities to collectively solve Courtown’s problems:

We are actively involved in planning for the future now. So we literally have to get on with it. But people’s perception of it [Courtown] has changed because of the lack of the beach. We nearly have to read from both areas [parts of the community] as a base for something else. I think it’s nearly even more important that people have a family day by the sea as opposed to on a beach.

This person also highlighted what they think would help re-imagine Courtown without a beach centred on accessible spaces by the sea for families:



Figure 4. Left – Image 1 photograph showing the erosion of the beach and tree line near Courtown woods. Right – Image 2 signs protesting the sale of Courtown woods Sources: image 1 provided by the interviewee. Image 2 Protect Courtown Woods Community organisation.

So there's a focus on creating spaces and areas where you can sit and look at the sea, as opposed to being on the beach. That's one of the great things about Courtown, it's so accessible. I think it's one of the most accessible places to have a day by the sea on the east coast.

However, even though interviewees are willing to see Courtown re-imagined, some have expressed worry over who will benefit from future developments and if locals will be left out. One interviewee is concerned that developments might restrict access for residents and exacerbate existing problems, showing that anticipated changes to place are also causing worry:

My concern would be that a large amount of sea front will be restricted to a sailing club or private enterprises, and that the local people or the people that now live in the area would lose a massive amount of access to the seafront. That would be a major concern for me.

Despite these concerns, interviewees wish to move on from the loss of the beach and re-imagine Courtown. They are showing a willingness to take ownership of the loss, turning it into something more positive for the community and future generations despite emotional challenges. One interviewee discussed the positive aspects of future developments:

the only thing that can improve Courtown is the likes of the new hotel which will bring so many jobs to Courtown, the likes of a market house which will bring jobs to Courtown the Marina ... which would also bring more jobs. Developments would bring more people, would put Courtown on the map as ... a destination for sailing.

However, when asked what could be done to improve issues in Courtown, interviewees talked about the need for increased communication "just to have somewhere, where everything [local information] is in one good place", local participation to "make people feel that they've been heard" in decision-making and increased "public consultation". These people are willing to re-imagine the area and want to take ownership of the loss they have experienced in order to create a better future for themselves, the community and future generations. They still worry that the area is vulnerable to further transformations that will negatively impact the community, similar to their experiences in the past.

4. Discussion

We explored individual experiences of place loss, the impact adaptive actions have on place relationships and how individuals re-imagine the future of place following the disruption. Using photo-elicitation and walking interviews, we found that interviewees express emotions associated with solastalgia (Connor et al. 2004; McNamara and Westoby 2011), including; sadness, anger, anxiety, worry, distress and powerlessness due to the loss of the beach, corroborating the findings of Phillips and Murphy (2021). One interviewee discussed feelings of physical sickness at the current state of the beach, while others expressed anxiety about the continued vulnerability of the area and feelings of deep sadness every time they visit the beach. These experiences are similar to those reported by Albrecht et al. (2007) who showed that people living in the upper Hunter valley Australia expressed a physical sickness due to environmental degradation. Other interviewees highlighted a sense of unfamiliarity with place between the past and present, similar to the sense of "home sicknesses" described by McNamara and Westoby (2011) regarding undesirable environmental changes in the Erub straits.

When adaptation options or actions run counter to values, beliefs, place attachment or interactions with place, individuals may view them as undesirable or barriers to adaptation can emerge (Moser and Ekstrom 2010; Clarke, Murphy, and Lorenzoni 2018). As the beach in Courtown eroded, rock armour was installed. This rock armour is described as "stark" by many, seen as amplifying the impact of place loss and signifying the end of the beach for some interviewees. The installation of rock armour further undermined interactions with place, community and place attachment for some. As shown by Clarke, Murphy, and Lorenzoni (2018), when adaptation actions transform place they can undermine community wellbeing, be resisted and amplify stressors experienced by

coastal communities (Solecki and Friedman 2021). Adaptation actions that reinforce disruptions to place have been shown by some scholars to challenge place attachment and magnify impacts of loss creating limitations to adapt to future change (Cheng and Chou 2015; Adger 2016; Clarke, Murphy, and Lorenzoni 2018). In the case of Courtown interviews show that adaptation actions in response to place loss have caused further harm for some, amplifying sense of loss and creating distress.

Transformation of place does not occur in isolation of socio-economic or political factors. Evidence presented in this paper highlights that for many respondents loss of the beach is amplified by other place changes, primarily due to a lack of voice in decision-making. The experience of loss in Courtown has been amplified by planning and policies associated with large-scale development. Policies such as the "Renewal Scheme for Traditional Seaside Resorts" encouraged intense residential development and social change, without adequate infrastructure. Undesirable place change brought about by large-scale developments, combined with environmental loss (coastal erosion) have challenged interviewee's interactions with and connections to place and community. Interviewees expressed greater attachment to the beach in the past, compared to today. As a result of undesirable place change, some interviewees have a lower frequency of visitation to the beach which Halpenny (2006) states is a sign of reduced attachment while another interviewee stated they are willing to leave. Slow-onset or incremental shifts such as these can have long-lasting socio-economic impacts, altering community makeup, causing stress and undermining sense of place (Solecki and Friedman 2021)

Interviews indicate weak public consultation and participation with locals in decision-making processes. Some feel powerless to stop negatively perceived place change. Lack of consultation and participation in decision-making can undermine place attachment, self-efficacy and sense of control, whereas increasing participation has been shown to reduce experiences of place disruption and nurture positive place relationships (Clarke, Murphy, and Lorenzoni 2016; Anton and Lawrence 2016; Von Wirth et al. 2016). In line with other studies, our findings indicate that weak consultation combined with environmental changes have exacerbated sense of loss (Connor et al. 2004; Higginbotham et al. 2006; Marshall et al. 2012; Warsini, Mills, and Usher 2014).

Interviewees want local knowledge and solutions to be consulted, with greater communication and access to information on local decisions, which previous and current developments in Courtown neglected to include. This lack of engagement seems to be repeating, as evident through local tensions surrounding the future of Courtown woods. Our suggestion for policy makers and organisations working with communities is guided by interviewees' desire for a "ground-up approach" to decision-making. Blader and Tyler (2003) discussed how people's views of authority are influenced by the quality of decision-making and the treatment they receive during decision-making procedures. The way people are treated during decision-making influences how they evaluate the fairness of those procedures (Blader and Tyler 2003). Our interviewees have highlighted how they think organisations and policy makers should treat them during decision-making. Procedures must incorporate greater consideration of local knowledge and co-development of policies from the outset. Indeed, lack of engagement on local development issues seems to amplify and prolong the sense of loss and lack of control that residents feel in response to loss of the beach.

Climate adaptation literature also suggests that successful adaptation in valued places tends to be co-produced, place specific, and promotes individual and community agency (Marshall et al. 2012; Barnett et al. 2016; Malloy and Ashcraft 2020; Westoby, Clissold, and McNamara 2021). Adaptation to place loss in Courtown/Riverchapel has failed to adequately include the community and has caused distress for some. We suggest that climate change adaptation actions and policies would garner more support if authorities and experts increased inclusion and worked to maintain the trust of locals in decision-making.

Despite the challenges that interviewees have faced, pessimistic outlooks for the future are not shared by all. Community groups such as Courtown Community Council are actively working on

new projects to re-vitalise the area, re-imagine place and increase community representation. This includes focus on the forest, expanding walking trails, promoting sea views and access. These actions are shifting hopeful intentions for the future from a passive (waiting for solutions) to an active (creating solutions) state (Hayes et al. 2018). Some see the process of re-imagining place for a better future as the only way forward.

However, even for these people the recent liquidation of Waterworld Leisure Centre, the future ownership of Courtown woods and stalled marina proposals are undermining community efforts to cope with loss of the beach and their ability to re-imagine place. Moreover, beyond issues of ownership, Courtown woods are vulnerable to on-going erosion with the tree line receding. As Solecki and Friedman (2021) discussed, perception of on-going risks and future anticipated risks can have significant impacts on individuals everyday lives. For some, experiences of worry are reinforced by plans to construct a marina, raising concerns over private ownership of the sea front and access for locals.

Finally, we note some limitations and reflections on our methods. Our findings are based on a small sample size; however, this research follows a larger quantitative study with 271 respondents from the area conducted by Phillips and Murphy (2021). We also note that our sample represents long-term residents of Courtown only. This is due to the stronger experience of solastalgia among this group (Phillips and Murphy 2021) and our objective of unpacking that issue. While some interviewees highlighted that newer residents may have different values and visions for the future development of Courtown, we do not include these perspectives in our analysis. Future research on the case study should prioritise eliciting views from newer residents.

Our small sample size combined with photo-elicitation and walking interviews allowed time to build adequate trust between the researcher and participants and acquire detailed and rich experiences. Indeed, the combination of photo-elicitation and walking interviews provided insights that traditional interviews may not as they include sensory stimuli that can trigger unique responses (Lombard 2013; Briggs, Stedman, and Krasny 2014). We suggest that the combination of such methods may be beneficial for other research investigating responses to place loss. Social distancing and restrictions on movement during the Covid-19 pandemic made conducting all interviews in person impossible, requiring photo-elicitation interviews to be conducted online and some adjustments to the roll-out of walking interviews. These necessary adjustments did not result in loss of integrity but did hamper the ability to better observe sensory reactions.

5. Conclusion

Place loss due to coastal erosion can foster significant emotional impacts for those affected. Using the case study of loss of a beach in Courtown, Co. Wexford, Ireland we show how feelings associated with solastalgia can emerge for individuals within the community, confirming findings of previous research on solastalgia and place loss for residents of Courtown (Phillips and Murphy 2021). Importantly, we also find that adaptation actions themselves, in this case, the installation of rock armour, may also be perceived as undesirable place change, increasing stress and feelings of loss for communities. Weak consultation and lack of opportunities for participation in local decision-making have exacerbated experiences of loss, creating a sense of powerlessness among our interviewees, who see the same lack of engagement in decision-making on issues ranging from loss of the beach to local development. However, despite these challenges, some interviewees are actively working to re-vitalise and re-imagine place. This anatomy of the impact of place loss on the community of Courtown will be of interest in other contexts, highlighting the importance of public engagement and people–place relationships in decision-making on adaptation planning in response to place loss.

Acknowledgements

We would like to thank interviewees for giving their time and valuable experiences as well as Eugene Doyle and Patrick Comerford for contributing images. We also thank the Editor and two anonymous reviewers whose insightful comments helped improve our paper. This research was approved by Maynooth University Research Ethics Committee.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This study was co-funded by the Irish Research Council and Environmental Protection Agency.

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Data availability statement

Data can be acquired on request to the corresponding author.

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