## **Beginnings**

The HMS *Belfast* was launched on St Patrick's Day in 1938 and entered active duty in the Royal Navy in 1939. As the latest entry in an arms race with Japan, it materialized the global ambition of the British Empire. With the onset of war however, the cruiser became entangled in the European theatre – though not for long. On 21 November 1939, the ship struck a German mine in the Firth of Forth, and was knocked out of action until 3 November 1942. Upon recommissioning, HMS *Belfast* undertook escort duty with the Arctic convoys and assisted in the sinking of the *Scharnhorst* at the Battle of North Cape before participating in the 1944 D-Day invasion. After Victory in Europe Day, the *Belfast* finally cruised to the Pacific to face the Japanese fleet. However, the war ended before it arrived, and the *Belfast* was assigned to the Far Eastern Station. In 1950, HMS *Belfast* fought with UN forces in Korea. After that war, the aging warship was modernized and served in the Indian and Pacific Oceans from 1959 until 1963. Following this, the *Belfast* was given over to the Royal Naval Reserve, and by 1971 it was scheduled for scrapping.

The HMS *Belfast* Trust was created to save the ship, and on 15 October 1971 the ship was towed to its current mooring on the south bank of the Thames between Tower Bridge and London Bridge (Figure 1). The ship was subsequently absorbed by the Imperial War Museum (IWM). Today, the HMS *Belfast* is simultaneously the largest object in the IWM's collections (see Woodman 2005) and a popular tourist site in its own right. Marketed as a story that brings the multiple lives of HMS *Belfast* to life, the ship provides a heritage attraction that is situated across nine decks and consists of an audio-guide, private tours, first-hand accounts, simulations of various battles, and 360-degree views of London

from the flag deck. In 2016, almost 300,000 visitors toured the *Belfast* and used a combination of these operational solutions to experience its materiality and story (ALVA 2016).

HMS *Belfast* has undergone several adaptations over its lifespan: these have occurred in response to both wartime needs and the ship's repurposing as a museum. Simultaneously a material object to be conserved and a contemporary museum, we suggest this allows for two tensions to be viewed in parallel: the heritage-oriented tension between preserving the ship for posterity and updating the ship for visitors, and the tension between a stable subject and one that becomes with its context. Assemblage thinking therefore allows us to analyze the ways in which both the ship and the visitor are (re)territorialized and (re)coded through their encounter. These tensions are crucial to heritage sites because one of their key objectives is to leave visitors changed by the experience.

We begin with a literature review of the geography of ships before turning to the relation between assemblage thought and heritage studies. In doing so, our review articulates an understanding of heritage emphasizing affective relations between bodies and materials, and highlighting key themes of the following analysis, such as the unique questions of movement, spatial orientation, and materiality that the *Belfast* raises. The article then shifts to a analysis of the *Belfast* as a heritage attraction, in which we find both how bodies are trained over the course of their visit to avoid negative interactions with the ship's materiality, and also how orientation and disorientation are used to heighten the affective experience of the ship. We conclude with reflections on the material intensities experienced by visitors' bodies as they move through the

peculiar spaces of the HMS *Belfast* and interpret the 'pasts' it presents. These material intensities can be understood as vectors of force relations that (re)territorialize and (re)code both the ship and the visitors' subjectivities simultaneously, furthering the heritage sites' aims of a potentially transformative visit.

### **Geographies of ships**

Though ships have seldom been the focus of geographical attention, recent work highlights ships' potential within the discipline. As Hasty and Peters (2012, 661) argue:

...the ship is often used as a vehicle for exploring a variety of sociocultural, economic and political phenomenon [sic] at sea and beyond, but here we ask what might be achieved by shifting not only the sea from the margins of academic attention, but so to [sic], the ship itself.

Two features of this literature are relevant here. The first is the emphasis on the relational nature of space aboard ships. Historically, a tension exists between accounts of ships as extensions of land-based society and as autochthonous seabased societies. Scholars embrace this tension without resolving it by highlighting the relational nature of shipboard spaces, with social categories from terrestrial society brought on board but conditioned by maritime affects, from the differential effects of seasickness to the achievement of 'getting one's sea legs' (Spence 2014; see also Palsson 1994). This relationality often starts with the discussion of ships advanced by Latour (1987) and Law (1986). These

theorists of actor-network theory (ANT) conceptualized ships as immutable mobiles, "a distinct spatial technology that, through its movement, can make and maintain networks between other places" (Davies 2014, 387).

The 'immutable' aspect of this description, however, is contested, with the ship's mobility – and its encounters with people and places – central to the emergent subjectivities of those on board, as in Davies's (2014) account of the Royal Indian Navy mutiny following the Second World War. It may seem selfevident that the mobilities paradigm does not apply to HMS *Belfast*, given it now rests in a trough dug into the River Thames (Anim-Addo et al. 2014). Still, an emphasis on mobility is useful in two ways, and we have drawn on Peters and Turner (2015, 2017) for inspiration. First, one characteristic of the *Belfast* as a 'thing' is that its narrative is not tied to a particular environmental context, whether the cold of the Arctic convoys or the tropical heat of the Far Eastern Station. This poses challenges for representing the experiences of sailors who served. Second, and relatedly, although the *Belfast* is a 'thing', it is also an environment that shapes the mobilities of those on board. As Peters and Turner (2017, 635) argue, 'it is through movement that visitors are routed around museums, and in turn, are routed through histories'. This is complicated by a shipboard museum:

Often thought of as an enclosed space, the ship; a mobile and still place (externally and internally, respectively); a space that encompasses an interior and exterior, an inside and outside – a space predicated in boundaries – can instead be seen as one that is part of a wider global

fabric or *meshwork* of movement; of ties and knots forging places, times, and experiences (Anim-Addo et al. 2014, 341).

In our case, the *Belfast* is no longer mobile externally and still internally; it is still externally and instead issues of mobility arise *within* the ship. Whereas Ingold (2011) considers maritime *wayfaring*, the exhibitions staff of the HMS *Belfast* is concerned with ship-board *wayfinding*.

The second theme we address from the literature on the geography of ships confronts their materiality. While the oceanic turn has led to theorizing about oceanic materialities (e.g. Steinberg and Peters 2015), relatively few publications have embraced the materiality of ships (Ryan 2006; Crang 2010). However, Hasty and Peters (2012, 665) have argued that ships provide a unique site through which to examine the materialization of spaces:

... because ships are [both] 'things' – some of the largest constructions to be built, from a range of materials; reed, timber, steel [...] and they also carry 'things', from motorcycles, flip flops to shampoo [...] as well as being a material, physical and tangible means of connection (and separation) at a range of scales.

Such an approach to ships highlights both the work required to keep a vessel 'ship-shape' (the two times the *Belfast* left its spot on the Thames were for dry docked maintenance) and also how the material design of the ship affects shipboard subjectivities. Hasty (2014, 355) notes the constant becoming of

pirate vessels, which could not be so easily differentiated from the sea, as well as the intertwining of human and non-human life:

[Seawater] Ingress was inevitable, slowly but surely the wooden ship would succumb to mould and rot. Other organisms, like the Toledo worm, clung, gnawed, and burrowed their way through the wood, eating the ship and altering its structural properties as they went. [...The ship] was never static and it was never stable. It was a body decaying from its launch, kept afloat through the continuous labours of those who sailed it, modifying as they went to keep it moving.

From this materialist approach to the geography of ships we take an emphasis on the agency of the ship itself in a more-than-human encounter either with the high seas or, in the case of the modern-day *Belfast*, with the rushing tide of tourists. Thus, we next turn to the literature on materiality, heritage, and subject formation found in cultural geography and heritage studies.

### Museum assemblages and materiality

Materiality has long been at the core of geographic interest in heritage. As Dwyer and Alderman (2008, 168) have argued, "[c]omposed of seemingly elemental substances – water, stone, and metal – memorials cultivate the appearance that the true past is and will remain within reach". Indeed, one can think of 'heritage' as the process through which pasts are brought into the present to impact upon it, and the materiality of memorials, heritage sites and museum artifacts is how some pasts are made present (and others made to disappear -- see Drozdzewski

et al. 2016). Recent work at the nexus of heritage studies and cultural geography has produced a new paradigm drawing on Bergsonian and Deleuzean thought (see Harrison 2013; Waterton and Dittmer 2014; Tolia-Kelly, et al. 2017). Harrison's work on assemblage, or *meshwork*, is particularly instructive here. He argues for a rethinking of pasts as networks of things and people that 'are involved in complex, interconnected webs of relationships across time and space' (2013: 21).

The materiality of heritage has therefore come to 'matter' in recent times inasmuch as it has been brought into relationship with specific bodies through theorizations such as Harrison's. Similarly, Sumartojo (2016), drawing on Closs Stephens (2015), posits that commemorative atmospheres emerge from the specific spatial arrangements engineered into national events, and subsequently impact the political subjects who attend, and whose bodies help compose such events. While Sumartojo is writing about Anzac Day in Australia and other national-scale festivities, we have elsewhere argued that smaller events, such as a class trip to a heritage site, provide similar opportunities for past and present to collide, with the resulting 'event' impressing itself on attendant bodies as memory (Waterton and Dittmer 2014).

We view collective memories as "materialized in bodies as a result of those bodies' participation in multiple (and often competing) assemblages of national heritage" (Dittmer and Waterton 2016, 176) and then existing virtually within bodies as somatic markers activated by future events (Connolly 2002). Indeed, it is the coming together of things, bodies, and discourses as an assemblage that activates somatic markers and other latent capacities, causing unexpected outcomes. For this reason, every assemblage is unique, even if it

superficially resembles others. Further, the things, bodies and discourses may function in multiple assemblages at once, and therefore affects can circulate through assemblages sharing common elements. Therefore, considering heritage attractions as assemblages has two implications relevant to this study. First, these attractions are not unitary and static. Second, the material objects involved cannot be understood in a functionalist way. Rather, most heritage attractions involve a re-purposing of material objects from their original purpose (e.g., naval vessel) as they enter into a new assemblage (e.g., the IWM). In short, this is the purpose of this paper – to understand how the re-purposing of the HMS *Belfast* can illuminate both the geography of ships and the geography of heritage.

#### Methods

Our methods are derived from the insights of the above literature, and draw on an (auto)ethnographic sensibility as a way into the atmospheres that Closs Stephens and Sumartojo, amongst others, have highlighted. This autoethnographic approach also replicates the work of Peters and Turner (2017) and their interrogation of penal histories at convict ship exhibitions. As Peters and Turner (2017, 636) argue, such an approach provides for 'an embodied and critical foray into taking the workings of museums seriously', and is an approach that has been widely adopted in museum studies (see Macdonald 2007; Witcomb 2013; Waterton and Dittmer 2017). One of the authors (Dittmer) and a research assistant spent several days on board HMS *Belfast* over the course of a ten-month period (October 2016 to July 2017), initially engaging with the museum in a relatively straight-forward way as a tourist, before shifting to a two-pronged

research strategy. To begin, the researchers observed the embodied interactions of other visitors – with each other and with the ship. Extensive field notes were taken to document both the artifacts and interpretive aids on display in each shipboard space and also our observations of our own and other bodies within the space. Following from that, the researchers worked to de-familiarize the ship through a range of techniques that allowed them to sense the *Belfast* assemblage differently. For instance, spending an extended amount of time in a single space on board the ship often led the researcher to eventually sense different affective dimensions of the space than those foregrounded by curators. Often these 'background' elements served as an infrastructure that either underpinned – or interrupted – the intended experience. A similar effect could be using recording technologies – either photographic or audio – to isolate dimensions of the affective experience. Finally, Lucy Tindle, the exhibitions manager for the *Belfast*, was interviewed in order to understand more about the still-ongoing process of staging a naval vessel as a museum.

#### All aboard

As outlined in our interview with Lucy Tindle, the arrival of the *Belfast* posed a set of intriguing problems for museum professionals. Designed with one purpose (warfighting), but now serving another (heritage attraction), the standard response might have been to update the ship for its new role. However, its new status as a historic artifact militated for its physical preservation, foregrounding the preservation of the past *for future generations* as a crucial dimension of museum curatorship. That said, the conservation process does allow for change in some circumstances:

Everything about the ship – its fixtures, its fittings, its signage, everything about it is historic in point of fact. It was made at a time when techniques aren't quite the same you would use now. So there's asbestos everywhere (Interview, Lucy Tindle).

While it was deemed acceptable to clean up the asbestos (or encapsulate it) in the spaces opened up to visitors (Figure 2), this illustrates the challenges posed by converting a naval vessel into a museum piece. In what follows, we examine how people's mobility on board emerged out of two sets of processes: the training of bodies and the design of routes and wayfinding aids onboard.

## Training bodies

Sailors in the Royal Navy were trained extensively in order to function as highly efficient combat machines. This is in sharp contrast to most visitors to HMS *Belfast*:

[It's] alien to most school children, to anybody who has worked in an office. The idea that the pipes are around your head height, things are at shin height, that you have to step through doorways, and you have to climb down ladders and make sure that nobody is coming up, that's kind of all alien to the visitors who come here (Interview, Lucy Tindle).

This alien experience is also part of the affective thrill of visiting museum spaces like that offered by the *Belfast:* "It's much more of an experience than a visit, so

you have to climb up ladders, you have to walk along these trippy corridors" (Interview, Lucy Tindle). Nevertheless, a certain amount of bodily re-coding is necessary to negotiate such an experience:

Field notes: I'm walking through the Belfast, writing down observations. As I move from one compartment to another, my foot clips the lip of a doorway. I stumble through the door, catching myself gracelessly and darkly muttering "death trap" to nobody in particular. Standing up straight I see a bystander has observed me. "You'll go home with bruises," he says. I note as he walks away that he is a volunteer on board the ship.

Doors on the *Belfast* were watertight to aid in compartmentalizing water, and thus people today must step over and through doorways (Figure 3). Learning to do this is just one of the ways in which visitors to the *Belfast* are themselves changed by the bodily experience of the ship.

Other material challenges for visitors to negotiate are the rakishly angled ladders between the ship's decks (spaces only accessible by vertical ladders are not open to the public for safety reasons). In order to facilitate movement and in contrast to when the ship was in active service, each ladder is to be used in one direction only. Further, signage worked to inculcate the proper technique for ascending or descending ladders, as some techniques are more likely to cause slippage or head injuries (Figure 4). Through navigating the ship's materiality, visitors were made 'ship-shape' themselves, learning both embodied techniques and also heightened attentiveness in comparison to movement on land (although notably the ship was not pitching and rolling as it would have were it at sea).

Field notes: I stood at the top of the ladder, waiting my turn. The mother was reprimanding her son for his ladder descending technique. "No, come back up and start again, facing the ladder." He complied, and when he reached the bottom, she called him back and awkwardly lowered her camera and purse to him on the deck below. As she very cautiously turned to face the ladder to descend she saw me waiting and apologetically offered an explanation: "Sorry, I had surgery on my brain and I'm afraid I'll trip on a strap and hit my head."

This participant observation illustrates how differentiated bodies interact with the *Belfast* (Colls 2012). Indeed, bodies experience space differentially across many axes of difference. The authors themselves would, for example, experience the ship differently. One author (Dittmer) had to stoop not just to cross through doorways, but even to move through whole hallways where pipes and machinery hang from the ceiling. The other author (Waterton) would have no such concerns. The vignette also points to how individual visitors became highly attuned to their material context as they are forced to more actively think about the confined spaces of the museum.

Of course, as the vignette indicates, the *Belfast* is a profoundly ablest landscape. While there is a lift for those differently abled on the quarterdeck, only two decks can be accessed without climbing or descending ladders. And as Lucy Tindle stated in our interview, "obviously we do welcome visually impaired guests, it's just a bit harder for them to navigate." Indeed, navigation on board

the ship is a challenge for both visitors and the exhibition managers, as we will discuss in the next section.

# Wayfinding on board

Field notes: I have been on the ship for some time observing. I am on Upper Deck 3 and realize that I could use the men's room. I start to head down to Upper Deck 1 to look for it. Confidently, I stride out of the compartment and look for a way directly down, rather than following the slow, crowded path of the audio guide. I walk around the deck and the only ladder I can find is an 'up' ladder. I circle the deck several times, my frustration growing with my need for the men's room every time I find myself back on the Admiral's bridge. Eventually I wait until the volunteers aren't looking and I step over a velvet rope used to direct traffic. This is not the first time I have gotten lost on the ship, nor will it be the last.

The *Belfast* is not laid out to enable an easy flow of visitors through the exhibition; nor does the vessel's interpretive design 'flow' out in any thematic way, as a conventional museum exhibition might. Rather, each compartment served a purpose frequently unrelated to the next (a highlight being the firing control center, located next to soap storage). Further, there are few exterior portals to orient visitors. Therefore, wayfinding can be a challenge:

When I first visited there was a bit where I was like, "oh my God, I have no idea where I am and I feel like I need to do things in the right order."

Those visitors who want to do everything in the right order, and want to see everything – it can be quite frustrating for them if they've not quite understood where they've gone and where they should have gone (Interview, Lucy Tindle).

Efforts have been made to provide critical information in ways already familiar to visitors, with department store-style directory signs mapping the major sights on each deck (Figure 5), wayfinding signs indicating the major sights, and directional signage laid in the linoleum and overhead on ductwork.

Finally, the major compartments are numbered to coincide with the audio-guide. Indeed, the audio-guide serves as the primary way through which the ship is ordered and made known to visitors, with key compartments numbered one through 29. Further complicating things is the fact that the *original* system for numbering the compartments is still on the walls for reasons of historical preservation (Figure 6). The exhibitions staff is considering a plan to break up the comprehensive audio guide tour into several tours, each focused on a specific theme, such as military technology or daily life on board. As the relevant spaces are all over the ship, this would entail cross-cutting flows of traffic, perhaps furthering the disorientation. However, this disorientation is not something the exhibitions staff seeks to eliminate. Rather, in their effort to communicate 'what life was like on the ship', disorientation is an affective relation between the visitor and the *Belfast* with historical value:

We have got loads of testimonies from veterans who say "in the first week, I used to count the ladders that I went down, and I'd count them on

the way up, but I'd turn up somewhere completely different." So it was something that the crew had to struggle with (Interview, Lucy Tindle).

Still, complete disorientation is obviously anathema to a good visitor experience. Indeed, being spatially situated was key to appreciating some of the ship's compartments.

Field notes: I am deep in the bowels of the ship, in the boiler room. I have been here before, but I still struggled to find the entrance. The ladders in here are narrow, the room to pass by other visitors absent. This room is three decks deep, and feels simultaneously more expansive and more crowded than anywhere else. A digital display has been installed to show where we are in the ship, but the other signs that locate us vis-à-vis the surface of the Thames garner more attention. "Are we still under water?" asks one child as he passes by. Looking up through three floors' worth of equipment, and listening to the simulated throb of the boilers at full volume, it is hard not to marvel that all of this is underwater.

This participant observation points to the affective potential of spatial orientation within the ship in two ways. First, the boiler room is a unique space, and is signified as such. If the rest of the ship is ablest, the boiler room (and the subsequent engine room) is hyper-ablest, with height restrictions and warnings about the number of steps to be descended and climbed (Figure 7). There is no audio guide commentary here because visitors should have both hands free and pay extra attention to their surroundings lest an injury occur. Making it to the

bottom therefore feels like an achievement of some sort. Second, this is by far visitors' deepest descent into the ship, and the view back up is unlike anything else on the ship. Clogged with machinery and filled with the throbbing sounds of simulated boilers, it feels impossible that we are *under water*, a fact signposted in several places (Figure 8). Therefore, we can see how both orientation and disorientation heighten the affective experience of visitors to HMS *Belfast*. These temporary affective relations are generated in hopes that the bodies of visitors will bear the trace of the visit for a long time after they have left.

### **Conclusion**

This article reflects on the relations between heritage, assemblage, corporeality and materiality in order to underscore the emerging and fruitful overlap between heritage studies and cultural geography. The *Belfast* allows two tensions to be viewed simultaneously in a single site: the heritage-informed tension between the ship as an historical artefact to be preserved and the ship as a museum space to be (re)designed for visitors, and the tension in the social sciences between the stable subject and the subject that emerges from its geographical situatedness. Assemblage thinking allows us to bring together these two tensions by analyzing how both the ship and the visitor are (re)territorialized and (re)coded through their encounter with one another. These tensions are crucial to heritage sites because one of their key objectives is to leave visitors changed by the experience.

Our focus came to rest on how the ship, with its tight spaces, shifting heights, and various modes of (dis)orientation, intensified the visitor experience by focusing attention on unexpected intrusions. In other words, the ship as

heritage was encountered bodily as well as cognitively. The ship, then, became integral, active, and generative in ways that exceed traditional museums, cocreating an atmosphere of immersion. Such an atmosphere worked to blur the edges between the museum (HMS *Belfast*), its artefacts (sometimes also HMS *Belfast*), and the visitors who were experiencing them (after Bille et al. 2015, 2). Visitors, then, were brought into relation with something spatially and temporally multiple: an extraordinarily large artefact was simultaneously a collection of very small museum spaces and exhibits and a carefully managed exhibition floating in contemporary London.

Assemblage thought provided the language through which we could trace these (re)territorializations and (re)codings of both the ship and its visitors. Fruitful for emerging debates about the nature of heritage, our experiences onboard HMS *Belfast* point to the coalescence of the human and non-human, expressed in those moments during which the ship became active in its environment through its reconfiguration as heritage. The role of assemblage thought in studies of materiality and the more-than-human is only likely to grow with attempts to rethink heritage in the era of climate crisis and other politically salient human/non-human systems.

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