- DEBATES -

SKIMMING THE SURFACE

Dislocated Cruise Liners and Aquatic Spaces

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Abstract

Modern, highly facilitated and luxurious cruise ships provide a highly particular type of environment and a very particular placement within oceanic and harbour spaces. In these regards they may be understood as floating entities effectively removed from their locales or, rather, as removed as they can be, barring issues of technological failure, accident and/or intrusion of extreme weather or geo-physical phenomena. Conceptualised as 'floating pleasure palaces', they are less like islands (with their complex gradations of connection to and social engagement with aquatic and sub-surface topographic space) and (increasingly) more like hovercraft that skim across aquatic surfaces. Indeed, in many recent examples, the access to and connection with the marine space that provides the medium for and rationale of 'the cruise' is marginalised. This essay begins to theorise the rationale implicit in such disconnections.

Keywords

Cruise ships, floating, aquatic spaces, aquapelago

I. Introduction

In a recent article, French geographer Christian Fleury (2013) engaged with Philip Hayward's work on conceptualising the integrated relationship between (some) island communities and marine spaces in terms of "aquapelagic assemblages" (Hayward 2012a and 2012b) and identified the antithesis of this approach as being that of "the latest generation of passenger cruise ships" (2013: 1). His principal example was the Royal Caribbean Line's 'Oasis Class' in which, he identified, "a great number of cabins do not have a view of the sea but open on to an inside passage almost 300 metres in length and lined with shops" (ibid). As he went on to assert, the design of these ships is "above all concerned with the surface of the sea, with what is immediately visible" and such ships "bear witness, albeit very incompletely, to the issues and conflicts in a space that should be considered in its verticality" (ibid). This essay examines and evaluates Fleury's contention through a detailed consideration of the design and conceptual bases of large, modern cruise liners. My focus on modern ships does not so much suggest them as a radical departure from previous major liners, their design and environments, bur rather points to them as highly advanced

interpretations of well-established models that have their own characteristics and chronologies.[1]

Hayward defines an aquapelago as both geographical and social. Aquapelagos are "an assemblage of the marine and land spaces of a group of islands and their adjacent waters" (2012a: 4) and "a social unit existing in a location in which the aquatic spaces between and around groups of islands are utilised and navigated in a manner that is fundamentally interconnected with and essential to social groups' habitation of land and their senses of identity and belonging" (2012a: 1). In this sense, cruise ships are paradoxical in that they can be considered both to form a unique type of aquapelagic assembly and to provide its antithesis. Terrestrial descriptions such as 'floating cities' (Quartermaine and Bruce, 2006: 11) or 'mobile islands' (Butcher, 2006: 37) that draw on terrestrial referents are of limited use. Cruise ships are constructed, mobile and social environments, different from islands or cities and with a distinctly different relationship with the aquatic environment to that which Hayward outlines. Due to their terrestrial nature, islands have a close relationship with the sea, whereas many aspects of cruise ships repudiate the sea, attempting to remove and control the natural forces into which they come in contact. Occasionally this attempt is unsuccessful, as in the recent *Costa Concordia*[2] and *Carnival Triumph*[3] incidents, but for the vast majority of the time, cruise ships successfully control and mediate their interaction with their 'natural' environment. At any given time there are hundreds of these skimming craft at sea moving between 'destinations' – themselves constructs as the real 'destination' of the cruise is the ship itself.

Cruise ships have been considered to be examples of postmodern tourism (Vogel and Oschmann, 2013; Berger, 2011; Berger, 2004; Williams, 2002: 193-197), a model that "consists of compromising statements and stresses the multiplicity of tourist motivations, experiences and environments, thus going a step beyond modernist propositions regarding the variety of tourist experiences and the importance of authenticity" (Heitmann, 2011: 51). Given this lack of motivation for a touristic relationship with the places visited, it is understandable that cruise tourists are more interested in the ship itself. The vessel becomes a cultural, social and physical cocoon (Vogel, 2004) protecting them from the (sometimes harsh and/or ambiguous) realities of the destinations they visit, and a luxurious destination in its own right.

II. Aquatic Relationships

Modern cruise ships have a convoluted relationship with their environment. It is the ocean that gives the cruise ship its mobility; however these vessels reject and diminish their relationship with the natural ocean environment. Aboard the mega-liners cited by Fleury, water for entertainment and aesthetic value has been increasingly tamed, the focus of the passengers turned inward from the sea to a series of increasingly technological and exciting water features that fabricate actual interaction with the sea. A guest may relax in a temperature-controlled pool rather than swimming in the ocean. They may grab a board and ride the monotonously perfect waves of the 'FlowRider'[4] rather than risk the imperfection of catching a real wave. They can admire beautiful water features rather than regarding water in its natural state. In this way, the cruise ship acts both as mediator between the passengers and reality, and as master magician, replacing and improving reality.

Figure 1 – Onboard FlowRider experience (Source: Caribbean Cruises)

Early passenger shipping maintained a firm relationship with the sea—indeed, it was difficult to do otherwise. 19th Century voyages were dangerous, the relatively small ships were crowded and the constant rolling of pre-stabiliser vessels reinforced the ship's hazardous relationship with the sea. Even official stances revealed this attitude. In 1870s, with White Star overtaking Cunard Line as the preferred transatlantic shipping company, the spartan conditions of early Cunard Line vessels were pointed out to Charles McIver, then running the company. Even napkins were not available for dining. McIver's response was that going to sea was a hardship and if passengers wished to wipe their mouth during dinner, they could use a pocket handkerchief (Butler, 2004: 111). The loss of nearly 300 lives when the Collins Line SS *Arctic* sank in 1854 followed two years later by the Collins SS *Pacific* with the loss of 200 lives reinforced the dangers of early passenger shipping. Other disasters, such as the sinking of the RMS *Atlantic* (1873, 535 deaths), RMS *Titanic* (1912, 1,502 deaths), RMS *Empress of Ireland* (1914, 1,012 deaths) and the destruction of the RMS *Lusitania* (1915, 1,198 deaths) continued to keep such dangers in the minds of the public.

Shipping has generally been used for business. The concept of taking to ships for pleasure relies on safe, luxurious and (above all) stable ships. 19th Century steamships were not always any of these and pleasure shipping (originally known as 'excursion shipping') was initially limited to coastal or river shipping. Mark Twain recorded an early international pleasure cruise aboard the USS *Quaker City* in his book *The Innocents Abroad*, (1869) but also discussed of the inconveniences and hazards of going to sea. Passengers in these early ships could hardly forget that they were at sea with the constant rolling of the ship and the sounds of the ocean. They were forced to interact with their aquatic environment.

However, shipping lines were in competition with each other and began to introduce aspects of the ship experience designed to increase passenger comfort. From the last years of the 19th Century, some transatlantic ships, beginning with the small but luxurious Hamburg-Amerika Line's SS *Prinzessin Victoria Luise* (1900), began to undertake coastal pleasure cruises in their commercial 'down season'. This practice increased after the 1924 Immigration Act limited the number of immigrants to the United States. The development of stabilisers in the early 1930s that limited the rolling of the ships helped passengers forget that they were in an aquatic environment. Guests began

to turn their attention inwards as ships became more like luxurious hotels than ocean-going vessels.

Modern mega-liners are a product of the modern cruise industry, which developed in the 1960s. Some lines, such as Royal Caribbean Cruise Line and Norwegian Caribbean Line built new vessels from the start, though these were typically small ships with more in common with European ferries than modern cruise ships. Other lines bought existing 'mothballed' or retiring ships and offered cheap cruises at unheard-of prices, bringing cruising within the financial realm of the American middle-class. For example, in 1972 Carnival bought the RMS *Empress of Canada*, a transatlantic steam turbine ship, renamed it the TSS *Mardi Gras*, adapted the internal spaces to new requirements and set her sailing around the Caribbean until 1993. Royal Caribbean Cruise Line had bought the former SS *France*, which they operated as the SS *Norway* until 2004. Such ships adapted the existing physical constraints of the original ships to their new roles as cruise liners. Theatres were long and narrow with significant distance between the audience and performers.[5] Portholes were small and balconies non-existent. Air conditioning was often woefully inadequate to vacations in the warm Caribbean. Despite this, such ships were wildly successful.

The first major development towards the modern mega-ship came when Carnival Cruise Lines built the MV *Tropicale* in 1983, their first newbuild and, at 36,674GRT,[6] one of the largest cruise ships in the world. As she was built from start as a cruise ship, rather than an ocean liner, *Tropicale* established several protocols that would be adopted by future cruise ships. She was flat-bottomed and slab-sided, not deep hulled like an ocean liner. Each of her cabins of the same class was identical in size. The interior, while not as exuberant as some of Carnival's later vessels, was colourful and flamboyant. This most obvious characteristic was how far forward her superstructure extended (as the ship did not need have cargo hatches) and the installation of a startling red winged funnel (known as a *Farcus Funnel* after Carnival's chief architect Joe Farcus) (Cudahy 2001: 48–49) was also a defining design element. Carnival quickly followed this up with three 46,052GRT Holiday-class ships from 1985.

Cudahy (2001: 66) argues that Royal Caribbean's MV *Sovereign* (1988) (later called *Sovereign of the Seas*) was the first "mega"-ship; citing her passenger numbers (2,276) and her displacement (73,129 GRT) as making her, at the time, the fourth-largest passenger ship ever built). Onboard water features increased in importance as these new mega-ships developed. In addition to swimming pools and Jacuzzis, the *Sovereign* also featured an artificial 'islet' at the bottom of its atrium space.[7] Called 'Serenade Island' and surrounded by waterfalls and pools, it was the performance space for the onboard string quartet. These features started to distance the ocean from the ship, which became a backdrop rather than something with which to interact and the focus of the cruise holiday became the ship. A contemporary reviewer noted that, "the *Sovereign of the Seas* is a fun-filled, glitzy resort, almost a city, that carries a lot of people from island to island. But she's so big that you often lose touch with the sea" (Hemphill, 1988: 43).

From this time on, more and more water features began to appear on cruise ships, typically introduced on Royal Caribbean ships. The MS *Rhapsody of the Seas* (1995) has a full-service spa. The MV *Vision of the Seas* (1998) has a pool that converted from an indoor pool to an outdoor pool by means of a retractable roof. The MV *Voyager of the Seas* (1999) included an ice-skating rink and nearly all outward-facing cabins

included a balcony. The centrum sculpture on the MV *Navigator of the Seas* is based on the bubbles made by a diver. The Freedom-class ships (2006-2008) introduced the aforementioned FlowRider (a surfing ride which simulates a wave permitting guests to 'surf' while not leaving the ship) to the cruise shipping industry. It also introduced cantilevered hot tubs that hang over the side of the ship. This facility allows guests to relax in a simulated water environment while watching the actual water environment.

The most physically obvious water-based attractions aboard cruise ships are water slides. In the early days of modern cruise ships these would be basic slide-and-ladder setups. Carnival Cruise Lines added a basic ten-foot L-shaped slide to the *Festivale* (Sarna 2010: 1) and other lines soon caught on. Modern water slides rival those at theme parks. The MV *Carnival Dream*'s "Twister" is 303 feet long and four decks high and the MV *Norwegian Epic* has a bowl ride also four decks high and 240 feet long. Big as they are, such rides are dwarfed by the planned 'Aquaduck' on the MV *Disney Dream*, which will be 765 feet long and take passengers thirteen feet over the ocean in a transparent perspex tube.

Figure 2 – Aquaduck in construction phase

In the earliest days of passenger shipping, guests were very conscious of the dangerous aquatic environment in which they found themselves. Since the dawn of the modern cruise ship industry however, shipping lines have distracted and turned passengers inward rather than outwards, modifying, adapting and controlling cruise ship spaces that deal with the natural environment and replacing real interaction with water with a representation. When an unexpected interaction occurs, such as in the sinking of the *Concordia*, it still has the capacity to shock.

III. Use of the Natural Environment

Cruise ships utilise the natural environment in one of two manners: either they interact with it as little as possible, or use it in a destructively polluting manner (though thankfully the former is now more common than the latter). Water is taken into the ship through the sea chest for engineering requirements in the manner of all ships. These large vessels produce extravagant amounts of pollution. However, to passengers, these considerations are hidden and unexplored.

As well as entertainment and aesthetic purposes, water serves very significant functional purposes within cruise ships, not the least being drinking water for guests. The filtration systems on a cruise ship can, in theory, produce perfectly acceptable drinking water from seawater. Even 'blackwater' (ie raw sewerage), once treated aboard, is virtually indistinguishable from tap water (Teran 2007: 2). However cruise ships, to an extent, reject even this interaction with seawater as it costs more to run the machinery to change seawater into potable water than to purchase water; and when and where it is safe to do so, cruise lines acquire drinking water from land-based suppliers.

A cruise ship produces several streams of pollution that they are required to moderate. Copeland (2010: 3–6) identifies several streams of cruise ship waste, some of which include waterborne pollution including:

- Blackwater (or raw sewerage. A large ship can produce 15,000–30,000 gallons of raw sewerage per day)

- Graywater (the wastewater from sinks, laundry, galleys etc)

- Bilgewater (leaks from machinery mixed with water that gathers in the bilge, the lowest part of the ship with the two halves of the keel meet)

The International Maritime Organisation (IMO) implements the 1973 International Convention for the Prevention of Pollution from Ships, as modified by the Protocol of 1978, known as MARPOL 73/78. The flag of convenience country[8] must be a signatory to the IMO and to the various Annexes, which have been approved by the requisite number of countries. Of the six annexes of MARPOL 73/79, two are relevant to water pollution: Annex I regulates the prevention of pollution by oil and Annex IV the prevention of pollution by sewerage. Different countries have different regulations regarding the disposal of wastage. The Federal Water Pollution Control Act of the United States, for example, does not allow the disposal of oily water with less than 15ppm to be discharged within Exclusive Economic Zone (EEZ) which extends 200 miles offshore; nor does it allow raw sewerage to be discharged in its territorial waters which extend three miles from shore (Copeland 2010: 8, 13). However, when possible cruise ships hold blackwater aboard in holding tanks for shore-based treatment[9].

The cruise industry has a less-than-exemplary record of corporate citizenship in the realm of ocean pollution. In 1994, Royal Caribbean was found to have been habitually dumping untreated bilgewater into the ocean and falsifying records to cover it up. In 1999, they pled guilty to 21 felony counts of dumping oil and hazardous chemicals and one count of making a false statement to the US Coast Guard (Klein, 2002: 88-9). In 1999, Celebrity Cruises allegedly dumped perchloroethylene, a dry-cleaning solvent,

into San Francisco Bay (ibid: 91). The cruise industry has recently come under pressure from the United States, Canada (Unattributed, 2009: B6) and New Zealand (Davidson, 2012: 7) regarding the amount of sulphur in its fuels. Much of this pollution is unavoidable, however it cannot be denied that in 2005 the cruise industry emitted four billion gallons of pollution into the aquatic environment, an amount 350 times that of the Exxon Valdez disaster (US Federal News Service, 2006).

IV. Environmental Interactivity

Whether cruise lines wish it or not, cruise ships must interact with the physical environment of the sea. As seagoing vessels, the ship must operate safely and according to international and national law, a task undertaken by a cruise ship's relatively small deck department overseen by the staff captain. However, as far as the touristic experience is concerned, such interaction is hidden and actual interactivity between guests and the natural environment is typically accidental or mediated.

Paul Virilio (2006) famously proposed accidents as consequences. It is no accident (to consciously pun) that most passengers' connections with watery spaces (at least while out of port) are the result of accidental immersions and impacts. The passengers and crew of the SS *Titanic* were famously introduced to the cold waters of the north Atlantic by the mediating agency of the iceberg that caused rivets in the ship's hull to sheer off and water to gush in between its hull plates. The MV *Oceanos* introduced water into the vessel as a result of the failure of the sea chest, permitting the entrance of water where there should have been none, resulting in the ultimate failure of the ship. The *Costa Concordia* lost power after the flooding of the engine room and lost buoyancy due to the open state of the watertight doors (Squires, 2012: 16). In such situations, interaction with the aquatic environment is forced upon cruise ship guests and crew

Not all immersions are accidental; but such that occur are extremely moderated. Guests partake in the onboard water-based recreational facilities such as pools and water slides. Surprisingly (or perhaps unsurprisingly) shoreside swimming is not a regular pastime for guests, who may be unsure of what is in the water. If they occur, they usually take place on local 'tours'. However, many cruise lines advertise stops at "Unknown" Islands in the Caribbean, often leased from existing states. Royal Caribbean's 'Labadee' resort is, for example, leased from Haiti, while Disney Cruise Lines' 'Castaway Cay' is in the Bahamas. The environment of these locations is fundamentally altered. Castaway Cay, for example, had sand dredged from the middle of the bay, cleaned, ground up finely and deposited on the beach to align itself with Disney's image of the idyllic Caribbean island. It is "an island with no Caribbean people living on it… marketed as 'the best of the Caribbean', claiming to offer, not a little paradoxically, 'the total experience that can be found in the West Indies'" (Hall, 2004: 112). At these stops, guests are ferried ashore to swim and interact with an idealised 'Caribbean' island environment where drinks waiters wade waist-deep in azure waters bringing rum-based beverages to guests lounging on li-los. Staff members are typically shipboard staff rather than local Haitians or Bahamanians, which suits guests. Contact with local residents, observes Wood (2000: 360), is 'disturbing' to passengers. In these fabricated islands, there is little that is authentic (residents, names, even the sand) for cruise ship guests to interact with.

While the tendency for cruise ships is to turn guests' attention inwards in dealing with water, guests' tendency to enjoy scenery turns it outwards. Many cabins are designated as 'outside' cabins with small private balconies so that guests can sit and enjoy the scenery the ship passes. However even this interaction is at a distance. The necessity of keeping the ship watertight means that open balconies must be at least dozens of feet above the sea[10]. Some vessels even have cantilevered hot tubs so guests can watch the unfolding backdrop of the aquatic environment while enjoying the luxury of warm bubbly water with a drinks waiter nearby. This distance between observing tourist and observed environment mediates guest interaction with the water. It becomes impossible for guests to interact with the ocean. Rather than dealing with closely with the aquatic environment, the ocean is relegated to the status of a backdrop to the main activities of the cruise vacation.

V. Conceptual Cruising

In the manner of all shipping, cruise ships are necessarily linked to and physically enclosed by the sea. However cruise ships are unique from a cultural, social and quotidian viewpoint in also rejecting the sea, attempting to turn their temporary residents' attentions inward, distracting them with simulations of water or mediating interaction with the aquatic environment. Hayward's definition of the 'aquapelagic assemblage' necessarily emphasises the social aspects of the assemblage. In discussing the islands of Haida Gwaii as aquapelago, Hayward quotes the Council of the Haida, which has stated that "Haida culture is intertwined with all of creation in the land, sea, air and spirit worlds. Life in the ocean around us is essential to our well-being and it nourishes all of the communities of Haida Gwaii" cited in (Hayward, 2011b: 5). By contrast, neither temporary (nor semi-permanent) residents of cruise ships have such a relationship with the natural environment of the cruise. The opportunity may not arise as some guests never leave the ship in port and few workers have the luxury of getting off in port during their working ours. Weaver (2005) refers to cruise ship as effectively mobile tourist enclaves and spaces concerned with containment and revenue capture. Such terms, associated with confinement and exclusion are unlikely to be used for an aquapelagic society. Terrestrial concepts of society and culture are of limited relevance onboard a cruise ship. The vast majority of the society (and the more important social class) are guests—temporary residents from a number of nations, predominantly the United States[11]. The semi-permanent residents (ie staff) of these ships are also from many countries and cultures, predominantly the Philippines, Costa Rica and Eastern Europe (Dickinson and Vladimir, 2008: 64). Instead of integrating to form a single multi-culture, in the manner of an aquapelago, the residents of this society often fragment into linguistically and ethnically comprised social 'islands', referred to onboard as "mafias" (Bruns 2008).

Cruise lines do not encourage interactivity with the aquatic environment of the sea. Instead they promote the ship as the main destination of a cruise vacation rather than the ports visited or the maritime environments that convey the ship. As a result, passengers have varied reactions to the destinations. Some passengers choose not to leave the ship at all in port (Weaver, 2005: 170-171) but rather stay onboard using the ship as a resort. Others stay in a well defined "tourist bubble" in the port area (Jaakson 2004). If they venture outside of this port area, many do so in ship-sponsored tours, which comprise an extension of the cultural, social and physical cocoon of the ship. This lack of interaction is unsurprising given Hung and Petrick's (2011) finding that the

most important reason for people to cruise is "Self-esteem and social recognition" (ie "doing something that impresses others") and the least important was "Learning/Discovery". Such attitudes suit the cruise industry as the more time guests spend onboard the ship, focussed internally, the more revenue the cruise industry generates. While the industry is often at pains to describe its careful approach to environmental concerns (Dickinson and Vladimir, 2008: 76-78); the reality is that cruise ships are large and complex pieces of mobile machinery with thousands of people on board. Despite a more successful (and government-enforced) recent record of environmental compliance, cruise ships continue pollute the aquatic environment in a manner antithetical to that of global, oceanically-aware, corporate citizens.

Conclusion

Unlike an aquatic assemblage, cruise ships do not co-exist with the ocean environment, but subvert and dominate it while mediating contact with cruise ship guests. Cruise ships are a manufactured space with no terrestrial geographical or social counterpart. In order to make large profits for the ship, and to assure passengers of their safety, cruise ships distract their guests, focussing them inward. Island paradises are manufactured, water features and interactions are fabricated and the ocean becomes a thematic accompaniment to the more serious occupations of relaxing, consuming and being entertained.

The *Costa Concordia* disaster can be regarded as a casualty of the relationship between the sea and the cruise industry. The disaster appears to have initiated because Captain Schettino took his enormous vessel too close to the shore of Isola del Giglio, striking an unmarked rock and inundating the engine compartment. In effect, Schettino, safe on the bridge of this large and technologically advanced vessel, does not appear to have considered that the sea *could* affect his vessel so catastrophically. Equally, the 3,206 guests and 1,023 crew, their attention turned inwards to the luxury and lights of the ship, barely noticed the sea or the island until their safety was compromised. The company, following standard industry practice, scheduled the lifeboat drill within twenty-four hours on the morning after departure, so remote was considered a disaster. With so many assumptions of safety and security, the shock when this enormous ship ran aground, lost power, drifted back into Giglio harbour and capsized, killing thirty-two, was so profound it adversely affected the worldwide cruise bookings (Wright, 2012: 17).

The worldwide cruise industry is a highly profitable and robust tourism sector. However travel aboard a ship is not centred on interaction with the destination but is, rather, premised on the interposition of the cruise industry—almost as an interpreter—between the guest and the destinations. If cruise ship is regarded as a postmodern tourism experience, it becomes self-contained, a barrier to interaction with the oceanic environment and the antithesis of the concept of the aquapelagic assemblage.

Endnotes

[1] See Maxwell (2012) for a discussion of chronologies in an aquapelagic context.

[2] On 13 January 2012 at about 9.45pm, the MV *Costa Concordia*, a 114,137GRT cruise ship operated by Costa Crociere, struck a rock and partially sank off the Italian Isola del Giglio, in the Tyrrhenian Sea. It was grounded and partially capsized off the

harbour for the main town, Giglio Porto. Thirty-two passengers and crew died in the disaster.

[3] On 10 February 2013 at 5.30am, the MV *Carnival Triumph*, a 101,509GRT cruise ship operated by Carnival Cruise Lines, suffered an engine fire in the Caribbean resulting in loss of propulsion and power. Although some power was restored the next day, the ship did not reach the port of Mobile, Alabama until 9.20pm on 14 February 2013. This parallels, in some respects, the fire on the MV *Costa Allegra*, which suffered a generator fire on 27 February 2012 off the coast of Africa and took three days to reach Port Victoria on the island of Mahe in the Seychelles.

[4] A wave-making device designed for bounded pool spaces, originated by surfer Tom Lochtefeld in 1991 (see Lochtefeld, nd: online for background).

[5] Kronenberg (2012) calls these 'adapted spaces'.

[6] Gross Register Tonnage (GRT) is a measure of the internal capacity of the ship; one GRT is equivalent to 100 cubic feet (2.83m2). Gross Register Tonnage is the standard method of indicating the size of a ship. The SS *Titanic*, for example, was 46,328GRT and the MV *Oasis of the Seas*, the largest passenger ship ever built, is 225,282GRT. The supertanker *Seawise Giant*, the largest ship ever built, was 260,941GRT.

[7] The *Sovereign* was described as having the first atrium at sea (Hemphill, 1988), however Payne (1990: 8) notes the atriums of the *France* (1912), *Paris* (1921) and *Île de France* (1924).

[8] The Flag of Convenience is a system that permits ships to be registered in foreign countries, thereby being run according to that country's laws. Popular FoC countries are Liberia, the Bahamas, the Cayman Islands and Panama.

[9] Cruise ships hold blackwater aboard for an average of 62 hours (United States Environmental Protection Agency, 2009: 9).

[10] Traditional ocean liners (such as the RMS *Queen Elizabeth 2*) did not include balconies at all.

[11] Of the 15 million people who undertook a cruise in 2011, 11.1 million were from North America (Florida-Caribbean Cruise Association, 2011: 6)

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