

A Cultural and Historical Narrative of the *Titanic*

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Honors Thesis

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## Introduction

Unlike the little engine that could make it up the steep hill, the *Titanic* could not make it across the vast Atlantic, and yet it has fascinated and inspired people for generations. By definition, the word “titanic” means monumental, gigantic, or colossal. When people hear the word, however, they do not think of its literal meaning, but associate it with the ship that suffered a tremendous tragedy. The story of the *Titanic* did not end the night it sank on a frigid night more than one-hundred years ago. Indeed, it is a never-ending story that has been added to and changed revised. The story of the *Titanic* is made up of witness accounts, discoveries made by modern technology, and society’s perceptions that fit together like pieces of a puzzle in the same way the pieces of the wreckage once fit together to make up the ship. Even though the survivors have long since passed on, and the once elegant ship slowly decays into dust, there are movies, documentaries, and plentiful museums that continue to spark interest and captivate the imagination of the audience.

This thesis examines the cultural and historical narratives of the *Titanic*. More than providing a general overview or a part of the story, it scrutinizes several themes that have woven the story together: cultural representation, the role of technology, and questions of preservation. In studying how the *Titanic* was represented in culture and in society, the thesis will explore how the media’s reporting of the disaster originally shaped people’s perceptions and how the survivors’ accounts similarly shaped the original knowledge about the sinking. The role technology has played in redefining the *Titanic*’s history is a third important theme of this thesis. Present-day technical knowledge of the *Titanic* differed considerable from the past and cultural attitudes have changed people’s of view the *Titanic* over the years. Finally, it will explore and

question what the next century holds for the *Titanic* in terms of preservation for future generations.

There are countless books, articles, documentaries, and websites that deal with different aspects of the *Titanic* and its story. Based on the sheer amount of information and studies done on the subject, the sinking of the *Titanic* is probably one of the most written about events in modern history. There is seemingly no end to the information, theories, discoveries, and thoughts available at the touch of the world's fingertips. At times, it can seem that there is too much information and many times the information is repetitive. Each type of information, book, documentary, etc., fits into different categories. There are many books, including children's books, which give a general overview of what happened with some witness accounts and diagrams. Since the discovery of the remains of the ship in 1985 reignited interest in the shipwreck, there have been numerous expeditions to the site to explore and understand the sinking. Therefore, many books deal exclusively with the modern day activities concerning the ship, such as analyzing and interpreting the copious amounts of data. A few books have been written about how the ship was built and all of the plans and human labor that went in to the ship. Still other books have been written about the cultural legacy of the ship and in what ways it has influenced society. Entire websites have been dedicated to the *Titanic*, which contain a plethora of information on passengers, witness accounts, and court testimony on the sinking. Below is a sample of some of the many books that have been written about the *Titanic*, what their focuses are, and which will be used as sources of information for the thesis.

There are books that deal with the cultural and social aspects of the *Titanic* story both at the time of the disaster and afterward. *Down with the Old Canoe* by Steven Biel, for example,

examines how and why the disaster impacted the world in the decades following the sinking.<sup>1</sup> The book looks at how society reacted to the news of the sinking, how the story became romanticized, the plethora of *Titanic* enthusiasts over the years, and it also touches on the role of technology past and present. Another book, Paul Heyer's *Titanic Legacy: Disaster as Media Event and Myth*, examines the relationship between the *Titanic* and the media over the years. The book looks at the circumstances that created the concept of large liners, and how radio and telegraph were impacted by the *Titanic*'s sinking. The last part of the book examines how the *Titanic* was covered in the news and how the *Titanic* has been presented in different forms of media, like movies and books, since the ship went down.<sup>2</sup> Wyn Graig Wade's *The Titanic: End of a Dream* chronicles the story of the *Titanic* from the building of the ship through the aftermath. It discusses the building of the ship, the voyage, the sinking, and the news reports, and the investigations that took place afterward. These books all argue how culture and society at the time of the tragedy affected the telling of the story.<sup>3</sup>

Two books that deal with the discovery of the wreck and later expeditions that visited it are Dr. Robert Ballard's *The Discovery of the Titanic* and *Return to Titanic*. *The Discovery of the Titanic* gives a brief history of what happened the night of the sinking and talks about the beginnings of Ballard's interest in the shipwreck, and how he began his search. It also covers other attempts to find the ship before his expedition, and then provides a detailed account of his team's discovery of the ship and exploration of the wreck. The book finally discusses how the discovery of the wreck showed that the *Titanic* broke apart and did not go down intact as

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<sup>1</sup> Steven Biel, *Down With the Old Canoe. A Cultural History of the Titanic Disaster* (New York: W.W.Norton & Co, 1996).

<sup>2</sup> Paul Heyer. *Titanic Legacy: Disaster as Media Event and Myth* (Westport, CT: Praeger, 1995).

<sup>3</sup> Wyn Craig Wade. *The Titanic: End of a Dream* (New York: Penguin Books, 1986).

previously thought. This discovery raised new questions of how the ship went down.<sup>4</sup> *Return to Titanic* covers Ballard's return to the wreck in 2004.<sup>5</sup> It recovers the events of the first expedition, talks about the media frenzy that was stirred by the discovery, and discusses the controversy of whether to leave the *Titanic* wreckage alone or to salvage artifacts. It then discusses the evolution of underwater technology, which was a crucial part of discovering the *Titanic*. Finally, it details the 2004 expedition, which mapped and examined the site in more detail with newer technology, and talks about the deterioration of the ship.

One book that looks exclusively at the construction of the *Titanic* is Rod Green's *Building the Titanic: An Epic Tale of the Creation of History's Most Famous Ocean Liner*. The book examines how and why the ship was constructed and discusses the people and companies involved in building the *Titanic*. The book also covers the process of construction as well as describes the layout of the *Titanic*. Finally, it details the amenities the *Titanic* offered its passengers and how they differed from other similar passenger liners.<sup>6</sup>

Other books deal exclusively with theories about the sinking of the *Titanic* and involve scientific research. Two examples are *What Really Sank the Titanic* by Jennifer Hooper McCarthy and Tim Foecke and *Report in the Loss of the SS Titanic: A Centennial Reappraisal* written by Samuel Halpern. *What Really Sank the Titanic* takes a detailed forensic look at the *Titanic* and its wreckage by examining how the *Titanic* was built and uses scientific forensics to scrutinize several theories about the sinking.<sup>7</sup> *Report in the Loss of the SS Titanic: A Centennial*

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<sup>4</sup> Robert D. Ballard and Rick Archbold. *The Discovery of the Titanic* (Toronto: Madison Press Books, 1998).

<sup>5</sup> Robert D. Ballard and Michael S. Sweeney. *Return to Titanic: a new look at the world's most famous lost ship* (Washington, D.C.: National Geographic, 2004).

<sup>6</sup> Green, Rod. *Building the Titanic : an epic tale of the creation of history's most famous ocean liner*. (Pleasantville: Reader's Digest, 2005).

<sup>7</sup> Jennifer Hooper McCarthy and Tim Foecke. *What Really Sank the Titanic: New Forensic Discoveries* (New York: Citadel Press Books, 2008).

*Reappraisal* examines the inquiries into the disaster, the ship's design, the damage to the ship, the theories surrounding the sinking, as well as several other issues.<sup>8</sup> These books summarize the copious amounts of data about the ship and its wreckage that have been gathered over the years.

Several useful books cover a wide variety of subjects concerning the *Titanic*. *Unsinkable: The full Story of the RMS Titanic* by Daniel Allen Butler chronicles the entire story of the *Titanic*: when it was built, the sinking, the inquiries, and the discovery of the wreck.<sup>9</sup> *A Night Remembered* by Stephanie Barczewski details the *Titanic*'s maiden voyage, sinking, and immediate aftermath of the disaster. It also studies certain people and places related to the *Titanic*'s story in depth, such as the Captain of the *Titanic* and the shipyard in Belfast where the ship was built.<sup>10</sup> *Titanic: Triumph and Tragedy* by John Eaton and Charles Haas also chronicles the extensive story of the *Titanic* by examining the ship's design, voyage, and sinking. It also discusses the discovery of the wreck, several expeditions that have since visited the site, and the controversy that surrounded the recovery and preservation of artifacts from the wreck.<sup>11</sup>

My thesis will discuss the literature presented above, but it also relies on primary sources. There are several websites that offer primary sources of information. Newspapers from April 1912 are an important source because they show how the sinking was originally reported and how details emerged and changed. The Library of Congress website has archived thousands of newspaper pages from around the country that cover the sailing and sinking of the *Titanic* that can be found with a search of the word *Titanic* and sorted by date.<sup>12</sup> Investigations into the sinking to try to determine what exactly happened that night included survivors' testimony. The

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<sup>8</sup> Halpern, Samuel. *Report into the loss of the SS Titanic: a centennial reappraisal*. (Stroud.: History Press, 2011).

<sup>9</sup> Butler, Daniel Allen. *Unsinkable : The Full Story of the RMS Titanic*. (New York: Da Capo Press, 2012).

<sup>10</sup> Barczewski, Stephanie L.. *Titanic: A Night Remembered*. (London: Hambledon and London, 2004).

<sup>11</sup> Eaton, John P., and Charles A. Haas. *Titanic, Triumph and Tragedy*. New York: Norton, 1998).

<sup>12</sup> Search Results for 'Titanic'. Date range: 4-15-1912 to 5/01/1913. From Library of Congress.



*Titanic Inquiry Project* website archives all the inquiries into the tragedy that took place in the United States and United Kingdom and the testimonies given by survivors.<sup>13</sup> Knowing how many passengers and crew were on board, how many were in each class, and other ship details are also important to this thesis. Another website, *Encyclopedia Titanica*, has detailed information about how many people were aboard the ship, who they were, and what happened to them along with other information about the ship.<sup>14</sup>

The first chapter of my thesis discusses the cultural meaning of the *Titanic* before its departure and during its voyage. There was a reason people believed the *Titanic* was unsinkable. The ship was a symbol of Anglo-American maritime power and represented the advancement of technology, since it was the biggest and the most luxurious of its time. Thus, the beginning of the chapter discusses the role of technology in how the ship was built. It will also highlight how luxury and the amenities onboard catered to the higher classes. The second part of the chapter will lead into the actual story of what happened the night the *Titanic* sank.

The chapter uses books like *A Night to Remember* and *Ghosts of the Titanic* as well as testimony given by survivors about the sinking, found on the Web and in the book *The Titanic: End of a Dream*. It also relies on newspaper articles that sketch a picture of how the story of the *Titanic* first began. This information is important because what was said and reported at the time established how the sinking of the *Titanic* was perceived for decades. As mentioned before, most believed that the *Titanic* went down as one whole ship and it was a fact that was not questioned or disputed save for a handful of survivors who thought otherwise. Class and male chivalry, also

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<sup>13</sup> “Titanic Inquiry Project: Electronic Copies of the Inquiries into the Disaster” *Titanic Inquiry Project*, <http://www.titanicinquiry.org/>

<sup>14</sup> “Encyclopedia Titanica: RMS Titanic Passengers and Crew Research” *Encyclopedia Titanica*, <http://www.encyclopedia-titanica.org>

helped shape the story for many years. Its influence on the perception of the *Titanic* is still seen today. *Down with the Old Canoe* is a useful source of information about the how the story of the ship was shaped by society at the time.

The second chapter examines how the media and inquiries constructed the story of the *Titanic*. It will discuss the media reports of the sinking, the survivor accounts, and court testimonies. First, the chapter will cover the American and British inquiries into the sinking, what their reports concluded, and the impact these reports had on the public. It will also discuss how the press reported the aftermath of the tragedy. The Edwardian media often created a romantic telling of the *Titanic*'s story that mixed myth with fact, and reflect the norms and values of Edwardian class and society. Finally, the chapter will look at how fascination with the sunken ship continued for decades after the tragedy and is primarily based on accounts of 1912. This chapter will focus on people, not only on the survivors of the *Titanic* but also on how the world, especially the United States and the United Kingdom, reacted to the disaster and the assumptions they made.

Both of Paul Heyer's books, *Titanic Legacy: Disaster as Media Event and Myth* and *Titanic Century*, are useful for this chapter because they look at how different forms of media have dealt with the subject of the *Titanic* over the years. This is important information because the media have kept the story in the public interest for so long. There are many books and movies, fictional and non-fictional, that date before 1985, with the most well-known being the film version of *A Night to Remember*. The discovery of the wreck renewed the public's fascination with the story and gave media new information to use. Not only did historians and scientists write about the newly found wreckage but they also made numerous documentaries

about how the ship hit the iceberg and how it broke apart while sinking. Several new movies that tell the tale of the sinking, both made for television and cinema, have been created as well. For instance, James Cameron's *Titanic*, released in 1997, is a unique mixing of non-fictional history with a fictional storyline. It is now probably a more well-known *Titanic* movie than *A Night to Remember*. Media have greatly helped to change our understanding of the *Titanic*.

The third chapter discusses finding the wreck of the *Titanic* in 1985 and explores the impact of this discovery on history. No longer was the ship a tragic tale, or a lost shipwreck. The *Titanic* suddenly began a new voyage into the modern day. As soon as the wreckage was found, scientists and historians wanted to employ forensics to find every detail of the ship to try to uncover how and why it broke apart. Technology played a crucial role in the *Titanic*'s history, from its conception to the discovery of the wreck. This chapter examines how advancements in technology helped change our knowledge of the sinking. It scrutinizes a plethora of theories dealing with questions about how steep of an angle the stern rose to before it submerged, whether a coal fire in the ship contributed to the tragedy, how atmospheric conditions reduced visibility of icebergs, why the wreckage of the bow and stern look so different from each other, as well as other theories. Even as recently as the 100<sup>th</sup> anniversary in 2012, new information has come to light about the shipwreck. This chapter demonstrates that technology applied to the shipwreck provided new insights and into how the ship sank.

Dr. Robert Ballard's books, *The Discovery of the Titanic* and *Return to Titanic*, along with the book *What Really Sank the Titanic*, will be used to show that Ballard's discovery of the wreck changed our understanding of the sinking and what we thought we knew about the *Titanic* almost overnight. This discovery that the *Titanic* was not intact when it sank was made possible

by modern technology. The books will be used to show how technology has had a tremendous impact on how the story of the ship has evolved in recent times. Using technology, like scanning the wreckage and creating computer-generated simulations, has allowed old theories to be reexamined and new theories to be formed and tested.

The fourth chapter probes how the legacy of the *Titanic* might continue into the future. Preservation is more than just writing history books and learning lessons from mistakes. There are many museums around the world, permanent and traveling exhibitions, dedicated to the preservation of the *Titanic*'s legacy. Preservation of the ship is not without some controversy, however. Some people believe that since the wreck site is essentially a graveyard, it should be, and should have been, left alone except for careful and respectful visits to the wreck's final resting places. Others believe that artifacts should be raised and preserved in museums. The U.S. and other countries have made laws and treaties to protect the site that have been considered and/or signed by some countries, including the United States. Finally, the decay of the *Titanic* has been quite visible over the past few decades; it is inevitable that the *Titanic* will disappear eventually. The chapter will therefore discuss when that might happen and if it can be delayed.

This thesis will attempt to use much of the information currently available to give insight into the main themes of the *Titanic*'s story. The themes of culture, technology, and preservation have influenced how the story has unfolded. There are almost endless ways to study a particular topic and the *Titanic* is no exception. Over the decades, some works have focused on one aspect or another of the *Titanic*, like the discovery of the shipwreck or the night of the sinking. Other works have looked at the story as a whole. Much has changed over the past hundred years but also in recent times. Part of the fascination in the *Titanic* is that people have been able to see

history unfold in front of their eyes. The disaster happened long ago yet the story has been kept alive through movies, books, and museums that have given people an opportunity to step into the past without leaving the present. This thesis hopes to tie together different aspects and themes, from society's impact on the origin of the story to the role of technology in finding out the ship's secrets, in order to show the evolution of the story from one end of the twentieth century to the other.

## Chapter 1: From Splendor to Wreck

The *Titanic* was a symbol of British and American power and pride. The ship was built for the White Star Line in Ireland by the shipbuilders Harland & Wolff, it was staffed and crewed by many British men and women, and its maiden voyage started from England. Many Americans traveled aboard the *Titanic*, but it is a little known fact that the International Mercantile Maritime consortium, a wholly American company, actually owned the White Star Line.<sup>15</sup> Therefore, both Americans and British had a vested interest in the *Titanic* and its success. They had no reason at all to doubt that anything would go amiss since the Olympic, *Titanic*'s sister-ship, which had debuted in 1911, had performed excellently.

The *Titanic* as a symbol of Anglo-American power and influence can be seen through different lenses. The ship was a showcase of modern technology, with things like electrically operated watertight doors and a powerful wireless transmitter that could send and receive telegraphs between 500 and 2,000 miles away depending on the time of day.<sup>16</sup> When the ship sank, the world was incredulous at how the best of technology could fail. I argue, however, that “failed” technology was not the major reason that the ship went down. Rather, British and American feelings of superiority contributed as much to the sinking of the ship – if not more – than the flooding and failure of the supposedly watertight doors and compartments. Indeed, if anything, the *Titanic* was a micro cosmos of British Empire, mirroring English class society and its infallible belief in the knowledge and power of its upper classes.

In 1912, the *Titanic* was quite impressive for its day. The ship was fitted with some of the best technology had to offer: thousands of electric lights, elevators, watertight doors at the

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<sup>15</sup> Barczewski, *A Night Remembered*, 80.

<sup>16</sup> Heyer, *Titanic Legacy*, 37.

bottom of the ship that could be closed by a button at the top, and a powerful radio that could reach the corners of the earth at night. Fancy accommodations that used electricity, such as elevators and fans for the upper-class, were relatively new phenomena aboard a ship.<sup>17</sup> The use of the latest technology made those traveling aboard the *Titanic* feel at ease and safe. In 1912, shipwrecks and wooden boats belonged to the past. To be sure, ships of steel collided, but they were still much sturdier than wood. Large steam-powered metal liners such as the *Titanic* were too safe to sink, and passengers never imagined it could be otherwise.

The *Titanic* was the largest ship in the world when it sailed; it was 90 feet longer than the previous largest ships, *Mauretania* and *Lusitania* of the Cunard line, White Star Line's competitor.<sup>18</sup> The ship was 92 ½ feet wide by 852 ½ feet long<sup>19</sup>, which is about the size of an eleven-story building.<sup>20</sup> "Everything about the *Titanic* was on a grand scale: a locomotive could pass through each funnel, and a double-decker tramcar through each of its twenty-nine boilers. Its rudder was longer than a cricket pitch, and its anchors weighted fifteen tons each."<sup>21</sup> The *Titanic* was held together by millions of rivets that in total weighted over 1,000 tons, and it was steered by a building sized rudder that was 101 tons heavy.<sup>22</sup> There were more than a dozen watertight compartments, which would later stir up so much controversy and discussion, that could be sealed off one by one by the crew or all at the same time by a simple flip of a switch from the bridge.<sup>23</sup>

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<sup>17</sup> Wade, *End of a Dream*, 20.

<sup>18</sup> Green, *Building the Titanic*, 48.

<sup>19</sup> Last Night of a Small Town 22.

<sup>20</sup> Wade, *End of a Dream*, 19.

<sup>21</sup> Barczewski, *A Night Remembered*, 1.

<sup>22</sup> Wade, *End of a Dream*, 19.

<sup>23</sup> *Ibid.*, 20.

However, to save some money and make it easier for any passengers and crew to traverse the ship it was decided that the bulkheads for the watertight compartments would only be a certain height. This meant that some of the bulkheads' height would only barely be above the ship's waterline.<sup>24</sup> If a handful of compartments were flooded, the ship would probably be fine but if six or more became flooded, the water would rise too high, rush over the tops of the bulkheads, and engulf more compartments. This scenario never occurred to anyone because the mentality of the time was that since the ship was so big and well built, it was infeasible that any sort of collision could be catastrophic enough to sink the ship.

British and American trust in the *Titanic*'s technological superiority, however, led to a neglect of adequate safety features. The most obvious neglect of safety was the insufficient number of lifeboats. The *Titanic* could hold about 3,300 people on board at maximum. There were supposed to be forty-eight lifeboats allotted to the ship, but even if all forty-eight boats could hold sixty-five people each, they would fall almost 200 people short of carrying all passengers and crew. White Star Line and Harland & Wolff decided to cut the number of lifeboats to a mere twenty;<sup>25</sup> four more lifeboats than regulations required.<sup>26</sup> The meager 20 lifeboats allotted for the ship consisted of four collapsible boats capable of carrying 47 people each, 14 regular boats with a capacity of 65 each, and two smaller boats that could carry 40 people each. Consequently, the maximum amount of people that could escape the ship in lifeboats was not even 1,200 out of 3,300.<sup>27</sup> Indeed, the regulations for the required number of

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<sup>24</sup> Barczewski, *A Night Remembered*, 3.

<sup>25</sup> Ibid.

<sup>26</sup> Ibid.

<sup>27</sup> Ibid.



lifeboats were two decades old and did not take into account the large increases in the size of passenger liners over the years.<sup>28</sup>

A second major failing was the fact that the watertight bulkheads, essentially heavy metal doors that could be shut to seal off each section of the ship in case of flooding, only were tall enough to go up a few decks from the bottom of the ship. Therefore, the bulkheads were only above the waterline by 15 feet, which meant that if more than 5 or 6 sections had damage enough to let water in and the *Titanic* sunk too low, the water would rise above the tops of the bulkheads and spill over to the next section like filling an ice cube tray.<sup>29</sup> The designers assumed that this could not happen because it had not happened before and most likely the design saved on cost as well. The *Titanic* was praised for her technology which many people assumed made her completely safe and nearly impossible to sink.<sup>30</sup> Yet, just two of the deficiencies of the *Titanic*, inadequate lifeboats and training and inadequate watertight doors, played the heaviest roles in her loss of life and sinking. Ultimately, human error and complacency led to the inadequacy and failing of technology aboard the *Titanic*.

The little details were of the utmost importance to the builders of the *Titanic*, Harland & Wolff, and the passenger line it belonged to, White Star Line. Bruce Ismay, chairman and director of White Star Line, went on the maiden voyage of *Titanic*'s sister ship *Olympic* and utilized the trip as a sort of trial run for the *Titanic*'s upcoming maiden voyage. Ismay took copious notes of where improvements and changes could be made to the *Titanic* before it officially sailed.<sup>31</sup> Ismay recommended that extra deck space be converted into more rooms for

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<sup>28</sup> Green, *Building the Titanic*, 112.

<sup>29</sup> Barczewski, *A Night Remembered*, 3.

<sup>30</sup> Wade, *End of a Dream*, 20.

<sup>31</sup> *Ibid.*, 18.

the first-class, and that a reception area next to the first-class dining room should be enlarged to the benefit of those passengers.<sup>32</sup> Ismay's recommendations could also be truly trivial. He ordered firmer mattresses, cigar holders in the first-class bathrooms, and an electric potato peeler was required in the kitchen to keep up with the pace of the crew's galley.<sup>33</sup> The costs of making these changes and additions must have been well worthwhile to White Star Line that sought the satisfaction of its wealthy passengers. Whereas too many lifeboats were deemed an unnecessary cost and would take up too much space detracting from the clean and neat look of the ship, no expenses were spared for luxury accommodations.<sup>34</sup> A director for Harland & Wolff commented that during a planning meeting, hours had been spent talking about such matters as carpeting but only a few minutes were spent on the lifeboats.<sup>35</sup>

The ship hosted 735 first-class, 674 second-class, and 1,024 third-class passengers.<sup>36</sup> Third-class cabins were bare bones compared to second and first-class rooms, but they still had amenities that were luxurious compared to other passenger liners and could be considered equivalent to second-class cabins on other ships.<sup>37</sup> The second-class cabins boasted such amenities as mahogany furniture, covered floors, electric lights, and wood paneling which made the *Titanic's* second-class rooms equivalent to first-class rooms on other company's passenger liners.<sup>38</sup> First-class cabins and suites were lavish. The most luxurious suites were similar to mini-apartments decorated in various styles from different periods in history with multiple rooms that were equipped with luxurious amenities, such as fireplaces, ceiling fans, large beds, reading

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<sup>32</sup> Wade, *End of a Dream*, 18.

<sup>33</sup> Ibid.

<sup>34</sup> Barczewski, *A Night Remembered*, 2.

<sup>35</sup> Ibid., 3.

<sup>36</sup> Wade, *End of a Dream*, 19-20.

<sup>37</sup> Green, *Building the Titanic*, 59.

<sup>38</sup> Ibid.

lights, and furnishings made of the finest woods.<sup>39</sup> Although the first-class had the best of everything including extra lavish meals, all three classes were well fed and had meals considered extravagant for their particular class.

Before 1912, swimming pools aboard a passenger liner were unheard of, but White Star Line decided that for its pride and joy, the *Titanic* should have a heated indoor swimming pool for its first-class.<sup>40</sup> The ship also housed a gymnasium, a Turkish bath, a squash racket court, a fully equipped hospital, barber shops, even darkrooms for photographers, as well as elevators along with countless public areas dedicated to certain activities for the passengers.<sup>41</sup> None of these accommodations would do anyone much good if the ship sank, but since a grand ship like the *Titanic* could not, safety features could be skimped on to save money that could be put into more important features, like cigar holders in the washroom. This reflects the values of Edwardian society and the importance that was placed on pleasing the upper classes.

Ushering in a new century, the *Titanic* was touted for its newness and bigness and advertised to be the most luxurious. Air travel, although an exciting feat of technology, was in its infancy and would not become mainstream until many years later. Travel by sea was tried and true because it had been used for centuries. A floating hotel with all the bells and whistles such as the *Titanic* made sea travel exciting. The *Titanic* was therefore a beacon of prosperity for many British and American passengers. Although the *Titanic* was most well-known as a floating luxury hotel, its main purpose was to transport passengers across the Atlantic from Great Britain to New York and vice versa. There was no other or better way to travel between the continents. The fleet of ships that *Titanic* was part of would become extremely important in the next few

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<sup>39</sup> Green, *Building the Titanic*, 68.

<sup>40</sup> *Ibid.*, 61.

<sup>41</sup> Wade, *End of a Dream*, 20-21.

years. The sister ships of *Titanic*, *Olympic* and the later built *Britannic*, would serve important roles in World War I as the former would become a troop ship and the latter a hospital ship. Unfortunately, the *Britannic* would meet a similar fate as the *Titanic*.<sup>42</sup> If the *Titanic* had survived its maiden voyage, it most likely would have served the allied forces with its sister ships.

To lure customers, White Star Line promoted the *Titanic* in advertisements by comparing the ship's size to famous buildings both tall and historical.<sup>43</sup> Advertising the *Titanic* next to American skyscrapers and historical monuments, like the pyramids in Egypt, showed the grandeur of the ship and gave it, "cultural prestige."<sup>44</sup> Reiger argues that another purpose for contrasting the ship against famous buildings was that:

...it introduced a historical and geographical narrative: not only did the ship's central position between architectural examples from the "old" and the "new" worlds suggest that liners physical maintained ties between America and the locations where "western civilization" had originated; the card [advertisement] also placed the vessel prominently among revered artifacts of both the past *and* the "modern" present.<sup>45</sup>

What better way to symbolize Anglo-American power than by likening the *Titanic* to a floating skyscraper influenced in its design by ancient monuments?

### **The Voyage**

There was a good deal of hype surrounding the *Titanic*'s maiden voyage before it even began. The journal *Shipbuilder* had been so impressed with the *Titanic*'s construction that it had famously dubbed the ship 'practically unsinkable.'<sup>46</sup> It was a phrase that would be shortened to

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<sup>42</sup> "Sister Ships." [http://www.starway.org/Titanic/Sister\\_Ships.html](http://www.starway.org/Titanic/Sister_Ships.html)

<sup>43</sup> Rieger, Bernhard. *Technology and the Culture of Modernity in Britain and Germany, 1890-1945* (Cambridge: Cambridge University Press, 2005), 43.

<sup>44</sup> Ibid.

<sup>45</sup> Ibid.

<sup>46</sup> Barczewski, *A Night Remembered*, 2.

‘unsinkable’ by many after the ship’s sinking to highlight how unbelievable the disaster was. The *Titanic* was not simply another passenger liner because it was luxury on the high seas. It was the sister ship to the *Olympic* which had launched the previous year; only newer and improved. Many newspapers featured articles about the upcoming maiden voyage. *The New York Times* featured a short article the day the *Titanic* sailed with a list of some of the most wealthy and famous traveling aboard the maiden voyage.<sup>47</sup>

Another newspaper, from Texas, wrote, “With her passenger accommodations taxed to the utmost, the giant liner *Titanic*, sistership of the *Olympic*, sailed today on her maiden voyage to New York. The *Titanic* made an excellent record in her speed trials and she is expected to be able to show her heels to the fastest ships afloat.”<sup>48</sup> In fact, the *Titanic* carried neither a full load of passengers, since the ship was not filled to capacity.<sup>49</sup> Nor was the ship able to “show her heels” to the fastest ships because the *Titanic*’s top speed was slower than some other liners.<sup>50</sup> *The Tacoma Times* wrote that although the *Olympic* and *Titanic* were much slower by several knots an hour than some other liners, they were the best ships since the liners *Lusitania* and *Mauretania* and, “...the last word in the way of comfort and luxury...”<sup>51</sup> *The Sun*, a New York paper, included an article in its March issue about the grandeur of the *Titanic* and how it was more lavish than the *Olympic* with larger sized staterooms for the first class as well as a bigger restaurant. Its most expensive rooms were like small homes with their own promenades.<sup>52</sup> The media buzz surrounding the departure of the *Titanic* made the fateful trip become famous even before it sank.

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<sup>47</sup> “The Titanic Sails Today.” *Nytimes.com*, published April 10, 1912, <http://query.nytimes.com/mem/archive-free/pdf?res=940DEEDB1F31E233A25753C1A9629C946396D6CF>

<sup>48</sup> Bryan Daily Eagle and Pilot., April 10, 1912, Image 1 (From Library of Congress Search)

<sup>49</sup> Wade, *End of a Dream*, 25-26.

<sup>50</sup> Butler, *Unsinkable*, 21.

<sup>51</sup> The Tacoma Times., March 04, 1912, Page 6, Image 6 (From Library of Congress Search)

<sup>52</sup> The Sun., March 17, 1912, SECOND SECTION, Image 17 (From Library of Congress Search)

In a grand fashion, the *Titanic* blew its horns at 12 p.m. the 10<sup>th</sup> day of April 1912 to signal its departure from Southampton, England, on its maiden voyage, but not after almost colliding with a ship called the *New York* while exiting the port.<sup>53</sup> Before the ship would make its venture across the Atlantic to its final destination of New York City, the *Titanic* made two small stops. The *Titanic* made a trip across the English Channel to arrive at Cherbourg, a French port, later the same day to pick up more passengers.<sup>54</sup> The morning of April 11 the ship sailed north from Cherbourg into the port of Queenstown in Ireland, which was renamed Cobh some years later, to welcome the last passengers on board before setting out to cross the Atlantic.<sup>55</sup> Little could anyone aboard guess that less than five days later the *Titanic* would reach a very different destination than the land of America.

While the passengers enjoyed the many accommodations and good food, the *Titanic* slowly but surely made its way across the ocean at 22 knots an hour and from the 11<sup>th</sup> through the 13<sup>th</sup> became almost 1,500 miles closer to New York City.<sup>56</sup> Every Sunday captain Edward John Smith ran lifeboat drills, but on April 14 he decided to cancel the practice and attend church service instead.<sup>57</sup> Perhaps running the one drill might not have made a large difference with how the lifeboats were operated and loaded during the sinking, but regardless it was foolish to skip a standard drill, which would have familiarized the new crew with the new ship. Also on Sunday, the ship received multiple messages about ice fields and bergs over the wireless telegraph from other ships around the general area of the *Titanic*. These warnings were handled haphazardly with no set procedure. The *Titanic* received a message, for example, from a ship called *Caronia*

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<sup>53</sup> Barczewski, *A Night Remembered*, 1.

<sup>54</sup> *Ibid.*, 5.

<sup>55</sup> *Ibid.*, 9.

<sup>56</sup> Barczewski, *A Night Remembered*, 9.

<sup>57</sup> *Ibid.*, 10.

about ice fields and icebergs in the North Atlantic spread across an area ahead of the ship. The warning was posted on the bridge as it was received.<sup>58</sup> The ships *Baltic* and *Amerika* also sent messages in after lunch. This time Captain Smith inexplicably decided not to post the *Baltic's* message and instead gave it to Bruce Ismay. The message only made it to the bridge around dinnertime and the *Amerika's* message does not appear to have been received by Captain Smith at all.<sup>59</sup>

By nightfall, the air had become cold and close to freezing temperatures. While the Captain ordered a small course correction, the *Titanic* continued traveling at full speed towards the ice ahead.<sup>60</sup> After dinner, an exchange of messages between the ships *Californian* and the *Antillian* about icebergs in the vicinity was picked up by the *Titanic's* wireless and reported to the bridge. A ship called the *Mesaba* also sent a message and provided the coordinates of the ice fields and icebergs; an area the *Titanic* was actually entering. Again, the warning never made it out of the wireless room.<sup>61</sup> Two last warnings came in: one from the ship *Rappahannock*, which passed by the *Titanic* and signaled by lamps about heavy ice, and the other from the *Californian* through wireless at about 11 pm Sunday night warning that the ice was so heavy ahead that the *Californian* had to stop.<sup>62</sup> A reason, but certainly not an excuse, for the lack of consistency in reporting ice warnings can be attributed to the wireless operators, Jack Philips and Harold Bride, who answered to the famous Marconi Company. The Marconi Wireless Telegraph Company, Ltd supplied the *Titanic* and other ships with transmitter equipment and operators.<sup>63</sup> The man who created the company, Guglielmo Marconi, pioneered the use of the wireless telegraph and

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<sup>58</sup> Barczewski, *A Night Remembered*, 10.

<sup>59</sup> *Ibid.*, 11.

<sup>60</sup> *Ibid.*, 12.

<sup>61</sup> *Ibid.*, 13-14.

<sup>62</sup> *Ibid.*, 14.

<sup>63</sup> Heyer, *Titanic Legacy*, 37-38.

radio.<sup>64</sup> Because the operators on the *Titanic* worked for Marconi Company and not White Star Line, sending and receiving passenger's messages had higher priority than warnings concerning the safety of the ship.<sup>65</sup>

Meanwhile, the ship's lookouts, Reginald Lee and Frederick Fleet, had trouble squinting down from atop the crow's nest scanning the water for icy obstacles. The conditions that night did not lend themselves to spotting icebergs because there was no moonlight to reflect off the ice, and the sea was so calm that there were no waves to splash against icebergs to make them visible.<sup>66</sup> Not only was it extremely dark, but another obstacle was the lack of binoculars. There was a pair on board the *Titanic* but the lookouts were unaware of its location.<sup>67</sup> Whether the binoculars would have made a difference is unknown, but that Lee and Fleet had no such basic equipment ready at hand underscores again the false confidence in the 'unsinkability' of the ship.

It was about 11:40 pm, when Fleet, braving the cold with his companion, suddenly saw ice and immediately reported to the bridge: "Iceberg right ahead."<sup>68</sup> First Officer Murdoch called for the ship to be turned to the left, which unfortunately could not occur instantaneously because of the ship's immense size. As the *Titanic* finally started veering to the left, Murdoch called for the ship to be turned right in order to try to swing the back of the ship away from the iceberg.<sup>69</sup> As the side of the ship glided by the iceberg, seemingly missing a collision, it was not immediately apparent to all that the ship had in fact quite literally scraped by the iceberg. Not everyone had even heard or felt the iceberg tear into the *Titanic*. Those who did, heard or felt the

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<sup>64</sup> Ibid 27-29.

<sup>65</sup> Barczewski, *A Night Remembered*, 11

<sup>66</sup> Butler, *Unsinkable*, 74.

<sup>67</sup> "Titanic Myths, Legends, Truths and Facts." *Titanic-titanic.com*, [http://www.titanic-titanic.com/titanic\\_myths.shtml](http://www.titanic-titanic.com/titanic_myths.shtml)

<sup>68</sup> Barczewski, *A Night Remembered*, 15.

<sup>69</sup> Ibid., 191.



scrape with varying degrees of intensity. Some heard loud grinding while many others, passengers and crew alike, felt slight shudders and vibrations.<sup>70</sup> Third-class passengers heard and felt much more because they were on the lower decks and those that went up to the top deck to investigate found pieces of ice scattered across the deck. Others stayed below to investigate and were stunned by the sight of water coming in.<sup>71</sup> If the rest on board did not hear or feel anything, or simply ignored it, they certainly noticed the lack of the steady hum of the engine: Captain Smith had ordered it to stop.<sup>72</sup>

Captain Smith came on the bridge quickly and asked Fourth Officer Boxhall to examine the ship. Only minutes later, a crewman and postal clerk reported that water was coming into the mail hold, which was located on G deck. The third deck from the bottom of the ship was already filling with the ice-cold Atlantic sea.<sup>73</sup> Captain Smith and Thomas Andrews, the *Titanic*'s designer, took a quick tour of the ship to see the damage and found floodwater in each of the first six compartments at the front of the ship down below.<sup>74</sup> It would be discovered much later, after the discovery of the wreckage, that the rip in the side of the ship only amounted to a fraction of the original assumption that the gash's length was a third of the length of the ship. The *Titanic* proved that small holes can create deep wounds.<sup>75</sup>

The ship was already listing or tilting down to the right by several degrees before Thomas Andrews had even come to the bridge. After Andrews and the Captain examined the lower decks, Andrews gave the *Titanic* no more than an hour and a half left to stay afloat based on his

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<sup>70</sup> Butler, *Unsinkable*, 75-76.

<sup>71</sup> *Ibid.*, 86-88.

<sup>72</sup> *Ibid.*, 84.

<sup>73</sup> *Ibid.*, 79.

<sup>74</sup> Barczewski, *A Night Remembered*, 16.

<sup>75</sup> Butler, *Unsinkable*, 80 (note 21).

calculations as ship designer.<sup>76</sup> As a result of this dire prediction, almost a half hour after the collision, the Captain ordered to send distress calls and to uncover lifeboats.<sup>77</sup> Almost a half an hour had passed between the time of the collision with the iceberg and the Captain's orders to prepare the lifeboats. In the meantime, and probably in less than half that time, water did not just seep in slowly and coat the decks, instead it pulled the ship down and made quick work of engulfing the forward sections and decks.

Meanwhile down below, the crew was struggling to cope with the rising water: mail clerks were trying to save sacks of mail from being ruined, while mechanics tried to pump out the water and to safely shut down the boilers.<sup>78</sup> Eventually Captain Smith had the wireless operators sending out standard distress calls to other ships. However, the ones responding were hours away even at top speed and the *Californian*, which had seemingly been fairly close the last time Jack Philips received a message from it awhile before, was strangely silent.<sup>79</sup> Unbeknownst to Philips, the *Californian's* wireless operator had turned off his equipment and turned in for the night only ten minutes before the *Titanic* hit the iceberg.<sup>80</sup>

Passengers on the upper decks, not seeing the damage for themselves like the crew and some of the third-class on the lowest decks had, were oblivious of the danger. Many made their way out of their cabins to find out what all the commotion was about and why the ship had stopped. Some believed that the ship had lost a propeller and would be delayed a few hours. Others seemed aware that the *Titanic* had passed or even hit an iceberg.<sup>81</sup> Only stewards and

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<sup>76</sup> Barczewski, *A Night Remembered*, 16-17.

<sup>77</sup> *Ibid.*, 20

<sup>78</sup> Butler, *Unsinkable*, 89-90.

<sup>79</sup> Barczewski, *A Night Remembered*, 22; Butler, *Unsinkable*, 91.

<sup>80</sup> Barczewski, *A Night Remembered*, 14.

<sup>81</sup> Butler, *Unsinkable*, 85-86.

crew knew how long the ship had left to float, while they helped passengers into lifejackets and out on deck without alarming them.<sup>82</sup> It is understandable that the Captain and Officers did not want widespread panic all at once. However, telling passengers to put on lifejackets and stand in the cold without instilling in them a sense of urgency did not make for quick cooperation from the passengers.

Captain Smith did not show his experience as a seasoned captain. His reactions were sluggish and his commands reflected a bare minimum of effort.<sup>83</sup> It took precious minutes to coax some of the often oblivious and unwilling passengers into the boats because no one understood that the ship was sinking. Most of the first-class passengers were puzzled why they were being told to leave the warmth and comfort of the liner, to sit out on the freezing ocean in what was to them a paddleboat, if the *Titanic* was only delayed.<sup>84</sup> It was 12:20 a.m. when the crew loaded the first passengers onto lifeboats and it was not until 12:30 that the third-class passengers were ordered up on deck. The problem was that no one was sent in an official capacity to lead those passengers to the deck.<sup>85</sup>

The third class was at the bottom of the ship and there was rarely a straightforward and obvious way to get to the top deck. Navigating the passageways and stairs was like traversing through a jungle. To the vexation of foreigners and the illiterate, signs were only written in English. It is important to note that although the third class has been portrayed in movies as being locked like prisoners down below by full sized gates, this is more myth than fact.<sup>86</sup> In

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<sup>82</sup> Ibid., 92-94

<sup>83</sup> Ibid., 99.

<sup>84</sup> Barczewski, *A Night Remembered*, 21.

<sup>85</sup> Ibid., 24.

<sup>86</sup> Halpern, *Report into the Loss*, 168.

some cases, there were waist-high gates guarded by the crew, but these instances were rare.<sup>87</sup> A steward did take some initiative to try to bring up some third-class passengers in groups, but it took too long and he was only able to make two trips before he was ordered elsewhere. His was the most official help they received. Third class passengers were left to fend for themselves and many resigned themselves to their fates.<sup>88</sup> Sadly, a great number remained trapped in the bowels of the ship when it sank.<sup>89</sup> The third-class was overlooked because there were no official procedures for attending to third-class passengers when a ship was under duress.<sup>90</sup> There is no excuse for them being forgotten, but it is telling of society at the time. The third class was not rich or powerful and most were foreign immigrants. Their low class and ethnic backgrounds sadly delegated them to the bottom of the priority list of classes.

Leaving behind the third-class passengers is a prime example of class and race relations in Anglo-American society. The first-class passengers were wealthy and white, and fit the ideal image of Anglo-American society. The mentality was that third-class people were not superior like first-class people. The fact that there were many immigrants from numerous countries in the third-class added to this mentality because these people were not only rich and successful but many were also foreign. This mentality towards the people in the third-class also bled into the mentality of people in the third-class itself. The lower classes absorbed the views of the Anglo-American upper classes. Someone's class defined his or her place in society and his or her lifestyle.<sup>91</sup> The working class had been ingrained with the idea of following upper class authority. Society did not encourage the working-class to take initiative. Instead, the working-

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<sup>87</sup> Ibid 169.

<sup>88</sup> Butler, *Unsinkable*, 117-118.

<sup>89</sup> Barczewski, *A Night Remembered*, 24.

<sup>90</sup> Butler, *Unsinkable*, 116.

<sup>91</sup> Ibid., 118

class obeyed whoever the authority in a situation was because this was simply how society functioned and this was what was expected of them.<sup>92</sup> Thus, many waited in vain for some official authority to come and direct them.<sup>93</sup>

To make matters more disorganized and confusing, officers applied different policies. Officer Murdoch, overseeing the loading of lifeboats on the right side of the ship, took women and children first and then any men around, but Officer Lightoller, overseeing the left side, only took women and children and refused men.<sup>94</sup> Not only was the loading of passengers haphazardly done but it also was not even done thoroughly. The first boat lowered to the water, which had a maximum capacity of sixty-five, but only held a paltry twenty-five people, and another lifeboat that had seating for forty only occupied twelve people.<sup>95</sup> The officers in charge were worried that lowering the lifeboats while fully loaded would strain and break the boats. Unfortunately, they were unaware that Harland & Wolff had tested and proved the lifeboats. They could be lowered containing a full load without issue but Ismay and Andrews never spread this information.<sup>96</sup> In their panic, Officers now assumed that somehow more passengers could be added to the boats after they reached the water.<sup>97</sup> Lightoller, for example, later testified that he thought the lifeboats on his side of the ship could be lowered down to the gangway doors further down the side of the ship to load more people but his plans never came to fruition. The lifeboats paddled away from the *Titanic*, only partially filled.<sup>98</sup>

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<sup>92</sup> Butler, *Unsinkable*, 118.

<sup>93</sup> *Ibid* 119.

<sup>94</sup> Barczewski, *A Night Remembered*, 21.

<sup>95</sup> *Ibid*.

<sup>96</sup> Butler, *Unsinkable*, 101,113.

<sup>97</sup> *Ibid.*, 101.

<sup>98</sup> *Ibid.*, 113.

To add more problems, lowering the lifeboats did not go smoothly either. One of the first lifeboats lowered made its way to the water in a seesaw motion with one end dropping before the other and repeating back and forth because the brand new lines were stiff and would jam.<sup>99</sup> Loading and lowering lifeboats was a slow progress. Although loading started at 12:20 a.m., it was nearly one o'clock in the morning when lifeboats actually started to be lowered.<sup>100</sup> It was not until 1 a.m., almost an hour and a half since the *Titanic* had been wounded, that Captain Smith ordered distress rockets launched every few minutes, since, interestingly, about ten minutes beforehand a lookout saw the lights of another ship seemingly less than 15 miles away. It was a quarter of an hour later before one of the wireless operators began sending out the new distress call, SOS. Philips had already heard back from the *Carpathia* that made its way to the *Titanic* from almost 60 miles away.<sup>101</sup>

The sight of distress rockets spoke volumes and told passengers everything that the officers and crew had not: the ship would not be on its way soon, because it was badly damaged. Suddenly, passengers were more than willing to get into lifeboats. The problem was that officers and crew were only taking women and children and many wives and mothers panicked at the thought of being separated from their husbands.<sup>102</sup> As the bow dipping down became increasingly noticeable as the water rose higher, pulling the ship down further, one only had to go a few decks down to see the water climbing. Astoundingly, despite the growing urgency, even at one in the morning lifeboats were still only being filled at partial capacity.<sup>103</sup> Distressingly, the

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<sup>99</sup> Butler, *Unsinkable*, 102.

<sup>100</sup> *Ibid.*, 107.

<sup>101</sup> *Ibid.*, 108-9.

<sup>102</sup> Butler, *Unsinkable*, 110.

<sup>103</sup> *Ibid.*, 112,114.

ship that had been spotted in the distance was still visible but despite the rockets being fired off, the mystery ship remained stationary.<sup>104</sup>

By half past one, evacuation had become a barely controlled chaos with women and children being unceremoniously dumped into lifeboats and male passengers trying to jump into the boats being pushed back by officers and crew.<sup>105</sup> Fifteen minutes later the bow of the ship, which just two hours before had stood proud and tall above the ocean, was in the process of dipping under the water.<sup>106</sup> During the loading of the lifeboats, all of the husbands that had been left behind, bore it more or less with dignity because it was the gentlemanly thing to do.<sup>107</sup> Unfortunately, even as the death of the ship was drawing ever nearer, the “women and children only” rule used by officers remained strictly upheld. In some cases, even young boys, barely teenagers, suddenly did not qualify as children and were considered men. Their lives as gentlemen had barely begun.<sup>108</sup>

Throughout the process of loading the lifeboats, the *Titanic*'s band had been playing jaunty tunes and old favorites that probably made the whole experience for passengers feel both normal and surreal at the same time. It was around 2 a.m., over two hours since the ship was struck and a little over an hour and a half since evacuation started, when all but two of the various lifeboats were lowered.<sup>109</sup> As the Captain made his rounds informing officers and crew that their time was up and to fend for themselves, the wireless operators continued sending out calls for help and some men worked to get the last two heavy collapsible boats, weighing a

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<sup>104</sup> Butler, *Unsinkable*, 123.

<sup>105</sup> *Ibid.*, 131-2.

<sup>106</sup> Barczewski, *A Night Remembered*, 25.

<sup>107</sup> Butler, *Unsinkable*, 131-2,138

<sup>108</sup> *Ibid.*

<sup>109</sup> Butler, *Unsinkable*, 138.

couple of tons each, down from where they were firmly attached on top of the officers' quarters.<sup>110</sup> The *Titanic* was sinking faster because of the sheer amount of water pouring in, pulling the front down further and lifting the back of the ship higher out of the water. The two collapsible lifeboats, which had given the men so much trouble, had eventually been brought down onto the deck only to be swept away by rising and surging waters and become part of the debris.<sup>111</sup>

The bridge of the ship was pulled into the water about a quarter after two in the morning and the strain of the tilt caused the first of the huge funnels to give way. It fell forward into the water killing any unlucky enough to have been beneath it.<sup>112</sup> Of the 1500 people still left behind, those on the top decks tried desperately to climb the mountain that had been the stern as it kept rising out of the water revealing the gigantic propellers. Like a giant beast the sounds of metal buckled and everything movable within the ship broke and its sounds reverberated eerily into the night.<sup>113</sup> Those in the lifeboats witnessed a spectacular sight and it was a sight that would later grace movie screens, but such a sight should have only been the product of fiction rather than that of reality. The *Titanic* became increasingly difficult to see from a distance because the lights illuminating the ship grew dimmer until finally one bright flash went out completely plunging the sinking ship into darkness.<sup>114</sup>

The ship was now mere moments from disappearing, and the steep angle of the stern was under immense pressure until the ship finally snapped behind the third funnel.<sup>115</sup> The bow was

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<sup>110</sup> Butler, *Unsinkable*, 141.

<sup>111</sup> Barczewski, *A Night Remembered*, 26.

<sup>112</sup> *Ibid.*, 28.

<sup>113</sup> Barczewski, *A Night Remembered*, 28; Butler, *Unsinkable*, 142.

<sup>114</sup> Barczewski, *A Night Remembered*, 28.

<sup>115</sup> *Ibid.*, 29.



pulled further beneath the sea by the weight of the water. When the bow broke away completely, the stern was freed and righted itself somewhat, which caused some survivors to believe temporarily that the ship would cease sinking. Then eventually the stern was also pulled under to join its other half over two miles beneath the survivors left bobbing in the sea.<sup>116</sup> The ship that had been famously called unsinkable only took three hours and twenty minutes to be pulled beneath the Atlantic, taking many of the 1,500 men, women, and children from all walks of life down with her. It was 2:20 a.m. on Sunday, April 15 and for the survivors in the lifeboats, what had started as a simple trip was now a waiting game in the darkness and cold.<sup>117</sup>

The temperature of the ocean was a numbing 28 degrees Fahrenheit, and the reason the water could still be liquid below freezing was that saltwater has a lower freezing point. Those who had been aboard the top decks of the *Titanic* now were left floating in the sea. Heartbreakingly, they did not have the luxury of waiting in boats for the *Carpathia* or some other ship to arrive. They had less than twenty minutes and were already slowly being frozen to death.<sup>118</sup> The *Titanic*'s horn had proudly sounded the ship's departure on its maiden voyage not a week beforehand. In the early hours of April 15 only the cries and moans of the dying rang through the night. The desperate pleas for help coming from the mass of people trapped in the deadly water went almost resoundingly unanswered. Many, including women who had begged that their husbands and sons to be allowed into the boats, were now either silent or pleaded not to go back, to stay where they were out of paranoia that pulling people from the water would capsize the boats. Some men and women in various lifeboats suggested to go back and save

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<sup>116</sup> Butler, *Unsinkable*, 148.

<sup>117</sup> Barczewski, *A Night Remembered*, 29.

<sup>118</sup> Butler, *Unsinkable*, 152.

people, but they were sadly overruled by the majority.<sup>119</sup> People feared that going back to pick up survivors was too much of a risk because survivors might flood or capsize the lifeboats trying to get in.<sup>120</sup> Perhaps many were thinking of the scenario that a drowning person may pull under their rescuer and it was a reasonable fear. Nonetheless, it was a cold sort of logic many in the lifeboats seemed to apply to the situation.

Of the 18 lifeboats, most of which carried a fraction of their full capacity, only one went back to pick up survivors.<sup>121</sup> Officer Lowe in boat 14 transferred his passengers to other boats and then, astonishingly, waited and rowed back only when the din of people had died down.<sup>122</sup> It is presumable that he waited before going back fearing that too many people would try to climb aboard. He never encountered such a problem when he went to pick up survivors, because he only saved three people.<sup>123</sup> If all the lifeboats had tried to coordinate their efforts and took precautions to prevent flooding or capsizing, a few hundred more might have been saved. As it was, just over seven hundred people lived and 1500 people died.

A couple of hours later, around 4 o'clock in the morning, the *Carpathia* arrived and started boarding the people from the lifeboats onto the ship. Five hours later, all the survivors were aboard and the *Carpathia* headed to New York.<sup>124</sup> At last, the long night was over and the morning had brought a new day. For the survivors of the *Titanic*, though, a new day meant that the terror was not over. Some of the survivors found happiness in finding loved ones and friends

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<sup>119</sup> Ibid., 155.

<sup>120</sup> Ibid., 163.

<sup>121</sup> Barczewski, *A Night Remembered*, 31.

<sup>122</sup> Ibid.

<sup>123</sup> Ibid.

<sup>124</sup> Butler, *Unsinkable*, 165, 169.

who had come aboard from other lifeboats, but so many others only found misery when their desperate searches for loved ones came up empty.

The *Titanic* as a ship was the culmination of Anglo-American power in technology and belief in their superiority. The ship was not built with safety as the utmost priority and was not prepared for unusual accidents. Some of the events of the *Titanic* sinking and the behavior of passengers and crew are the result of Edwardian society at the time. The coddling of the first-class and the neglect of the third is a sad example of this. When the survivors finally made it to their originally intended destination of New York, they were refugees aboard a different ship. What awaited them were numerous questions and a public's rapidly growing fascination with what had happened. The *Titanic* was gone, its maiden voyage unfinished, but its history had just begun.

## Chapter 2: Building the Story

In the aftermath of the disaster, official inquiries and the media created a narrative of the *Titanic* that would be considered the definite story for decades to come. After the survivors returned to New York, the American and the British governments each ordered official inquiries into what had happened. An idea of what happened that night came into focus as survivors were interviewed and details emerged. British and American media often turned the disaster into a romantic tale of heroism and chivalry while often ignoring the more ignoble deeds. The story of the *Titanic* was thus weaved by inquiries that gave a factual account of the sinking and the media that wrote their own interpretation of the sinking. The idea of the *Titanic* did not fade away, even in the face of new famous events. The *Titanic* remained a part of popular culture for decades after its sinking and its story has been used in different ways.

### The Press

The fate of the *Titanic* quickly became known around the world. Even as the ship was sinking, others received the *Titanic*'s distress calls. Newspapers also caught wind of the ship's troubles. By the early hours of the morning of April 15, many conflicting and inaccurate reports floated around. When the *Carpathia* sailed into New York to deliver the shaken survivors, the news of the sinking spread rapidly, and the accounts of what had happened to the ship and its passengers increased.

The first newspaper reports told a story that was almost completely opposite to what had actually happened. A Texas newspaper reported that the *Titanic* had struck an iceberg, had transferred all of its passengers to the *Carpathia* and the *Parisian*, and that the *Titanic* was

slowly making its way to Halifax, Nova Scotia.<sup>125</sup> Another newspaper, out of Oregon, reported that the *Titanic* was sinking but that the *Virginian* was towing it into port.<sup>126</sup> Newspapers also got quotes from an executive of White Star Line saying that he had no doubt that the *Titanic* had not sunk and that its watertight compartments would keep the ship afloat.<sup>127</sup> The *New York Times* was one of the very few, if not the only newspaper, to report only what it could confirm. It printed that the last time anyone heard from the *Titanic*, it was sinking, and that passengers were leaving the ship in lifeboats. There was no more information available than that.<sup>128</sup> Infused by the notion that the *Titanic* was unsinkable, most newspapers reassured the masses that the *Titanic* had not experienced a tragedy and that everyone was safe. After all, the *Titanic* was state of the art. How could such a grand metal ship go down because of frozen water? Other smaller ships had navigated the ice fields just fine and if they did have a collision, they were still able to make it to port.

From today's perspective, it seems odd that it would take so long for the newspapers to get facts right but, as advanced as technology was at the time, news still took time to travel. Wireless communications could be intercepted by the press but the information was vague and incomplete. Plain rumor was assumed as fact. In addition, the *Carpathia* took a few days to make it to New York and arrived on April 18, which meant much information remained delayed and unknown.<sup>129</sup>

One example of inaccurate information concerned the passenger lists. One newspaper reported 1,300 passengers on board, another said there were 1,470; yet another included the crew

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<sup>125</sup> (Bryan, Tex.) 1909-1918, April 15, 1912, Image 1 (From Library of Congress Search)

<sup>126</sup> Daily Capital Journal., April 15, 1912, Page FIVE, Image 5 (From Library of Congress Search)

<sup>127</sup> The Evening standard., April 15, 1912, Image 1 (From Library of Congress Search)

<sup>128</sup> Heyer, *Titanic Legacy*, 67.

<sup>129</sup> *Ibid.*, 76.

and came up with 2,075.<sup>130</sup> The day after the sinking, the 16<sup>th</sup>, newspapers conceded that not all was as well as they had reported originally. There were only few survivors and the number of casualties and living remained uncertain. The *New York Times* estimated that 866 people had survived and 1,250 had not, others estimated that either 1,500 or 1,340 had perished, and 655 survived. Still another newspaper claimed that 675 people were alive and 1,800 had drowned.<sup>131</sup> On the 17<sup>th</sup>, newspapers were speculating and attempting to list who the survivors were based on some wireless messages from the incoming *Carpathia*. Of most interest to many readers were the names of the rich and famous who appeared, or did not appear, on survivor lists.<sup>132</sup> The variety in numbers reflects the uncertainty and disbelief of what could have happened to the *Titanic*.

As more details became known, the public, and in particular friends and family of those on board the *Titanic*, complained that newspapers had been misleading in prematurely reporting that all aboard had survived. The public in England was understandably furious at American newspapers for giving them the belief that there was nothing to worry about and then saying the complete opposite the next day.<sup>133</sup> Both the Americans and the English inundated the offices of White Star Line with angry and distraught questions about survivors because White Star Line had originally denied that the ship had sunk.<sup>134</sup> Until those aboard the *Carpathia* could be thoroughly interviewed, newspapers grasped for material to fill headlines and articles. The fact that there were barely enough lifeboats for even half of those aboard the ship was not missed by anyone. Newspapers and readers alike expressed fury about old regulations concerning lifeboat

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<sup>130</sup> The Tacoma times., April 15, 1912, Image 1; New-York tribune., April 15, 1912, Page 2, Image 2; The Evening standard., April 15, 1912, Image 1 (From Library of Congress Search)

<sup>131</sup> Heyer, *Titanic Legacy*, 69-71.

<sup>132</sup> *Ibid.*, 73.

<sup>133</sup> Wade, *End of a Dream*, 39.

<sup>134</sup> Barczewski, *A Night Remembered*, 50.

requirements not being updated for the new era of ship travel.<sup>135</sup> Anger was expressed differently on different sides of the Atlantic. Britain and America had differing viewpoints on whom to blame. The British accused the “little people,” that is the wireless operators aboard the *Titanic* and the news reporters, of not always reporting things accurately.<sup>136</sup> The Americans took similar offence and blamed the “big people,” the tycoons of the shipping industry and the British Board of Trade, for not changing regulations to keep up with modern times.<sup>137</sup>

On April 18, news coverage of the sinking and the shock surrounding it was eclipsed by the arrival of the *Carpathia* and its precious cargo of the lucky. As the weary ship pulled up to the pier, it was met by enormous crowds. New York City was buzzing with mournful anticipation but well prepared: the mayor and other officials had worked out plans to keep hoards of spectators and press away from the disembarking survivors, and a plethora of various societies, companies, charities, hospitals, and individuals either had opened their doors as accommodations or raised money for impoverished survivors.<sup>138</sup> Thousands of accommodations were offered, and tens of thousands of dollars, keeping in mind the large difference in value between a 1912 dollar and today’s dollar, were put together and waiting to serve a little over 700 of the passengers and crew of the *Titanic*.<sup>139</sup> Reporters swarmed all around the pier trying to get a picture or a quote from the survivors on board the ship, which had not even docked yet. Many reporters waved money in the air to get on board or for a survivor to jump ship. In one case, a reporter claimed to be a desperate relative to try and get an interview.<sup>140</sup>

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<sup>135</sup> Ibid., 52.

<sup>136</sup> Wade, *End of a Dream*, 42.

<sup>137</sup> Ibid.

<sup>138</sup> Ibid., 48-49.

<sup>139</sup> Ibid., 49.

<sup>140</sup> Wade, *End of a Dream*, 52-53.

Just past 9:30 p.m. the survivors finally stepped on land after the long trip, in order of class, and were faced with reporters, flashing bulbs of the cameras, and relatives and friends waiting to find out for certain the fate of those for whom they looked.<sup>141</sup> Unfortunately, many in the third class were not allowed to finally end their trip by debarking the ship right away. They had to sort through immigration.<sup>142</sup> Indeed some of the survivors of the third class were foreigners who had to go through official American immigration. Unfortunately, it seems no exception was made for third-class survivors who had suffered no less than the survivors of other classes. One can imagine how surreal the arrival must have been. Arriving in New York on a much smaller passenger liner, with nothing but the clothes on their back, no one had imagined a trip aboard the *Titanic* would end like this. The maiden voyage of the *Titanic* began with pomp and circumstance and those who lived through the journey stepped off a different ship to a different kind of pomp and circumstance: that of the news media.

By the next morning, the *New York Times* printed an exclusive interview with surviving *Titanic* wireless operator Harold Bride. One of the *Times*' writers had managed to arrange the interview through a friendship with the inventor of the Marconi wireless radio, used aboard the *Titanic*.<sup>143</sup> Readers all over the world could not get enough of all the interviews, reports, and updates that covered the front pages of all the newspapers. Although the *New York Times* paid Bride well for his story, he did tell what really happened.

Unfortunately, however, some survivor's stories were not as accurate. Some could be described as sensational; likely the result of reporters and editors attempting to make the

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<sup>141</sup> Ibid 54.

<sup>142</sup> Ibid 55.

<sup>143</sup> Ibid 56.



accounts more interesting.<sup>144</sup> Among some of the more interesting accounts were a couple of accounts that described the ship splitting in two. One of the survivors, Jack Thayer, even drew sketches to show what he saw.<sup>145</sup> Newspapers also tried to find a scapegoat. Some papers blamed the builders and designers for choosing extravagance over safety; others blamed the unpredictability of nature.<sup>146</sup> It is ironic or perhaps justified that so many looked upon White Star Line and Harland & Wolff with disgust for giving the *Titanic* luxurious accommodations at the expense of safety. Few had batted an eye at the lack of lifeboats before it sailed and ultimately went down.

### **The Hearings**

Although the actual journey across the Atlantic was over, people wanted questions answered. On the 17<sup>th</sup>, a day before the more than 700 survivors of the *Titanic* embarked, American outrage had already reached the White House. The president at the time, President Taft, was very interested in what happened to the *Titanic* not in the least because an old friend, Major Archibald Butt, had been on board the ship.<sup>147</sup> However, it was not the president, but Senator William Alden Smith of the State of Michigan to set the stage for the next part of the *Titanic*'s history. Senator Smith asked to open an official investigation into the sinking of the *Titanic* which would involve detaining, through subpoenas, crew and employees of the *Titanic* and of White Star Line to answer inquiries.<sup>148</sup> Since American interests were involved in the accident, namely the lives of American citizens as well as cargo and property, the Committee on

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<sup>144</sup> Wade, *End of a Dream*, 56.

<sup>145</sup> *Ibid.*, 57.

<sup>146</sup> *Ibid.*, 69.

<sup>147</sup> *Ibid.*, 38.

<sup>148</sup> *Ibid.*, 44.

Commerce, to which the resolution had been submitted, was passed and investigations were opened with Senator Smith heading them.<sup>149</sup>

The Senate inquiry into the disaster began only about twelve hours after the survivors left the *Carpathia*, on Friday April 19.<sup>150</sup> Bruce Ismay, the chairman and director of White Star Line, apparently had little interest in becoming involved with the American investigation. Ismay had sent out surreptitious messages trying to arrange transport back to England within the next day for himself and the British White Star Line crew survivors. By leaving the United States, they tried to avoid being held under a subpoena created by Senator Smith's investigation committee.<sup>151</sup>

The hearings took place over a period of about two and half weeks and came to a close towards the end of May. There were interviews with more than eighty witnesses from the *Titanic* and other ships and more than a thousand pages of transcripts.<sup>152</sup> The inquiry's senate report covered a multitude of subjects and issues. Such as availability of the lifeboats, the demographics of the passengers and survivors, weather conditions, the actual collision, the distress calls, the evacuation, and other issues and events.<sup>153</sup> The inquiry did far more than just to create a cohesive and factual picture of what happened to the *Titanic*; it also served as a basis for suggesting changes to regulations and laws concerning sea travel and communication:

The committee finds that this accident clearly indicates the necessity of additional legislation to secure safety of life at sea... The committee recommends that sections 4481 and 4488, Revised Statutes, be so amended as to definitely require sufficient lifeboats to accommodate every passenger and every member of the crew... All members of the crew assigned to lifeboats should be drilled in

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<sup>149</sup> Wade, *End of a Dream*, 102.

<sup>150</sup> *Titanic Inquiry Project*, <http://www.titanicinquiry.org/>, Day 1.

<sup>151</sup> Wade, *End of a Dream*, 48.

<sup>152</sup> *Titanic Inquiry Project*, <http://www.titanicinquiry.org/>, Report.

<sup>153</sup> *Ibid.*

lowering and rowing the boats, not less than twice each month and the fact of such drill or practice should be noted in the log... The committee finds that this catastrophe makes glaringly apparent the necessity for regulation of radiotelegraphy. There must be an operator on duty at all times, day and night, to insure the immediate receipt of all distress, warning, or other important calls.<sup>154</sup>

Great Britain's Board of Trade conducted its own inquiry into the sinking of the *Titanic*. When *Titanic* crewmen, some of whom had testified at the American Inquiry, returned to England on April 29, they were thoroughly interviewed over the course of a few days. The Board of Trade's hearings, though done differently and much more formally than the U.S. Senate's hearings, acted as a court of law and had full judicial powers.<sup>155</sup> The formal inquiry began on the 3<sup>rd</sup> of May.<sup>156</sup> The whole process lasted into July and was extremely thorough. The inquiry, conducted over a period of eight weeks, called almost one-hundred witnesses. More than 25,000 questions were asked and were included in a report, over a thousand pages in length. The Court of Inquiry on the *Titanic*'s sinking was the most extensive ever conducted in Great Britain and cost almost £20,000.<sup>157</sup>

The British report drew the same conclusions as the American inquiry. Based on evidence reviewed, both inquiries concluded that the *Titanic* had sunk because it had struck an iceberg.<sup>158</sup> (It is interesting to note that the Board of Trade, which had not updated old regulations for the number of lifeboats on board, had originally judged the *Titanic* fit to sail under old regulations.<sup>159</sup>)

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<sup>154</sup> *Titanic Inquiry Project*, <http://www.titanicinquiry.org/>, Report.

<sup>155</sup> Barczewski, *A Night Remembered*, 69.

<sup>156</sup> Butler, *Unsinkable*, 205.

<sup>157</sup> *Ibid.*, 206.

<sup>158</sup> *Titanic Inquiry Project*, <http://www.titanicinquiry.org/>, British Report.

<sup>159</sup> Barczewski, *A Night Remembered*, 70.

After comparing the two inquiries, *International Marine Engineering* stated that the British Inquiry did not contradict the American Inquiry and that the facts gathered were the same.<sup>160</sup> Both the American and British inquiries addressed many issues that were considered to be contributing factors to the disaster: the poor handling of iceberg warnings, the lack of lifeboats, the ineffectiveness of the captain, the lack of a general alarm to inform crew and passengers of the collision, and the partial loading of the lifeboats.<sup>161</sup> However, the inquiries approached the investigation differently. The American Inquiry blamed the Board of Trade, White Star Line, and Captain Smith.<sup>162</sup> The British Inquiry, however, was more hesitant than the American Inquiry to condemn those who had been in control. The British Inquiry viewed the disaster more as a combination of unusual circumstances and focused more on nautical aspects rather than human ones.<sup>163</sup> While the American Inquiry report was full of opinions and criticism, the British Inquiry report highlighted technical details and was more procedural in nature.<sup>164</sup> Nonetheless, both inquiries provided a factual account of what caused the disaster to happen

Not as well known about the inquiries are the dynamics and public reaction that surrounded them. Many in the United Kingdom and especially British newspapers were quick to sneer at the American Inquiry. They questioned the right of the American government to detain the British crew for interviews or to investigate a British ship.<sup>165</sup> There was a large backlash, for example, against Senator Smith for his handling of the inquiry and he was made fun of for his unusual way of asking questions that sometimes seemed to be nothing more than stating the

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<sup>160</sup> Wade, *End of a Dream*, 309-310.

<sup>161</sup> Wade, *End of a Dream*, 287-290; *A night remembered* 70.

<sup>162</sup> Barczewski, *A Night Remembered*, 70.

<sup>163</sup> Barczewski, *A Night Remembered*, 81; Wade, *End of a Dream*, 310.

<sup>164</sup> Barczewski, *A Night Remembered*, 70-71.

<sup>165</sup> Barczewski, *A Night Remembered*, 79.

obvious.<sup>166</sup> There was an important technical detail about the *Titanic* that the annoyed British seemed to ignore. Although the *Titanic* sailed under British registry, J.P. Morgan's International Mercantile Maritime consortium purchased White Star Line in 1902, which made the *Titanic* an American owned ship.<sup>167</sup> Although many British were appalled in some way by the American inquiry, not all were. Many of those who worked on or around ships, the "lower classes", were impressed and supportive of what Senator Smith was doing. They felt that because the American inquiry was less formal and "by the book" than a British inquiry, it would paint an easier to understand picture of what happened.<sup>168</sup> They felt that the strict formality of a British court of inquiry would obscure some of the truth, and that a less formal and more "emotional" American inquiry would uncover more details and question outdated regulations.<sup>169</sup>

### **Public Opinion and Myth Building**

In contrast to the inquiries, the media played a more powerful role in shaping people's perceptions about the events that took place the night of the sinking. The way the press portrayed the men and women of the *Titanic* reflects the values and norms of Edwardian society and class. Rather than just writing about human tragedy, the press created heroes and villains.

The ultimate heroes for the Anglo-American media of that night were the upper class men. They were the perfect heroes because they were gallant and self-sacrificing, and their tales tugged at the heartstrings of the public. People chide the 1997 *Titanic* movie for over-romanticizing the unrealistic fictional love story as well as the events themselves. In 1912, the media did not need a movie to turn the story of the *Titanic* into a heavily romanticized tale of

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<sup>166</sup> Butler, *Unsinkable*, 196.

<sup>167</sup> Barczewski, *A Night Remembered*, 80.

<sup>168</sup> Wade, *End of a Dream*, 189.

<sup>169</sup> *Ibid.*

chivalry because Edwardian societal views on class and gender made it easy to create a myth. Despite the availability of survivor statistics, the media still managed to give the impression that all of the higher class men died to save most of the women and children.

For example, one of the wealthiest passengers on board the *Titanic* who had perished was John Jacob Astor. A minister explained his death as a punishment of God for being rich. In general, however, the media praised Astor and they condemned the minister. Astor had given his life to save others, and therefore Astor was off-limits to criticism, because he was a hero.<sup>170</sup>

Captain Smith was also portrayed as a hero, especially in the British media and public. Captain Smith was held up as a man that followed his duty as a British Captain to the very end, and therefore the ultimate self-sacrificing man aboard the *Titanic*. There are numerous accounts from various surviving passengers and crew that weave shining tales about him. Several different accounts claim Captain Smith resisted opportunities to be saved by telling his would-be saviors that he was staying with the ship and wished them good luck.<sup>171</sup> Another account was a fantastic story of the Captain rescuing a baby from the water after the bridge had gone under and swimming to a lifeboat to hand the child over to safety but refusing rescue himself.<sup>172</sup> The most patriotic account circulating was the captain telling those still on board as the ship went under to ‘Be British!’ which presumably meant to meet their fate with dignity and composure.<sup>173</sup> Though all these accounts painted him in a golden light, they have little basis in reality.

The captain’s supposed heroic deeds only happened after the ship had mostly sunk, which suggests that he had not been a strong captain until then. As it turns out, his grand deeds did not

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<sup>170</sup> Biel, *Down with the Old Canoe*, 73.

<sup>171</sup> Barczewski, *A Night Remembered*, 170.

<sup>172</sup> Barczewski, *A Night Remembered*, 171.

<sup>173</sup> *Ibid* 71.

even happen then. Before the *Titanic* struck the iceberg, Captain Smith was not cautious as he could have been traveling through the ice field and did not order the ship to slow down in order to keep their time schedule.<sup>174</sup> During the disaster, he was an ineffective captain who was slow to act and not forceful in his commands. He could have used his status to order an evacuation earlier and quicker but he did not. Even the American Inquiry noted that Captain Smith had been overconfident in the ship's capabilities and was not prepared for a disaster.<sup>175</sup> Although people initially praised Smith for going down with the ship like a true captain, people could not ignore that he had not done enough to keep the ship safe from danger. Many did not consider Smith a hero and often questioned his decisions, or lack thereof, but they never turned him into a villain. After all, Smith acted as a true captain and never abandoned the ship; as captain he had borne the ultimate responsibility.

In contrast, the American media turned the managing director for the White Star Line, Bruce Ismay, into a villain. He had traveled aboard the *Olympic* to study the ship and its passengers' reactions in order to make suggestions for changes to the *Titanic* to make it grander. He joined the *Titanic* on its maiden voyage.<sup>176</sup> His crime, according to the media, was that he survived the sinking by jumping into one of the last lifeboats, instead of going down with the ship like a gentleman. He became the ultimate scapegoat for nearly everything that went wrong with the *Titanic*. The media and the public latched on to him even before the Inquiries. The American media and public blamed Ismay for the inadequate number of lifeboats. People also assumed he had urged the captain to maintain the ship's high speed in order to supposedly break

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<sup>174</sup> Ibid 13.

<sup>175</sup> Wade, *End of a Dream*, 288.

<sup>176</sup> Ibid., 18.

a speed record.<sup>177</sup> In addition, they blamed him for the fact that White Star Line's offices initially did not admit that the *Titanic* had sunk and had helped spread the belief that more people had survived.<sup>178</sup> The inquiries revealed that public charges against Ismay about the speed of the *Titanic* were unsubstantiated. The *Titanic*, in fact, could not set any records because it was not built to be the fastest ship. Neither did Ismay urge the captain to maintain a high speed.<sup>179</sup>

It was not just the fact that Ismay was rich and happened to be the director of White Star Line that condemned him in the eyes of the public. The media pronounced over and over that the gallant first class men gave their lives for the women and children, while Ismay had clearly not given his life. The simple fact that Ismay survived condemned him to be an example of the worst of men.<sup>180</sup> It was as if he had been the only first class man to survive and had stolen a seat from a poor woman or child in a cramped lifeboat. More than 50 first class men had survived aboard only partially filled lifeboats, but Ismay was made to bear the shame of the 50 surviving first class men. Even in today's world where our society would not condemn any of the *Titanic* men for saving themselves, his name is still somewhat tarnished because of traditional norms and values. Ismay resigned from White Star Line and lived a private life until his death in the late 1930s.<sup>181</sup>

The attitudes of Anglo-American Edwardian society drives home the idea that it was not just any men who were chivalrous; they were Anglo-American men: "Henry Moy Fot, special agent for the Chinese Merchants' Association, announced that Chinese's sailors would have

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<sup>177</sup> Wade, *End of a Dream*, 270-272, 326.

<sup>178</sup> *Ibid.*, 45.

<sup>179</sup> *Ibid.*, 270.

<sup>180</sup> Biel, *Down with the Old Canoe*, 72.

<sup>181</sup> Wade, *End of a Dream*, 327.



saved the men and children, leaving the women to drown”.<sup>182</sup> Once the survivors had returned safely to land and more details and statistics became known, the media, instead of adjusting their reporting to align with what actually happened, perpetuated their own myth and it became firmly rooted in the perceptions of the public.<sup>183</sup> The real story involves assisting women and children, but it also involves chaos aboard the sinking ship with panicked and desperate people, and men of all classes trying to get into the lifeboats and being forcibly held back by officers and crew. Wild accounts from survivors, however, did not fit in with the media’s portrayal of what happened. Instead the media, “...carefully selected the parts of the accounts that fitted with the version of first-class men standing calmly aside while women and children of all classes were loaded into lifeboats.”<sup>184</sup>

Inevitably, accounts of chaos and panic while the ship was sinking found their way into the public eye. However, the less than gentlemanly aspects of that night were not allowed to spoil the romantic myth, “...if there were lapses in discipline, they were explained by the fact that the *Titanic*’s passengers and crew were ‘not all Anglo Saxon’”.<sup>185</sup> According to the media and public perceptions, if men had found their way aboard the lifeboats they must have been foreign scoundrels. In this case, the media ignored the fact that there were quite a few first class male survivors.<sup>186</sup> Storytellers twisted the ignoble events and behavior during the sinking to reinforce the nobility of the purer, first class men.

In terms of portraying women aboard the *Titanic* in a mythical light, there is an interesting story that emerged some years after the sinking of the *Titanic* involving American

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<sup>182</sup> Ibid., 316.

<sup>183</sup> Ibid.

<sup>184</sup> Ibid.

<sup>185</sup> Barczewski, *A Night Remembered*, 55-56.

<sup>186</sup> Biel, *Down with the Old Canoe*, 49.

survivor Margaret Brown. She is more well-known as “Unsinkable Molly Brown” whose strong will during the disaster became legendary. She was never known as Molly Brown during her life and was only nicknamed Molly after her death in 1932 when some people wrote wild and inaccurate accounts of her life. She is portrayed as a plucky character with a strong sense of righteousness who took command of the lifeboat she was in. Molly Brown became a strong female character that women could look up to and she embodied stereotypical American values of individualism, courage, and endurance. The real Margret Brown was not as gutsy as she is portrayed, but she was a kind person who strongly argued to rescue people from the water though she was overruled.<sup>187</sup> The myth of the “Unsinkable Molly Brown” reflected strong American patriotic feelings and attitudes.

How the media portrayed the disaster and how the public reacted to it is telling of Edwardian society. Upper class, rich, Anglo-American gentlemen were examples of the best of society. Women were delicate and had to be protected by the aforementioned gentlemen who were supposed to give their lives chivalrously for women and children. Foreign men aboard the *Titanic* were portrayed as brutes trying to disrupt the order of society while the ship was sinking. Through the lens of this society, the story of the *Titanic* was often romanticized and allowed myths to emerge.

### **A Legacy**

One might think that, as with many disasters, the story of the *Titanic* would have eventually been forgotten in the wake of newer disasters. However, the *Titanic* not slip into obscurity after 1912. Famous authors like George Bernard Shaw and Arthur Conan Doyle, for

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<sup>187</sup> Barczewski, *A Night Remembered*, 88-89, 92-93.

example, wrote about the disaster not long after it happened.<sup>188</sup> Poems and songs written about the *Titanic* further romanticized the sinking.<sup>189</sup> One of the very first films about the *Titanic* called *Saved from the Titanic* was a short film released only a month after the disaster. It starred Dorothy Gibson, an actress who had actually been aboard the *Titanic* and survived.<sup>190</sup> One of the most intriguing *Titanic* films was a propaganda film during World War II. It was not a film made by the Allied Forces however, but by Germans. The film, a mix of fiction and historical fact, glorifies German passengers as the most noble and shows a single, and entirely fictional, German officer as competent and intelligent in the midst of the incompetent British.<sup>191</sup>

The 1950s were a popular decade for the *Titanic*. In 1953, Hollywood made an Oscar winning film called *Titanic* that featured big Hollywood stars like Robert Wagner and Barbara Stanwyck. The main characters and their story were fictional but parts of the movie were drawn from transcripts of both the British and American inquiries.<sup>192</sup> In 1955, Walter Lord published the first full historical account of the sinking based on extensive research and interviews with survivors.<sup>193</sup> *A Night to Remember* is still one of the most well-known and well cited books about the *Titanic*. A television adaption of the book was shown a year later, followed by a movie adaptation of the book released in 1958. The 1958 movie, also titled *A Night to Remember*, was more successful than the 1953 movie and remained the most well-known movie about the *Titanic*

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<sup>188</sup> Heyer, *Titanic Legacy*, 106.

<sup>189</sup> Ibid 161-164.

<sup>190</sup> Ibid 124.

<sup>191</sup> Heyer, *Titanic Legacy*, 127; Biel, *Down with the Old Canoe*, 149.

<sup>192</sup> Heyer, *Titanic Legacy*, 129.

<sup>193</sup> Ibid 130.

until the 1990s.<sup>194</sup> The film remained true to the book on which it was based and was therefore historically accurate, save for some liberties taken.<sup>195</sup>

There were other television and cinema films that either were about the *Titanic* or involved the *Titanic* in some fashion. *The Unsinkable Molly Brown* featuring Debbie Reynolds was a 1960 film version of a musical play that was very loosely based on the life of *Titanic* survivor Margaret Brown.<sup>196</sup> *S.O.S Titanic* was a made-for-television movie in 1979, which featured Helen Mirren and Ian Holm and focused on the voyage and the sinking.<sup>197</sup> *Raise the Titanic* was a 1980 film adaption of a book by the same name with a plot that required finding and raising the *Titanic* in order to retrieve radioactive materials in the midst of the Cold War.<sup>198</sup> The movie takes place before the discovery of the wreck in 1985 because the characters successfully raise a fully *intact Titanic*.

Even comedies found ways to use the *Titanic*'s story. The 1981 fantasy comedy *Time Bandits* involved a scene where characters traveled through time and at one point end up on the *Titanic*.<sup>199</sup> Although the movie *Ghostbusters II*, released in 1989, takes place several years after the discovery of the wreck, it features a scene of a ghostly *Titanic* floating into New York, as an intact ship with a gaping hole in its side.<sup>200</sup>

These books and films have sustained the story of the *Titanic* over the long years. They, whether fictional or not, have become a part of *Titanic*'s history through popular culture. In some cases, they have sustained some of the myths about the *Titanic*. For example, *Raise the Titanic*

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<sup>194</sup> Biel, *Down with the Old Canoe*, 161.

<sup>195</sup> Heyer, *Titanic Legacy*, 134.

<sup>196</sup> "The Unsinkable Molly Brown (1964) - IMDb." <http://www.imdb.com/title/tt0058708/>

<sup>197</sup> Heyer, *Titanic Legacy*, 136-137.

<sup>198</sup> "Raise the Titanic (1980) - IMDb." <http://www.imdb.com/title/tt0081400/>

<sup>199</sup> "Time Bandits (1981) - IMDb." <http://www.imdb.com/title/tt0081633/>

<sup>200</sup> "Ghostbusters II (1989) - IMDb." <http://www.imdb.com/title/tt0097428/>

and *Ghostbusters II* sustained the myth that the ship went down whole. Another example is the movie *The Unsinkable Molly Brown* that sustains the myth that Margaret Brown was larger than life. The book and movie *A Night to Remember* were not mythical but their telling of the story captivated people's interest in the *Titanic* for many years. The history of the *Titanic* is more than just its sinking and wreck, it is also the interest and creations that have come about because of the disaster.

In 1985, an expedition led by Robert Ballard discovered the wreck about 400 miles off the coast of Newfoundland. His discovery and the technologies he applied, as discussed in the next chapter, ushered in a new era in the ship's history. This event and the sinking in 1912 are undoubtedly the biggest moments in the *Titanic*'s story. The narrative of the *Titanic* was shaped in between those years. The inquiries into the sinking were an official account of what happened the night of the disaster and established the cause of the accident. The media's coverage of the sinking and the inquiries reflected Edwardian society. Based on its values and norms of class, race, and gender it created romantic myths about the story of the disaster. Even as the decades past, the *Titanic* continued to retain people's interests and sense of nostalgia through movies and books. This continuing fascination set the stage for 1985 when a group of researchers exploring the depths of the Atlantic would find the long lost *Titanic* and not only inspire new interest, but also add a new chapter in the history of the ship.

### Chapter 3: Technology and Theories

The year is 1985 and a research ship called *Knorr* is sailing the North Atlantic, scouring the bottom of the ocean for another ship that had sailed the same waters over seven decades beforehand. The research team aboard the *Knorr*, headed by Dr. Robert Ballard, looked at images sent from a remotely operated camera more than two miles below the surface. One moment the team would see sand and in the next the wreckage of the *Titanic* that had never been seen before by humans. The discovery was monumental and not only reignited but also created new interest in the tragically famous passenger liner from a bygone era. Nobody expected to find the *Titanic*'s broken wreckage. With the help of modern technology, however, scientists and researchers could travel down to the wreck site and study it in detail to learn why the ship had broken apart. The long-standing mystery of the location of the ship was answered, but an abundance of questions rose to take the place of the original mystery. Theories arose that attempted to answer how and why the ship sank and broke apart. Many of these theories involve the many expeditions that have traveled down to the *Titanic* over the years and those tend to be the most talked about. However, there are also several theories that have been made that do not involve expeditions down to the wreck. This chapter addresses and compares all of them.

In the late 1970's, Robert Ballard, a marine geologist with a Ph.D. in Geological Oceanography, together with William Tantum of the *Titanic* Historical Society, started to look for sponsors to search for the wreck of the *Titanic*.<sup>201</sup> Ballard had been interested in the *Titanic* because not only was the idea of finding the wreck challenging, but he was also captivated by the tragic story.<sup>202</sup> One of the main reasons to put together an expedition, however, was to give

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<sup>201</sup> Ballard and Archbold, *Discovery*, 54-59.

<sup>202</sup> *Ibid.*, 43.

scientists the opportunity to expand and improve deep-sea exploration.<sup>203</sup> In fall 1977, Ballard took a team out onto the Atlantic to look for the *Titanic* for the first time. Unfortunately, before they could even start using the equipment they had lowered into the ocean, disaster struck: essential equipment operating instructions had not been communicated to the crew, and ultimately the equipment was lost to the depths of the ocean.<sup>204</sup>

Almost ten years later, in 1985, Ballard had another opportunity to search for the *Titanic*. The U.S. Navy, interested in Ballard's special sonar equipment and cameras, funded him to assist in finding entirely different sunken ships, submarines, which had disappeared in the late 1960s.<sup>205</sup> This time Ballard was working with the Woods Hole Oceanographic Institution of marine scientists.<sup>206</sup> The first half of the expedition was a classified expedition to examine the wrecks of a submarine called the USS Scorpion that was lost in 1969, and a Soviet submarine that was believed to have rammed and sunk the Scorpion. The second part of the expedition, also funded in part by the U.S. Navy, was a joint French-American operation, ventured to search for the *Titanic*. Instead of the Knorr the French survey ship *Le Surriot* led the expedition.<sup>207</sup>

After *Knorr* had finished its first mission, it joined with the French research team to look for the *Titanic*. Ballard and his team defined the search area by different variables; they did not assume that the *Titanic* was located exactly at its last reported coordinates, but rather southeast of them. They believed that the *Titanic* lay elsewhere because of ocean currents. A hint to this is the fact that the *Carpathia* reached the survivors before it reached the *Titanic*'s reported

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<sup>203</sup> Ballard and Archbold, *Discovery*, 50-51.

<sup>204</sup> *Ibid.*, 61-63.

<sup>205</sup> Butler, *Unsinkable*, 225-226.

<sup>206</sup> "Profile Page: Robert D. Ballard." *University of Rhode Island Graduate School of Oceanography*, <http://www.gso.uri.edu/users/ballard>; *Discovery* 47-49.

<sup>207</sup> Butler, *Unsinkable*, 226; Ballard and Archbold, *Discovery*, 87.

coordinates; an additional hint is that the *Californian* had drifted after it stopped for the night into the ice fields.<sup>208</sup> Covering the search area was long and laborious and the expedition only had so much time to complete its work. The *Le Suroit's* search involved scanning the bottom of the ocean with sonar trailing behind the ship by a tether back and forth, slightly overlapping with each pass, somewhat like vacuuming a carpet.<sup>209</sup> Good weather on the surface meant the tether could be kept taut and scanning made easier, but the expedition did not always have good weather on the Atlantic, which prevented the team from searching continuously.<sup>210</sup>

Time was running out for the expedition. The team of researchers decided upon a new strategy for searching. The *Knorr* took over the search from the *Le Suroit* and the American and French scientists. The team had relied on sonar but now added a remotely controlled video camera system, called *Argo*, to visually search for the wreck of the *Titanic*.<sup>211</sup> Ballard's previous experiences in finding sunken objects taught him that smaller pieces break off from the whole and, "In deep water...the heavier the object, the more direct its downward path; but the lightest fragments will fall slowly in the underwater currents like leaves blown from a tree".<sup>212</sup> For a large ship like the *Titanic* sinking thousands of feet down, the currents would create a large debris field. With this in mind, Ballard thought it would make more sense to visually search for the debris field instead of just the ship itself.<sup>213</sup>

After adjusting and shifting the search area, which covered a deep sea canyon aptly named "*Titanic Canyon*", the researchers worked on looking for the *Titanic* through the eyes of

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<sup>208</sup> Ballard and Archbold, *Discovery*, 59, 105.

<sup>209</sup> *Ibid.*, 96.

<sup>210</sup> *Ibid.*, 97.

<sup>211</sup> *Ibid.*, 103

<sup>212</sup> *Ibid.*

<sup>213</sup> *Ibid.*, 104.



the remote camera *Argo*.<sup>214</sup> In late August, with less than two weeks left for the expedition, a dangerous problem with the cable lines that connected *Argo* to the ship nearly caused a sudden end to the trip and the underwater equipment, but complete disaster was averted and the search was able to continue.<sup>215</sup>

After weeks of searching not even a hint of debris could show for all of the researchers' work and time. The night when August turned into September, the late night scanning crew was doing what they had been doing night after night, looking for anything out of the ordinary. Only a few minutes after 1 a.m. endless images of sand were suddenly replaced with things that were definitely not natural to the bottom of the ocean. Then an image of a boiler that could only belong to the debris trail of the long lost *Titanic* appeared.<sup>216</sup> The researchers onboard were elated with finding the debris, yet had sobering thoughts about finding the debris at the same time of night the *Titanic* sank.

The actual wreck was found a short time later. With only a few days left and expecting bad weather, the expedition put all of their new-found excitement and energy into scanning and mapping the debris and wreckage in more detail.<sup>217</sup> As they began examining the bow, the front section of the ship, for the first time, they did so slowly and carefully in order to avoid getting *Argo* tangled up with any cables or other things the camera could hook on to. Ballard and his fellow scientists reasonably assumed, based on survivor testimony, that they would find the entire ship intact.<sup>218</sup> Then a subsequent survey of the ship past the second funnel showed, "...where the stern half of the hull should have been, the deck began to plunge away from us

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<sup>214</sup> Ballard and Archbold, *Discovery*, 106.

<sup>215</sup> *Ibid.*, 121-125.

<sup>216</sup> *Ibid.*, 132-133.

<sup>217</sup> *Ibid.*, 139.

<sup>218</sup> *Ibid.*, 141.

and...the video images faded into a confusing mass of twisted wreckage: turned-up windows, torn hull sections, razor sharp edges of jagged steel”.<sup>219</sup> The back half of the ship, the stern, was gone. The general assumption that the ship had sunk as a whole and had lasted seven decades, was now gone too. This discovery revised the standard narrative of the *Titanic*'s sinking yet also presented an opportunity to test advancing underwater technology

A large storm was causing the *Knorr* to pitch too much. The team replaced the small video camera *Argo* with the larger and sturdier *ANGUS* (Acoustically Navigated Geological Underwater Survey) which would take thousands of high quality pictures of the wreck.<sup>220</sup> The flashing cameras of the underwater equipment quite literally shed light on the *Titanic* for the first time since April 14, 1912. Unfortunately, all too soon the expedition came to an end and the team of researchers who were the first to see the *Titanic* again had to leave. Meanwhile, a different type of storm had been brewing since the first glimpse of the boiler and debris.

The news of the *Titanic* discovery had spread like wildfire around the world, much quicker than anyone on board the *Knorr* had anticipated.<sup>221</sup> Requests for interviews came flooding in and the media consumed every bit of information it could find. This was a familiar pattern. Seventy years prior, news reports were getting ahead of themselves by spreading unfounded rumors. In his book, *The Discovery of the Titanic*, Ballard writes that at one point there were rumors that the *Knorr* not only found the ancient wreck but also attempted to raise the ship.<sup>222</sup> These rumors might have been inspired by the 1970s movie called *Raise the Titanic*. But

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<sup>219</sup> Ballard and Archbold, *Discovery*, 146.

<sup>220</sup> *Ibid.*, 148.

<sup>221</sup> *Ibid.*, 138.

<sup>222</sup> *Ibid.*, 156.

the *Knorr* left the *Titanic* where it was and sailed into its dock, where it was greeted with another familiar sight.

Crowds waited at the dock celebrating in grand fashion the arrival of the ship similar to the crowds that had bid the *Titanic* farewell on its maiden voyage.<sup>223</sup> Mixed within these happy crowds were the media, itching to interview the researchers who had found the *Titanic* and share the news around the world. The reporters resembled the ones who had swarmed the docks in New York, desperate to interview the people who had survived the *Titanic*.<sup>224</sup> The *Los Angeles Times* observed that the discoverers of the *Titanic* wreck received a welcome similar to that the *Titanic* might have received had it reached New York.<sup>225</sup> People were excited. They considered Ballard and his team heroes for rescuing the wreck from being lost forever.<sup>226</sup>

Ballard and the scientists he worked with on the 1985 expedition kept the exact location of the wreck a secret.<sup>227</sup> The idea was to prevent unofficial dives to the *Titanic* and potential plunder of the shipwreck and the field of debris.<sup>228</sup> The 1985 discovery finally found the *Titanic* but generated a multitude of other questions. The bow and the stern were separated from each other on the ocean floor, which begged the obvious question of what caused the ship to break. Scientists especially were interested in answering this because a ship of the size of the *Titanic* would have to endure many stresses working in tandem for the structure to split. As such, it would be an opportunity to use their own expertise. The American and British inquiries previously answered the questions of how and why the ship sank; the ship struck an iceberg and

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<sup>223</sup> Ballard and Archbold, *Discovery*, 160.

<sup>224</sup> Ibid.

<sup>225</sup> Biel, *Down with the Old Canoe*, 211.

<sup>226</sup> Ibid., 211-213

<sup>227</sup> Eaton and Haas, *Triumph and Tragedy*, 307.

<sup>228</sup> Ballard and Archbold, *Discovery*, 246.

the amount of water flooding in surpassed the limits of the watertight bulkheads and pulled the ship under. This time scientists and researchers wanted to understand how and why the ship broke apart. It would take another two decades for these questions to be explored.

The summer of 1986, not even a full year later, Dr. Robert Ballard and an American research team went back aboard the *Atlantis II* to survey the *Titanic* in more detail.<sup>229</sup> The second expedition would be more in depth than the previous one. This time the team had the whole trip to examine and map the *Titanic* instead of spending weeks looking for it and only having a few days left to see it like the previous year. A few of the researchers traveled down to the wreck in a mini submarine called *Alvin* fitted with a detachable remote controlled camera, *Jason Junior*, tethered to the submarine that could travel where the submarine could not.<sup>230</sup> The expedition, again done through the Woods Hole Oceanographic Institution, proved an opportunity to test the U.S. Navy's new underwater vehicle *Jason Junior*.<sup>231</sup> *ANGUS*, the underwater device that had been used to find the *Titanic* originally, also made a return trip to the *Titanic* and would serve as a scout, mapping out the wreck of the stern section in case the *Alvin* was ready to move on to the stern.<sup>232</sup> This would be the first time since 1912 that the *Titanic* would be seen in person, and not just through a camera.

*Alvin* took about two and a half hours to travel more than two miles down to the site of the wreck. Because of technical problems, the few on board the small submarine were only able to see the *Titanic* for a few minutes before being forced to return to the surface for repairs.<sup>233</sup>

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<sup>229</sup> Ballard and Archbold, *Discovery*, 165.

<sup>230</sup> *Ibid.*, 166, 171.

<sup>231</sup> "1986 Return to the RMS *Titanic*." *Woods Hole Oceanographic Institution*, <https://www.whoi.edu/page.do?pid=83577&tid=3622&cid=128089>

<sup>232</sup> Ballard and Archbold, *Discovery*, 182.

<sup>233</sup> Ballard and Sweeny, *Return to Titanic*, 59-62.

One of the subsequent trips went more smoothly and took the few researchers cramped in the small submarine on a small but incredible tour of the interior through the eyes of the maneuverable camera system *Jason Junior*. *Alvin*, carefully maneuvered, landed on the top deck of the bow behind the glass dome that had once topped the Grand Staircase. *Jason Junior*, controlled from the *Alvin*, headed out and down the opening into the staircase and explored some of the first class areas adjacent to the staircase.<sup>234</sup>

A few days later, after exploring the bow section and the debris field, the team examined the stern. “Like the bow the *Titanic*’s stern section was buried deep into the mud — 45 feet or so — with the mudline resting well above the position of the propellers. Only about 16 feet of her rudder could be seen rising out of the ooze, as if the ship were floating on the surface of the sea”.<sup>235</sup> Pictures of the bow section are the most famous one of the *Titanic* wreck. There is a reason for this besides the fact that it is the front of the ship. After the ship broke apart, the stern was open to the sea and water pouring in in vast amounts caused a lot of damage to the stern so that, “...the effect of the impact of the stern with the bottom [of the ocean] was more devastating as the upper decks all pancaked down...The entire deck area of the stern is now utter devastation”.<sup>236</sup> This pancake effect is obvious when looking at the wreck of the stern from the side, and the hull along the side of the stern looks like it was blown out or peeled away and the collapsed decks are clearly visible.

Most of that damage happened both at the start of the plunge and at the moment of impact.<sup>237</sup> The stern, facing the opposite direction of the bow, is almost an unrecognizable

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<sup>234</sup> Ballard and Archbold, *Discovery*, 205.

<sup>235</sup> *Ibid.*, 230.

<sup>236</sup> *Ibid.*, 258-259.

<sup>237</sup> *Ibid.*, 258-259.

twisted mess covered in debris, and decking and hull plating is strewn all over and around the stern. When the stern sank, there was air trapped inside because the stern had not fully flooded. The water pressure increased as the stern sank deeper, eventually causing an implosion, further damaging the ship.<sup>238</sup> Additionally, the stern rotated around in a spiral as it made its descent, which explains why debris from the stern is in certain locations and why the stern landed facing the opposite direction of the bow.<sup>239</sup> By comparison, the bow is fairly well intact and instantly recognizable; this is why pictures of it seem to be more common. Although the bow is prettier, the stern is very haunting to look at considering the fact that it was part of the ship where hundreds of people clung to before it completely sank.

The expedition would capture some of the most well-known images of the *Titanic* and also record the state of the ship, how well it had been preserved, and how much it had decayed. Ballard describes the deep sea's effect on the ship:

*Titanic's* wood and iron generally had suffered the worst decay—the former eaten away and the latter covered by fans and stalactites of rusticles. Ceramic, glass, and bronze remained as bright as ever, especially where scoured by the current. Even some documents remained surprisingly intact. Clearly, some parts of the ship had fared better than others. The expedition raised new questions about the environment at the bottom of the ocean, as well as what had happened the night of April 14-15, 1912.<sup>240</sup>

*Jason Junior* was a brand new device and its capabilities were tested on the 1986 *Titanic* expedition.<sup>241</sup> Since *Jason Junior* was a small camera device linked to *Alvin* by cable, it could explore small and tight areas that the mini-submarine could not. When not in use, it could fit in a

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<sup>238</sup> Cameron et al., *Exploring the Deep: The Titanic Expeditions* (San Rafael: Insight Editions, 2013), 233.

<sup>239</sup> *Ibid.*, 234-235.

<sup>240</sup> Ballard and Sweeny, *Return to Titanic*, 65-66.

<sup>241</sup> Ballard and Archbold, *Discovery*, 165.

special box attached to *Alvin*.<sup>242</sup> Since its creation in the 1960s<sup>243</sup>, the submersible *Alvin* was much older than *Jason Junior* was but it was an incredibly useful tool in exploring the wreckage of the *Titanic*.

This mixture of older and newer technologies made it possible to see the *Titanic* up close and personal. The *Titanic* was technologically impressive for its day but since its sinking, technology has improved and evolved by leaps and bounds. Technology has helped science discover and understand more about the *Titanic*. Advancements and improvements in technology over the years have made it possible to come closer to finding out exactly how the ship sank.

### Theories

Ballard's discovery opened the door for new questions and theories about the ship as well as an in-depth exploration of the wreck. There have been many different theories and simulations done to answer various questions, such as how the ship broke apart, why the stern suffered such massive and catastrophic damage when the bow suffered much less damage by comparison, and why the stern landed differently than the bow, which was turned in the opposite direction, and so on.

The first theories that will be examined are the ones that do not specifically involve expeditions, but are scientific studies that look closely at historical records in combination with science. They may not be the most well-known or popular theories, but they still are thought-provoking and are genuine contributions to understanding what happened that night to the *Titanic*.

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<sup>242</sup> "1986 Return to the RMS *Titanic*." *Woods Hole Oceanographic Institution*, <https://www.whoi.edu/page.do?pid=83577&tid=3622&cid=128089>

<sup>243</sup> *Ibid*.

The wreck of the *Titanic* is mysterious because the wreck looks different depending from what angle you view the ship. A view from the top looks radically different from the sides of the ship or any angle in between, and additionally other areas of the bow and stern will look unlike the surrounding area. Some parts of the top of the bow section look like they were crushed from the top; some of that can be attributed to the first funnel falling forward when the ship was sinking. However, an author of a few *Titanic* books has come up with his own theory as to why parts of the bow and especially the stern looked like they were crushed from the top.

Charles Pellegrino ran his own experiments on a small model to see what other effects water might have had on the sinking besides filling up the ship and pulling it under. He put red dust in the water to more clearly see how the water around the model was behaving. “Each time I sank the ship, I watched very carefully the slipstream of red dust that trailed behind it. After the model came to a sudden stop on the bottom, the red dust spread out over a radius at least as large as the ship’s length, in great cauliflower billows”.<sup>244</sup> He called the effect a “downblast”. Dr. Robert Ballard mentioned the theory in his book, *The Discovery of the Titanic*, and added that it was plausible based on the damage he saw to the wreck.<sup>245</sup> For instance, swimming down through water at a fast pace and then coming to a sudden halt, one feels a small rush of water catch up and disperse around oneself. Thus it seems reasonable that some sort of downblast effect might have happened when the bow and the stern came to a sudden halt, after traveling at estimated speeds of 25 to 30 miles per hour.<sup>246</sup> How much of an impact this effect had on the wreck is very debatable. It may have caused only little to no extra damage, especially if the bow

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<sup>244</sup> Pellegrino, *Ghosts of the Titanic* (New York, N.Y.: William Morrow, 2000), 5.

<sup>245</sup> Ballard and Archbold, *Discovery*, 258.

<sup>246</sup> *Ibid.*, 257



and stern were traveling at slower speeds, or perhaps it did have a more moderate effect. It is a theory that needs more scientific research.

There is another theory about how the *Titanic* sank and what might have affected the sinking that has two different parts. This theory has to do with a coal fire that was burning down at the bottom of the ship while the *Titanic* was sailing across the Atlantic. At the British Inquiry, some of the surviving crew testified that coal in a bunker in Boiler Room No. 5 had caught fire right after leaving Belfast.<sup>247</sup> Since coal is combustible, it is difficult to put out once it starts to burn. It took several days between picking up the first passengers at Southampton, up to the day before the sinking, until the crew was finally able to put out the fire by removing all of the coal from the bunker.<sup>248</sup> According to two of the crewmembers, the bulkhead underneath was slightly deformed because of the burning coal.<sup>249</sup> One of the two crewmen testified that coal fires were not uncommon but he did not feel he could speculate as to whether the fire and the deformed metal contributed in any way to the sinking.<sup>250</sup> These testimonies about a coal fire have led to quite a bit of speculation and two distinct theories.

The first theory is an attempt to explain why the *Titanic* did not slow its speed after receiving multiple iceberg warnings. A persistent assumption was that the *Titanic* did not slow its speed because White Star Line wanted to show off the prowess of the ship. This idea has been circulating for years. It is a myth, however. The *Titanic* was not the fastest ship ever built and pushing it to its limits would not have made much of a difference in shortening the journey. Robert Essenhigh, an engineer and professor, however, believes that the ship did not reduce its

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<sup>247</sup> *Titanic Inquiry Project*, <http://www.titanicinquiry.org/BOTInq/BOTInq05Hendrickson03.php>, - 5239

<sup>248</sup> *Titanic Inquiry Project*, <http://www.titanicinquiry.org/BOTInq/BOTInq05Hendrickson03.php>, - 5243

<sup>249</sup> *Titanic Inquiry Project*, <http://www.titanicinquiry.org/BOTInq/BOTInq05Hendrickson03.php>, - 5248, *Titanic Inquiry Project*, [www.titanicinquiry.org/BOTInq/BOTInq04Barrett02.php](http://www.titanicinquiry.org/BOTInq/BOTInq04Barrett02.php), - 2305

<sup>250</sup> *Titanic Inquiry Project*, <http://www.titanicinquiry.org/BOTInq/BOTInq04Barrett02.php> - 2336, - 2337

speed because of the coal fire. This was not because the crew wanted to get to port faster to take care of the fire. Instead, the usual method of putting out coal fires on ships was to transfer the affected coal to the steam powered boilers at a much quicker rate than normal in order to get rid of the coal. Removing large amounts of coal at a fast rate causes more steam and therefore more speed or a maintained speed.<sup>251</sup>

There is also more to this theory; records indicate that the coal storage bunkers on the *Titanic* contained half the amount they normally would. Essenhigh estimates that if the ship was going at full speed, the coal supply would have been depleted by an inch per hour. Therefore, a coal fire near the bottom of the pile would be burning upwards at the same rate the coal was being removed from the top, and the fire would not have been reached by the time of the collision.<sup>252</sup>

The first part of Essenhigh's theory does make sense; the easiest way to get rid of a coal fire on a steam ship would be to transfer it to the boilers. The second part of the theory, that the coal and the fire would not be removed by the time the ship sank does not take into account the crewman who testified at the British Inquiry that they worked hard to remove the coal and did so by Saturday. There was another crewman, John Dille, who did not testify at either inquiry. He was recorded saying that there was a fire in bunker number 6 and that it was still raging when the *Titanic* struck the iceberg.<sup>253</sup> Perhaps this is what Essenhigh was referring to as part of his theory.

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<sup>251</sup> "Coal Fire Theory." *Titanic.com*, <http://www.titanic.com/modules/articles/article.php?id=27>

<sup>252</sup> [Ibid.](#)

<sup>253</sup> "Coal Bunker Fire." *Titanic Research & Modeling Association*, <http://titanic-model.com/db/db-03/CoalBunkerFire.htm>

Dilley's description of the fire is suspicious though because there is nothing to corroborate it. He did not testify at an inquiry and those crewmen who did testify told a different story, namely that the fire was in a bunker in Boiler Room No. 5, not 6.<sup>254</sup> Essenhigh's estimation of the rate at which it would take for the coal supply to drop at full throttle does not take into account that the crewmen had orders to get the coal out quickly so that the bulkhead could be inspected for damage.<sup>255</sup> The crew assigned to that boiler room would have been working very hard to get the coal out very quickly. Although the testimony does not specify what the crew did with the coal, it is possible that they transferred all the coal from that bunker into the boilers. On the other hand, they might have transferred the good coal to other bunkers, in order to make up for the lost coal weight in Boiler room No. 5 to keep the ship from listing to one side,<sup>256</sup> and the burning coal to the boilers.

The basic idea of the theory that the ship did not slow down because crewmen were shoveling all of the coal from the burning bunker into the boilers and causing the *Titanic* to maintain a higher speed, is plausible. However, the theory ignores the testimony of crewmen from the British Inquiry.

The second theory related to the coal fire has to do with the fire itself and questions the extent of the damage it might have caused. Knowledge of the coal fire has understandably made people wonder if it damaged the bulkhead substantially and if it played a role in the breakup of the *Titanic*. As previously stated, two crew men testified that the bulkhead appeared to be dented after the coal was removed. One wonders how dented it was and if the damage was severe. A part of the theory notes that one of the witnesses to the fire, crewman Barrett, "...also recalled

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<sup>254</sup> Ibid.

<sup>255</sup> *Titanic Inquiry Project*, [www.titanicinquiry.org/BOTInq/BOTInq04Barrett02.php](http://www.titanicinquiry.org/BOTInq/BOTInq04Barrett02.php), - 2302

<sup>256</sup> "Titanic's Boilers." *Titanic-titanic.com*, [http://www.titanic-titanic.com/titanic\\_boilers.shtml](http://www.titanic-titanic.com/titanic_boilers.shtml)

that while he was assisting the engineers below after the collision, a great wall of water rushed through the passageway between boilers [No. 5 and 6], sending him scurrying above decks for good.<sup>257</sup> Therefore, the theory asks if the bulkhead gave way, allowing water to rush through as Barrett witnessed because the fire weakened the metal.<sup>258</sup>

This theory has been scientifically examined and looks at the properties of the metal and coal to see if the coal would burn hot enough to cause the metal to heat up substantially and how affected the metal would be by being heated. If the smoldering coal fire in the bunker burned hot enough to heat the metal bulkhead to red hot, a temperature of 900 degrees Fahrenheit, it would soften. If metal is heated and softened and then cooled over a long period of time it then becomes stronger.<sup>259</sup> However:

...if the bulkhead heated up to red hot and then it was hit with cold seawater, either during the collision or even by a stream of water from a hose, it would quench at some rate. If it cooled fast enough, a phase could form in the structure, known as martensite. Martensitic steel is extremely brittle and will fracture catastrophically under stress.<sup>260</sup>

The problem with the theory is that red-hot steel, the kind of steel that made up the bulkhead, is not hot enough to form a lot of martensite when cooled down quickly. Consequently, even if any martensite formed, the likelihood that it would have affected the low-temperature strength properties of the bulkhead is low.<sup>261</sup>

Additionally, the coal fire may not have reached red-hot temperatures. The coal was in a pile and therefore not a lot of oxygen was reaching the fire to make it hotter. It would probably

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<sup>257</sup> McCarthy and Foecke, *What Really Sank the Titanic*, 176

<sup>258</sup> *Ibid.*, 178.

<sup>259</sup> *Ibid.*, 180.

<sup>260</sup> *Ibid.*

<sup>261</sup> *Ibid.*

be more accurate to describe the coal as smoldering instead of on fire.<sup>262</sup> Furthermore, “the most likely cause of that rush of water seen by Barrett was the collapse of a bunker door on the bunker bulkhead at the forward starboard side of No.5 boiler room”.<sup>263</sup> It is highly unlikely that the coal fire, or rather, smoldering, had much if anything at all to do with the sinking and breakup of the *Titanic*. This is interesting because one would think that if there was coal fire in a bunker at the bottom of the ship it must have had something to do with aiding the breakup of the *Titanic*. However, science has shown that the smoldering fire could not have been hot enough to weaken the metal bulkhead beneath, and coal fires were not unusual occurrences on steam-powered ships of the time. Of all the variables that came together in all the wrong ways to lead to the sinking of the *Titanic*, oddly enough, this fire was not one of them. If nothing else, it goes to show that coincidences can happen even during disastrous events.

There are also theories that point to a possible poor construction of the ship. These theories focus on the steel that made up the ship and its hull as well as the rivets that hold the ship together. The theory about the steel is that it was low quality and brittle and that was why the iceberg was able to do so much damage. The theory about the rivets was that they were also made poorly with metal full of impurities and were not strong enough to hold the ship together.

What gave considerable fuel to the brittle steel theory was that a piece of the *Titanic*'s hull brought up from the bottom of the ocean in 1991 went through metallurgical tests over the years. The tests showed not only that at freezing temperatures the steel was breakable and cracked, but also that the steel contained impurities.<sup>264</sup> The grain of the *Titanic*'s steel is coarser

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<sup>262</sup> Halpern, *Report into the Loss*, 125-126.

<sup>263</sup> *Ibid.*, 126

<sup>264</sup> McCarthy and Foecke, *What Really Sank the Titanic*, 116-117.

than steel made today but it matched with how steel was normally made in Edwardian times.<sup>265</sup> The *Titanic*'s steel met the required specifications for its day, however, "...‘researchers’ conclusions found that *Titanic* steel had low fracture toughness at ice-brine temperatures, something that *Titanic*'s designers knew little, if anything, about and did not specify or test".<sup>266</sup> This meant that the ship's steel was not made to handle cold temperatures, in part because it had more impurities than today's steel, and could react to freezing temperatures by fracturing.

However, further tests on the *Titanic*'s steel showed that impurities in the metal might not have been as much of a culprit as previously thought.<sup>267</sup> Other tests in the late 1990s that looked at how brittle the metal was at certain temperatures indicated that the steel was not quite as brittle or as lower-grade as the original tests had seemed to show. Additionally, if impacted quickly the metal would behave in a more brittle manner and if it were impacted slowly, it would behave more flexibly.<sup>268</sup> Based on survivors' testimony that the impact of the ship against the iceberg was more like a vibration and did not feel like a sharp blow throughout the ship, the impact was probably slow and not quick. The original test on the metal was therefore not an accurate representation of the impact.<sup>269</sup> Furthermore, the original piece of metal tested was already a broken piece from the debris field and is too small of a sample to accurately represent the rest of the ship's hull.<sup>270</sup> Thus, it is unlikely that the steel failed catastrophically because of inferior metal and brittleness, and more likely that the steel did not fracture.

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<sup>265</sup> Ibid., 122.

<sup>266</sup> Ibid.

<sup>267</sup> Ibid., 126-127.

<sup>268</sup> Ibid., 136

<sup>269</sup> Ibid., 134-136.

<sup>270</sup> Ibid., 137.

The next theory attempts to find an answer to why the ship became damaged enough to let water in where the previous theory of weak steel failed. This theory asks whether the rivets holding the hull plates together might have been weak and subsequently failed when the iceberg pushed against the seams of the hull plates. Examinations of those areas of the ship that were damaged from the iceberg showed that rivets were missing.<sup>271</sup> The ship was held together by about three million rivets made of either iron or steel and installed either by a press or by hand hammering.<sup>272</sup> Each batch of rivets was made slightly different than the rest depending on who made the batch and how they made it.<sup>273</sup>

Tests were run on some of the *Titanic's* rivets, whose rounded tops were missing, and they revealed large strands of impurities, called slag, within the rivets that were far above the normal amount usually found in rivets.<sup>274</sup> While these strands can actually help strengthen the metal going parallel to the strands of slag, the metal becomes much weaker if force is applied perpendicular to the strands and breaking can occur. Hammering the rivets into the ship caused the slag at the tops to turn perpendicular to the rest of the slag running along the length of the rest of the rivet.<sup>275</sup> Almost fifty rivets were tested and although many were missing their tops, there were also rivets retrieved that were complete with their tops. They did not show the same signs of stress that the broken ones did.<sup>276</sup> Although many of the *Titanic's* rivets were doing their jobs properly, they could still fail:

If a load from the iceberg impact were borne by the rivets of a joint at the edge of a plate, failure of a small fraction of the rivets (for whatever reason) would transfer this load onto the remaining intact rivets like a domino effect. This load

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<sup>271</sup> McCarthy and Foecke, *What Really Sank the Titanic*, 142.

<sup>272</sup> *Ibid.*, 141.

<sup>273</sup> *Ibid.*, 143.

<sup>274</sup> *Ibid.*, 144.

<sup>275</sup> *Ibid.*, 145.

<sup>276</sup> *Ibid.*, 146.

transfer would occur mainly onto the rivets immediately next to the failed ones. This could bring the stress level in these neighboring rivets to the failure level and propagate the failure of the joint, even if the neighboring rivets are of standard quality.<sup>277</sup>

More testing was done on the iron rivets and there was little consistency among the rivets. Some contained a lot of slag and others contained small amounts, and iron rivets compared to other iron structures still in existence from the 1910s showed much greater amounts of slag than similar 1910s structures.<sup>278</sup> The steel rivets contained much less slag than their iron counterparts did and were therefore stronger. A computer simulation of the collision with the iceberg showed that the iron rivets did not hold up very well.<sup>279</sup> An examination of iron rivets from another Harland & Wolff ship from around the same time of the *Titanic* also shows large amounts of slag, which indicates that unlike the sample of the hull plate, the sample of *Titanic* rivets is a fair representation of the millions of other rivets.<sup>280</sup> Based computer models and physical recreation using iron from the same time period, the iron rivets did fail when the iceberg pushed against and buckled the seams and therefore contributed to the sinking of the *Titanic*.<sup>281</sup>

The latest theories take the weather and astronomy into account as possible explanations for the disaster. This theory is an example of a different and newer way to approach the sinking. It is perhaps known that no moon on the night of the sinking contributed to low visibility at night and hindered the lookouts trying to spot icebergs. The theory is that the moon, even though it was not visible that night, had a role in causing ice fields and bergs to drift much farther south than normal.<sup>282</sup> Two different articles, one done in 1995 and another done in 2012, which cited

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<sup>277</sup> McCarthy and Foecke, *What Really Sank the Titanic*, 147.

<sup>278</sup> *Ibid.*

<sup>279</sup> *Ibid.*, 155.

<sup>280</sup> *Ibid.*, 159.

<sup>281</sup> *Ibid.*, 160, 166-170.

<sup>282</sup> Wood, Fergus J. "A Combined Lunisolar Tidal-Current Forcing Function, Enhanced Calving of Coastal Icebergs, and the Sinking of the "Titanic"." *Journal of Coastal Research*. Special Issue No. 17 (1995): 327.



the 1995 article, noted that the beginning of 1912 witnessed the moon being the closest to earth it had been in hundreds of years.<sup>283</sup> Three different astronomical events coincided that January. A Spring Tide happens when the Earth and Moon line up with the Sun during a New Moon and Full Moon causing the tides to become higher than normal. A Perigean Tide happens when the orbit of the Moon brings it closest to the Earth, also causing higher tides. Lastly, tides are higher around January when the Earth's orbit brings it closest to the Sun. All three of these astronomical events occurred on the same day in January of 1912.<sup>284</sup> The theory is that these unusual conditions early in the year, which created such high tides, caused normally grounded icebergs to the north to be swept away through the Labrador Current and continue south and ultimately into the path of the *Titanic* a few months later.<sup>285</sup>

Much of the discussion about the *Titanic* and how it sank revolves around the wreck itself. The discovery in the 1980s opened up many possibilities to understand the *Titanic* since scientists have been able to go down to the wreck and study it up close. Evolving technology has aided scientists greatly in their expeditions and studies of the wreck. Many theories have come about because of this. Some have been disproven or shown to be unlikely as new evidence has come to light through technology. Other theories have remained and scientists have strengthened their cases for them over the years.

One also wonders how much damage an iceberg could have done since it seems unlikely that ice could cut through steel. The prevailing theory, circulated by the media shortly after the

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<sup>283</sup> Olson et al., "Did the Moon Sink the Titanic?" *Sky & Telescope*, 37.

<sup>284</sup> *Ibid.*, 37

<sup>285</sup> Olson, 38; Blaschke

"The Iceberg's Accomplice: Did the moon sink the Titanic?" *Texas State University: University News Service*.  
[http://www.txstate.edu/news/news\\_releases/news\\_archive/2012/March-2012/Titanic030512.html](http://www.txstate.edu/news/news_releases/news_archive/2012/March-2012/Titanic030512.html)

sinking, was that the iceberg sliced a third of the length of the ship, about 300 feet.<sup>286</sup> Not only does it sound impressive but a gash that big would certainly allow in the amounts of water necessary to sink the ship. On the other hand, a gash that big seems excessive and one would think the ship would have sunk within minutes with a third of ship's length open to the sea. In 1996, an expedition using sonar technology was used to examine the bottom of the sides of the bow, which were buried under many feet of sand, for evidence of the damage.<sup>287</sup> Damage to the seams was found along a much shorter length of less than fifteen feet in length. However, the damage was mirrored on the opposite side of the ship as well, which meant that the impact with the seabed created additional damage to both sides of the bow.

Another expedition in 1998 found hull seams damaged by the iceberg and that matched crew testimony. Together these two expeditions proved that the theory of a 300-foot slit along the *Titanic's* hull was nothing more than a decades-old myth.<sup>288</sup> One of the architects and designers of the *Titanic* from Harland & Wolff testified at the British inquiry and discussed possible damage to the *Titanic*. Using his expert knowledge of the ship's design and studies of survivor testimony, he calculated that the damage was not a continuous slash but rather intermittent punctures. He also calculated the total length of the damage and consequently testified, "...the aggregate of the holes must have been somewhere about 12 square feet".<sup>289</sup> This often-forgotten estimation of the *Titanic's* damage from 1912 was confirmed through technology over 80 years later.

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<sup>286</sup> McCarthy and Foecke, *What Really Sank the Titanic*, 109.

<sup>287</sup> *Ibid.*, 113.

<sup>288</sup> *Ibid* 113-114.

<sup>289</sup> *Titanic Inquiry Project*, <http://www.titanicinquiry.org/BOTInq/BOTInq19Wilding03.php>, -20423.

There is a theory that originated in 2005 that attempts to explain why the *Titanic* broke apart the way it did, and the theory revolves around the bottom of the ship and its expansion joints. There was an expedition down to the *Titanic* in 2005 that observed two intact pieces of the bottom, or underside, of the *Titanic*.<sup>290</sup> These pieces had broken away from the ship during the breakup. This discovery was important because scientists and researchers had not been able to see the bottom of the *Titanic* because it was buried in the seabed. A new theory about the breakup emerged that has two main parts. The biggest part of the theory is that instead of the stern rising up drastically high into the air before breaking, as usually portrayed in drawings and famously in the 1997 movie, the stern may have only risen into the air by eleven degrees when the *Titanic* started breaking apart.<sup>291</sup> The second part of the theory is that the design of the ship, particularly the design of expansion joints on the top decks where the ship was thought to have broken apart, was faulty and partly to blame for the breakup.<sup>292</sup> The faulty design theory was aptly referred to as *Titanic's Achilles Heel* in a television documentary that aired on the History Channel in 2007.<sup>293</sup>

A part of the faulty design theory is after the *Titanic* sank, the next Olympic class ship, the *Britannic*, was designed differently because of the disaster.<sup>294</sup> Dives were done on the *Titanic's* sister ship the *Britannic*, which had sunk in World War 1, to examine the expansion

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<sup>290</sup> Matsen, Bradford. *Titanic's Last Secrets: The Further Adventures of Shadow Divers John Chatterton and Richie Kohler* (New York: Hachette Book Group, 2008), Chapter 4.

<sup>291</sup> *Ibid.*, Chapter 14.

<sup>292</sup> *Ibid.*

<sup>293</sup> "Titanic's Achilles Heel." *History.com*, <http://www.history.com/topics/titanic/videos/titanics-achilles-heel-titanic-britannic>

<sup>294</sup> *Titanic's last secrets* Chapter 16. There were three ships of the Olympic class that White Star Line built. The first built was the *Olympic*, which the class of ships was named after. The *Titanic* was built alongside the *Olympic*, but construction was staggered so that the *Titanic* would be finished after the *Olympic*. The third built was the *Britannic*, which was built after the *Titanic* sank.

joints. It was found that the joints were different and better designed than the *Titanic*'s.<sup>295</sup> However, the part of the theory that states that the design was changed because the *Titanic* sank may be flawed. The ship builders and designers were constantly making improvements on the original design to implement them on the next ship built.<sup>296</sup> For example, as mentioned in Chapter 1, the *Olympic*'s maiden voyage was a test run to see what changes could be made to the *Titanic*, such as more first-class rooms. It is more likely that changes to the design of the ship made from observations of the *Olympic*'s performance were made before the *Titanic* sank rather than after.<sup>297</sup> The *Titanic*'s construction was likely too far along to implement design improvements, so the changes were applied to the *Britannic*.<sup>298</sup>

The *JMS Naval Architects* tested the technical aspects of the theory. They conducted multiple simulations with different variables to test if the design of the ship was faulty and failed as a result.<sup>299</sup> They found that the design of the ship was not faulty, and in simulations, the *Titanic* actually outperformed the design specifications that were the focal point of the study.<sup>300</sup> Therefore, the ship's sinking was not accelerated because the structure failed due to bad design. Rather, the breakup was an effect of the sinking than a contributing factor.<sup>301</sup> However, not all of the theory is necessarily incorrect. The study concluded that the *Titanic* would not have been able to support the stern raising up high into the air, even at forty degrees, before breaking and would have broken apart around a much lower angle.<sup>302</sup> Breaking apart at a shallower angle was

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<sup>295</sup> McCarthy and Foecke, *What Really Sank the Titanic*, 20.

<sup>296</sup> Chirnside, Mark. "Olympic's Expansion Joints." *Mark Chirnside*, [http://www.markchirnside.co.uk/Olympic-Titanic\\_expansionjoints-achillesheel-myth.html](http://www.markchirnside.co.uk/Olympic-Titanic_expansionjoints-achillesheel-myth.html)

<sup>297</sup> *Ibid.*

<sup>298</sup> *Ibid.*

<sup>299</sup> JMS Naval Architects. "RMS TITANIC: ALTERNATIVE THEORY." *Ship Structure Committee*, [http://www.shipstructure.org/case\\_studies/RMSTitanic.pdf](http://www.shipstructure.org/case_studies/RMSTitanic.pdf), pg 5.

<sup>300</sup> Halpern, *Report into the Loss*, 122.

<sup>301</sup> *Ibid.*

<sup>302</sup> JMS Naval Architects, pg 10.

not due to bad design, but because the structure could only naturally handle so much stress before breaking up.

There is a strong debate over two opposing theories about how exactly the ship broke apart. One theory states the opposite that the ship broke apart from the bottom hull of the ship upwards through the decks, which is the bottom-up theory. The other theory states that the ship broke apart from the top decks downward known as the top-down theory.

Bottom-up theorists believe that the bottom of the ship was weaker and the top of the ship was stronger because of how the ship was constructed.<sup>303</sup> The theory states that the break first began at the bottom of the ship then spread up towards the top of the ship and stopped before going all the way through. The few upper decks that were still attached acted as a hinge before eventually breaking apart.<sup>304</sup> A useful analogy is that the *Titanic* acted like a cardboard tube; when a cardboard tube is bent, it does not tear at the top but rather the bottom bends inward and upward and collapses from the bottom up.<sup>305</sup> Theorists believe that the ship breaking up from the bottom upward would result in the present day appearance of the wreck and debris, and that a top-down break would have resulted in the stern floating for a longer period of time.<sup>306</sup> Additionally, it is possible that a bottom-up breakup of the *Titanic* would validate the majority of survivors who did not see that the ship broke apart because the break would have happened below the sea.<sup>307</sup>

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<sup>303</sup> Woytowich, "How Did the *Titanic* Really Break Up?" *Scientific American*, <http://blogs.scientificamerican.com/guest-blog/2012/04/09/how-did-titanic-really-break-up/>

<sup>304</sup> Ibid.

<sup>305</sup> Mengot, "The Break-up of the *Titanic*." <http://wormstedt.com/RoyMengot/TitanicWreck/BREAKUP/Breakup.html>

<sup>306</sup> Ibid.

<sup>307</sup> Woytowich

The top-down breakup theory is analogous to breaking a stick in half. Theorists believe that as the flooded bow sank further below the water, gravity was working against the stern that rose into the air until the ship started to split from the top downward.<sup>308</sup> Additionally, because the ship had been listing to the side, the breakup also involved the ship's metal twisting as it broke apart.<sup>309</sup> In 2010, fifteen square miles of the *Titanic*'s wreck site were mapped in their entirety for the first time. New technology was used for the first time to map the site and to try to answer how the *Titanic* broke apart.<sup>310</sup>

Brand new underwater vehicles, called Autonomous Underwater Vehicles (AUVs) similar to their predecessors the Remotely Operated Vehicles (ROVs), equipped with sonar, swept the site methodically to give an entire picture of the area.<sup>311</sup> High definition 2D and 3D cameras for the ROVs, created for the expedition, took a closer look at newly mapped wreckage that had never been seen before.<sup>312</sup> Using all of this new data, scientists and researchers created their own simulation of how the ship sank. The simulation involves the ship breaking from the top down in front of the third funnel. Previous simulations had the ship breaking behind the third funnel, but not all the way through. The bow remained attached to the ship by the bottom hull, which was what was examined during the 2005 expedition, before finally breaking free and descending.<sup>313</sup>

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<sup>308</sup> Stephenson, More Questions Than Answers, Part 2 (continued)." *marconigraph.com*, [http://marconigraph.com/titanic/breakup/mgy\\_breakup3.html](http://marconigraph.com/titanic/breakup/mgy_breakup3.html)

<sup>309</sup> Ibid.

<sup>310</sup> Cohen, First Map of Entire Titanic Wreck Site Sheds New Light on Disaster." *History.com*, <http://www.history.com/news/first-map-of-entire-titanic-wreck-site-sheds-new-light-on-disaster>

<sup>311</sup> Ibid.

<sup>312</sup> Ibid.

<sup>313</sup> [Mengot](#); "Titanic at 100: Mystery Solved (2012) - IMDb." <http://www.imdb.com/title/tt2302931/>

The wide variety of theories suggest that there may never be full consensus on how the *Titanic* broke apart. But perhaps that is why the ship's story still fascinates; there are still enduring mysteries.

Advancements in technology have played an incredible role in understanding how the ship sank, not just technology on expeditions, but also computer technology to run simulations. In the 1980s, it was the new technology of the ROVs that helped to explore the *Titanic* wreck for the first time and in 2010 it was the new technology of the AUVs that mapped the *Titanic* wreck for the first time. In between then and now have been numerous expeditions that made use of the continuing advancements of technology, like cameras and sonar. Computers too have advanced in capability over the years to interpret data gathered from expeditions.

Exploring the *Titanic* has been just as useful in testing advancements in underwater technology in the deep sea as the advancements in technology have been useful in understanding the wreck. Doubtless, there will be more expeditions in the future that will make use of new or advanced tools for exploration. The copious amounts of data already gathered will continue to be studied by researchers. Although the 100<sup>th</sup> anniversary of the sinking has come and gone, people will continue to be awed by the story of the *Titanic* and will continue to use modern day resources to better understand the wreck and its mysteries.

The *Titanic* sank in part because technology did not go far enough in protecting it, but ultimately it would be technology that led to its rediscovery. The irony of the discovery of the wreck is that instead of laying to rest questions of location, it raised an abundance of new questions. This is part of the charm of the *Titanic*. It speaks not only to the scientific inclination to learn but also to humanity's natural curiosity. The explorations of the wreck have added to the

nostalgia that often surrounds famous historic events. The *Titanic* is a wonderful example of how history and technology can meet to enhance our knowledge of an event.



## Chapter 4: Legacy and Preservation

The *Titanic* wreck has lasted in the depths of the sea for over one hundred years, but its surroundings have worn the ship. Far from preserving the ship, the deep-sea environment has been slowly causing the decay of the *Titanic*. Even since the discovery of the wreck in 1985, the ship has decayed noticeably. This natural decay has been at the center of the discussions about the *Titanic*'s preservation.

In 1987, the French used a miniature submarine to dive to the *Titanic* wreck over 30 times. The purpose of this expedition was recovery rather than discovery, and the French brought up nearly two thousand items from the wreckage to be restored and preserved.<sup>314</sup> In 1993, another French expedition took place, which, over the course of half a month, made fifteen dives to research the ship and also to recover almost a thousand more items.<sup>315</sup> In 1996, the biggest item brought up from the *Titanic* wreck was a large section of the hull, twenty by twenty-four feet, that was found in the debris field.<sup>316</sup> There have been many other expeditions since, some of which most likely also yielded artifacts.

Recovering items from the wreck has stirred up a lot of controversy. The fear is that items from the wreck are being sold for profit instead of being preserved for public viewing. The concern was whether to bring up items at all and how to handle them if they were brought up. A United States Senator had therefore proposed a bill that would prevent items from the wreck to be imported into the United States, but this bill did not come to fruition.<sup>317</sup> Previous legislation was passed, in cooperation with the U.S., Canada, United Kingdom, and France that has turned

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<sup>314</sup> Eaton and Haas, *Triumph and Tragedy*, 310.

<sup>315</sup> *Ibid* 313-316.

<sup>316</sup> Ballard and Sweeny, *Return to Titanic*, 77.

<sup>317</sup> Eaton and Haas, *Triumph and Tragedy*, 310.

the *Titanic* wreck into a memorial site with clear guidelines as to how the wreck is to be treated.<sup>318</sup> However, it cannot prevent the illegal recovery of the wreck's objects.

In the midst of items being recovered and international legislation being proposed to protect the *Titanic* site, two very different viewpoints on salvage and recovery emerged.

The first viewpoint is that the *Titanic* wreck first and foremost is the site where over 1,500 people perished and should be treated as a graveyard. The site should only be observed by visiting the wreck respectfully and carefully with nothing being disturbed. Since some consider the wreck to be a gravesite, they believe that to remove items from the wreck, would be no different than robbing a mass grave. While they were alive, survivors, and now their descendants, therefore opposed items being removed from the wreck.<sup>319</sup> This belief also stems from concerns that some expeditions have not been careful treating the site. Submersibles and other underwater vehicles, for example, may have damaged the bow and stern of the wreck. Archeological concerns are that once items are removed, their placement in relation to the main parts of the wreck is lost. Others believe that the ship's artifacts have no significant archeological value because they are mundane things like plates and cups from the dining areas and some personal items from passengers.

The second viewpoint, however, advocates the recovery of items from the wreck to be preserved for public use. Although many perished on the *Titanic*, any human remains would have disintegrated or been removed by deep-sea creatures long ago. Observing the wreck on the sea floor and taking pictures prevents researchers from discovering hidden or buried objects. The company that has the rights to recover items from the wreck is required by law to not disturb the

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<sup>318</sup> Ballard and Archbold, *Discovery*, 265.

<sup>319</sup> Woodfield, Jillian, e-mail message to Charles Haas, March 28, 2014.

bow and stern and only bring up items from the debris field around the ship. Additionally, items recovered are photographed thoroughly before they are removed to mark where their location is. A survey of visitors to museums and exhibitions shows they support the recovery of artifacts. They believe that the retrieved objects are very valuable not only because the public is able to view these items up close but also because item recovery has added to scientists knowledge about the ship and its sinking.<sup>320</sup>

In 2012, one hundred years after the *Titanic* sank, the United Nations Educational, Scientific and Cultural Organization (UNESCO) declared the wreck site a World Heritage site. This happened under the Convention on the Protection of Underwater Cultural Heritage, created by UNESCO in 2001. The Convention is only applied to wreck sites and other cultural artifacts that have been underwater for over one hundred years. The purpose of the Convention is to protect and preserve underwater sites and to encourage further research under certain guidelines.<sup>321</sup> In the case of the *Titanic*, it makes it harder to remove items from the wreck. Recovery must be done with official authorization.<sup>322</sup>

Preserving the ship from decay has also been a point of debate. Despite the idea that the 1979 movie *Raise the Titanic* presents, removing the bow and stern from more than 2 miles down in the ocean is impossible. An interesting suggestion is that sheets of metal called anodes, like zinc, be attached to the wreck and an electric current run through them to cause the anodes to rust rather than the wreck.<sup>323</sup> The logistics of the idea, however, are impractical and the ship

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<sup>320</sup> Ibid.

<sup>321</sup> “The wreck of the Titanic now protected by UNESCO.” *UNESCOPRESS*, [http://www.unesco.org/new/en/culture/themes/single-view/news/the\\_wreck\\_of\\_the\\_titanic\\_now\\_protected\\_by\\_unesco/#.U0VuvFewVFY](http://www.unesco.org/new/en/culture/themes/single-view/news/the_wreck_of_the_titanic_now_protected_by_unesco/#.U0VuvFewVFY)

<sup>322</sup> Woodfield, email.

<sup>323</sup> McCarthy and Foecke, *What Really Sank the Titanic*, Chapter 14.

has already decayed greatly. Because the ship is now under the protection of UNESCO it is unlikely that the Convention would allow anything to be done that might further damage the ship.

Books, documentaries, and movies are a wonderful way of preserving the history of the *Titanic*. There is another way of preserving the ship, however, that goes beyond books and movies. The ability to see the ship in person as it was in 1912 is an interesting way of preserving the *Titanic* in people's minds. Museums and traveling exhibitions are achieving this form of preservation very effectively.

The company RMS *Titanic*, Inc has overseen the recovery and preservation of thousands of artifacts since 1987, shortly after the discovery of the wreck. The company also has assisted with scientific research into the wreck, and it has worked with many people on the expedition that photographed the entire wreck site for the first time. It runs seven separate, permanent *Titanic* exhibitions in multiple states and countries.<sup>324</sup> These exhibitions feature mockups of different areas of the ship, such as examples of different class cabins, and the opportunity for visitors to see items from the wreck up close, such as chinaware from the dining rooms and passenger's possessions.<sup>325</sup> The exhibition in Orlando, Florida, for example, has hundreds of artifacts and features a three ton piece of the *Titanic*'s hull that was recovered from the wreck.<sup>326</sup>

Likewise the *Titanic* Belfast museum in Belfast, Ireland, where the *Titanic* was built, display artifacts among numerous galleries. Reconstructions of parts of the ship cover all aspects

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<sup>324</sup> "About Us." RMS *Titanic*, Inc. <http://www.rmstitanic.net/about-us.html>

<sup>325</sup> [Exhibitions](#)

<sup>326</sup> "The Exhibition." *Titanic the Experience*, <http://www.titanictheexperience.com/orlando/the-exhibition.html>

of the *Titanic*'s story from its construction to the present day.<sup>327</sup> The Maritime Museum of the Atlantic in Canada also has a *Titanic* exhibit that has artifacts for visitors to see.<sup>328</sup> The *Titanic* Historical Society, Inc. has its own museum, which features artifacts and personal items donated by survivors of the sinking.<sup>329</sup> Yet another company called *Titanic* Attraction has two museums both of which are housed in buildings that are replicas of the bow section of the *Titanic*. It also presents artifacts and mockups of different areas of the interior of the ship.<sup>330</sup> All of these museums educate millions of visitors every year about the *Titanic* through up close experiences that are not found in books and movies. These museums preserve not only the artifacts on display but also preserve the history of the ship for future generations.

The environment that *Titanic* rests in returns the ship to dust. Salt-water corrodes the metal and organisms have eaten much of the wood of the ship away over the past century.<sup>331</sup> When the ship hit the bottom of the ocean, it sustained further damage, which weakened the ship's structure. It is estimated that the *Titanic* will decay into an unrecognizable mass within the next couple of centuries.<sup>332</sup> The numerous exhibitions displaying artifacts and models of the ship demonstrate that in modern times, fascination for the *Titanic* continues. However, the heated debates about the preservation of the ship also contribute greatly to the issue of the preservation of underwater sites in general.

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<sup>327</sup> "The Titanic Experience." *Titanic Belfast*, <http://www.titanicbelfast.com/The-Experience/The-Galleries.aspx>

<sup>328</sup> Titanic: The Unsinkable Ship and Halifax." *Maritime Museum of the Atlantic*, <http://maritimemuseum.novascotia.ca/what-see-do/titanic-unsinkable-ship-and-halifax>

<sup>329</sup> "The Titanic Museum." *Titanic Historical Society*, <http://www.titanichistoricalsociety.org/museum/index.html>

<sup>330</sup> *Encyclopedia Titanica*, <http://www.titanicattraction.com/titanic-locations.php>

<sup>331</sup> McCarthy and Foecke, *What Really Sank the Titanic*, 188.

<sup>332</sup> *Ibid.*, 201

## Conclusion

The story of the *Titanic* has been viewed through three main themes in this thesis: Edwardian culture and society, technology, and preservation. Each has had an enormous impact on how the story has developed over the years. These themes provide a context that shows that Anglo-American society greatly defined the conception of the ship and its downfall and aftermath. Modern-day underwater explorations have also and radically changed what we know about the ship. People today not only have a plethora of resources to research the *Titanic* but can also learn about it through museum exhibits. The *Titanic* is thus more than just a ship that had a tragic accident.

The attitudes of the men and women in Edwardian society initially shaped the story of the *Titanic*. The majority of Anglo-American society romanticized the sinking by holding up the first-class men as exemplary paradigms of how all men should be: chivalrous and willing to lay down their lives defending the weak and helpless. Stories of gallant, rich, white men gently assisting women and children into boats then stepping aside to wait patiently for their own deaths were recounted. Attitudes towards class, race and gender roles shaped how many viewed the disaster. The lower classes aboard the *Titanic*, mostly immigrants, did not match Anglo-American preferences for the upper class and Anglo-Saxon race. Not all accepted the romantic tale of the *Titanic*, however, and there were groups that condemned the racism and sexism. Others pointed out that man's blind faith in the "superiority" of technology was partly or entirely to blame for the sinking. A mix of these ideas has remained to this day. The *Titanic* has been romanticized in film and in books while also calling attention to the unfair treatment of the third-class and the blind trust people had in the *Titanic*'s technology.

Although the trust in modern technology may have been partly to blame for the sinking, modern technology also made it possible to find the lost wreck. Without the advancements in technology that made underwater vehicles possible, the *Titanic*'s location would still be unknown. Cameras and sonar made it possible to discover that the ship had split apart. Technology has also aided scientific research in learning about the wreck and understanding what happened to the ship during the sinking. It has not only expanded our knowledge about the ship but has also changed the history of the *Titanic* by uncovering what happened to the ship as it sunk below view from the survivors.

Additionally, artifacts recovered from the ship wreck capture people's interest daily in museums throughout the world. More importantly, controversies about the preservation of the wreck and its objects contribute to policies and procedures of other underwater sites. Still, the legacy endures. Although the *Titanic* may rust away, it has been very well preserved through survivor accounts, books, films, legal protection, and museums.

Through the decades, the *Titanic* is one of the most enduring stories in recent history. The event has remained in the public eye since its sinking over one hundred years ago. Books and films about the ship kept interest alive until 1985 at which point the discovery of the wreck ignited greater interest because there were new questions to be answered. Expeditions throughout the 1990s and 2000s taught more about the ship and recovered thousands of items now on display around the world. April 2012 was the 100<sup>th</sup> anniversary of the sinking and with that came the first complete photographic mapping of the entire wreckage site. People have the opportunity to explore the photographic map online and in some museums. Fascination with the *Titanic* is still high. Two interesting examples: a violin believed to have been played during the sinking

sold at auction for over one million dollars in October, 2013, and a rare second-class menu went up for auction on April 26, 2014 and was expected to sell for over one hundred thousand dollars.<sup>333</sup> The *Titanic* may have sank on a cold night in April 1912, but its story has sailed through the decades. The ship's history is continually unfolding and that is why it continues to captivate people's interest and imagination.

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<sup>333</sup> Nyberg and Carter. "Violin played as Titanic sank sells for \$1.7 million." *CNN.com*, <http://www.cnn.com/2013/10/19/world/europe/titanic-violin-auction/>; Tudor. "Never Before Seen Titanic Menu up for Action." *Yahoo.com*, <http://gma.yahoo.com/blogs/abc-blogs/never-seen-titanic-menu-auction-203201196--abc-news-Recipes.html>



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