

## Disaster in the High Seas: The Spanish Expeditions in the Pacific in the Sixteenth Century

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### Abstract

*The Pacific Ocean is the largest body of water on earth, measuring more than 165 million square kilometers. Although the first European to spot it was Vasco Nuñez de Balboa in 1513, who named it Mar del Sur (South Sea) due to a miscalculation, it was Ferdinand Magellan who named it Pacifico after taking notice of its calm waters.*

*This paper discusses the various disasters that sixteenth-century Spanish expeditions encountered during their trips to and from the Philippines while crossing the vast Pacific Ocean. It focuses on four events: (1) natural disasters like storms and gales; (2) health hazards like diseases and spoiled food provisions; (3) man-made hazards like mutinies and piracies; and, (4) other accidents like leaks and reef grounding. The study covers the period from Magellan's voyage of 1519 up to the trips of the galleons until the end of the sixteenth century, and concludes with the lessons learned from a century of traversing the Pacific.*

**Key words:** *disasters, Pacific Ocean, Spanish expeditions, galleon trade, Philippines*

### I. Introduction

A story on Walter McDougall's (1993) book<sup>1</sup> narrated the historic first eastward trip from the Philippines to Acapulco. Fray Andres de Urdaneta was on his way back to Acapulco from the Philippines. He set a course north by northeast in the hope of bypassing the trade winds and finding the westerlies back to the Americas. Forty-five years earlier, Magellan first crossed the Pacific westward, but since then no one has been able to make a *tornaviaje* (return trip) using the same route through the Pacific. After a month, Urdaneta's crew reached 32° north latitude, 159° east longitude, the same coordinates reached by Saavedra in 1528 but abandoned after a five-day storm

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<sup>1</sup>Walter A. McDougall (1993). *Let the Sea Make a Noise: A History of the North Pacific from Magellan to MacArthur*. Basic Books, p. 25.

crippled his ship, with his crew weakened by the cold and scurvy. Urdaneta then prayed for the intercession of St. Peter, patron saint of his ship *San Pedro*, that the westerlies would carry them back to Acapulco. The westerlies did pick up, the ship sailed eastward until the California current caught them and carried them southward to Mexico. They reached Acapulco on October 8, 1565 after sailing over twelve thousand miles in 130 days. Urdaneta unwittingly discovered the *Kuroshio* current<sup>2</sup> flowing off Japan, the North Pacific Current flowing towards California, and the *tornaviaje* route that eluded earlier Spanish explorers.

Thus began Spain's mastery of the Pacific Ocean. According to Greg Bankoff (2006), *"The Spanish Empire in the Pacific may have been motivated by 'God, gold, and glory' but its realization, in particular its extent and its pulse, was largely determined by the Pacific wind system."*<sup>3</sup> Spain may have built an empire, but it came with considerable loss of life and property. The Pacific, contrary to Magellan's initial impression of this "Spanish lake", was far from calm. It is the birthplace of numerous tropical storms, the home of the world's most active volcanoes and tectonic plates, and the regular site of earthquakes and tsunamis.

## **II. Initial Travels to the Philippines: From Ferdinand Magellan to Miguel Lopez De Legazpi, 1519-1565**

Antonio Pigafetta, Magellan's assistant and chronicler, kept a detailed account of the events of the 1519 expedition. The fleet began its voyage to the largely unknown waters in November 1520, with no clue as to direction or length of travel. Three months later, the food had deteriorated, and morale was low. He notes,

*"The tired crew only ate sea biscuits that were full of worms and smelled of the urine from the rats that had already eaten the good parts. Some men fought over old cowhides which they softened for four or five days in seawater"*

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<sup>2</sup>As described by Shirley Fish in her book, *The Manila-Acapulco Galleons: The Treasure Ships of the Pacific*. Author House (2011), p. 64: *"The Kuroshio Current begins off the coast of Taiwan and flows in a circular, clock wise pattern as far north as Japan. The current then merges with the North Pacific Current (NPC) which flows in a westerly pattern taking the ship towards the coast of Northern California and Mendocino. The NPC is the Pacific's counterpart of the Atlantic's Gulf Stream. Once off the coast of California, the galleon sailed south to Baja California and then to Mexico's Cape Corrientes and Acapulco."*

<sup>3</sup> Greg Bankoff (2006). "Winds of Colonisation: The Meteorological Contours of Spain's Imperium in the Pacific, 1521-1898", *Environment and History* 12, p. 67.

*before cooking them over a charcoal fire. Others caught and sold rats...and the demand for this kind of fresh meat could not be met. Nineteen of them perished from scurvy...*<sup>4</sup>

Scurvy is a disease that occurs due to the lack of Vitamin C and usually accompanies malnutrition. Symptoms include pale skin, sunken eyes, and loss of teeth. It was a common illness among sailors since the 15<sup>th</sup> century due to the absence of fresh vegetables and fruits, especially citrus, in their diets. These foods are highly perishable and cannot last for the several months that the sailors spend in long-distance travel in ships. A second voyage led by Garcia Jofre de Loaisa, and assisted by Juan Sebastian Del Cano [Elcano], was mandated by Carlos I to colonize the Spice Islands for the Spanish Crown. Leaving Spain in 1525 with an impressive fleet of seven ships and crew of 450, the Loaisa expedition barely survived the Atlantic crossing. Even before they crossed the Pacific, they were already down to four ships. After the Pacific voyage, only one ship reached the Spice Islands as three more ships were lost in the storms, while Loaysa and Elcano both died<sup>5</sup> of scurvy in July 1526. The October 31, 1527 trip of Alvaro de Saavedra Ceron proved most favorable for the Spanish fleet. Not only were the northeast trade winds strong enough to push them across the vast ocean, thus making the trip faster, they also arrived in the Philippines after the typhoon season was over.<sup>6</sup> Of course, it helped that one of the captains of the ships was a member of the earlier Elcano expedition and could have copies of the navigation charts. It was also the first time that a Spanish fleet originated from Mexico, instead of Spain, which means the food would remain fresher for a longer period of time during the Pacific crossing.

However, Saavedra could not escape the curse of the Pacific. Only two weeks into the voyage, the crew discovered that the ship was leaking badly. Wright (1951) wrote,<sup>7</sup>

*“...The water was pouring into the bread storeroom in the stern of the ship, in such quantities that the ship was settling rapidly. They hastened to lighten her by throwing overboard thirty quintales [equivalent to fifty days ration*

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<sup>4</sup> Rodrigue Levesque (trans.) *The Philippines: Pigafetta's Story of Their Discovery by Magellan* (n.d.). Levesque Publications, p. 14.

<sup>5</sup> Ibid, p. 111.

<sup>6</sup> Ione Stuessy Wright “Voyages of Alvaro de Saavedra Ceron” in R. S. Boggs (ed.) *University of Miami Hispanic-American Studies* (1951). University of Miami Press, p. 17.

<sup>7</sup> Ibid. p. 19.

*for forty men] of bread and meat and other foods, and set to work to get rid of the water....”*

On December 15, 1527, another misfortune happened to the crew. They encountered a storm, developed rudder trouble, and were forced to wait out the bad weather in the middle of the sea. Two other ships of the convoy – the *Santiago* and *Espiritu Santo* -- continued on their journey, but after the storm passed, these two vessels were never seen again.<sup>8</sup>

It was Saavedra who first attempted the *tornaviaje* in June 1528 by sailing northeastward, but was apparently unprepared for the extreme weather condition and more storms. He returned to the Moluccas and departed for a second attempt in May 1529, only to be attacked by the native islanders along the way. Saavedra himself fell ill and died on the return voyage (estimated around October 1529), but barely out of the western Pacific region. The crew returned to the Moluccas a second time, but was later captured by the Portuguese and taken to Malacca. After the Spaniards surrendered their arms to the Portuguese, they were sent to India and finally got back to Spain in Portuguese ships.

By the time Ruy Lopez de Villalobos set sail in October 1542, a lot of things had been learned about the Pacific. Captains were further instructed to keep a very detailed log of each day's journey, measured in leagues.

Despite all the preparation and the knowledge that went into the Villalobos expedition, the usual problems surfaced – leaking boats, lack of drinking water, and the occasional storms and gales, one of which caused one ship, the *San Cristobal*, to disappear.<sup>9</sup> It would later resurface in Mindanao and rendezvous with the rest of Villalobos's fleet. After several months in Mindanao, one of the ships -- the *San Juan* – would attempt to return to Mexico via the Pacific Ocean. The Villalobos expedition may have been better prepared for the journey this time around, but with the persistent lack of adequate knowledge of wind direction and sea currents occurring in the Pacific, this attempt was destined to fail. It would take Spain two more decades to figure this out before the incredible feat of returning to Spain via the Pacific would be accomplished. Miguel

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<sup>8</sup> Ibid., p. 21.

<sup>9</sup> Andre Gschaedler, "Mexico and the Pacific, 1540-1565: The Voyages of Villalobos and Legazpi and the Preparations Made for Them". PhD dissertation, Faculty of Political Science, Columbia University, p. 52.

Lopez de Legazpi had one very distinct advantage as he set sail across the Pacific in November 1564 – he was assisted by Andres de Urdaneta, who, by this time, had been the foremost expert in navigation. He had been crossing the Pacific since the Loaysa and Saavedra expeditions, and that his knowledge of cosmography and navigation was well known throughout the empire. He became an Augustinian friar in 1552, and stayed in Mexico where he was exposed to more studies on seafaring, particularly on the meteorological observations made along the coast of California.<sup>10</sup>

The November 21, 1564 departure of the Legazpi fleet would have spelled disaster had it not been for the instructions of Urdaneta who outlined different sea routes for (1) departures between Oct 1 to November 10; (2) departures between November 10 and January 20; and (3) departures after January which should not proceed until March.<sup>11</sup> Simply put, for every Pacific voyage, timing is paramount; one cannot take for granted prevailing winds and the sea currents at different times of the year. Needless to say, the voyage proceeded without any incident, and Legazpi reached Guam on January 26, 1565, and Samar on February 13, 1565.<sup>12</sup> Urdaneta left Cebu to return to Mexico on June 1, 1565 aboard the *San Pedro*. Although this was the voyage that discovered the eastward route back to Acapulco, we do know now that out of the original 200 people on board, only about 30 people were able to reach their destination after four months. This fact, however, does not diminish the significance of this return voyage, and it would serve as the route that the Manila galleons would follow for 250 years.

### **III. The Manila-Acapulco Galleon Trade**

Conquering the Pacific didn't end the disasters accompanying the subsequent Spanish expeditions. According to Shirley Fish (2011):<sup>13</sup>

*“After the arrival of the San Pablo in Mexico, it was followed by the San Geronimo, which arrived at Cebu in October 1566. This proved to be a difficult journey for all those aboard the vessel as a mutiny arose on the ship. The captain was murdered by the mutineers and it was a miracle that the ship arrived in the Philippines at all.”*

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<sup>10</sup> Ibid., p. 84.

<sup>11</sup> Ibid. p. 115-16.

<sup>12</sup> Ibid., p. 149, 152.

<sup>13</sup> Shirley Fish (2011). *The Manila-Acapulco Galleons: The Treasure Ships of the Pacific*. Author House, p. 65.

Aside from mutinies, captains also faced the possibility of encountering pirates and rival foreign ships when traveling over international waters. The galleons were part of the Spanish Crown Trade Route (SCTR), a larger network of traditional merchant ships that sailed annually in convoys using the Manila (Philippines) □ Acapulco □ Veracruz (Mexico) □ Seville (Spain) sub-routes. As discussed by Ruescas and Wrana (2012),<sup>14</sup>

*“Thus, two lengthy maritime routes operated across the Atlantic and Pacific Oceans simultaneously for over two centuries. Both of these lines were in turn connected by an overland route between Acapulco and Veracruz via Mexico City.... Through this overland route, the Atlantic and Pacific lines were connected forming a single combined route that stretched from Manila to Seville, linking Asia, America, and Europe....”*

For both the Atlantic and Pacific fleets, the Spanish Government established a highly-regulated system of laws that governed everything from cargo and provisions to weaponry and crew. The schedule for the voyages had to be strictly followed. Sailing to the Americas had to commence in the months of April or May in order to arrive in Mexico before the hurricane season, while the Pacific fleets can only start their voyage in October, but not later than January, to be assured of calm waters and favorable winds.

The Atlantic waters were likewise used by vessels from other countries such as the Dutch and British ships which were always hunting for Spanish galleons. That is why as early as 1526, the King of Spain had decreed that vessels traveling to the Americas would be escorted by war ships. In contrast, the Pacific galleons were not accompanied by these vessels, but instead were fitted with cannons to be able to protect themselves.<sup>15</sup> At times, an incoming Manila galleon was escorted from Baja California to the port of Acapulco by additional armed warships.

Alas, such precautions proved far from foolproof. One such example was when the *Santa Ana* was captured by Thomas Cavendish in 1587 off the coast of Baja California.<sup>16</sup> The *Santa Ana* was originally with the war ship *San Francisco* when they left Manila, but both encountered a typhoon off Japan which considerably wrecked the

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<sup>14</sup> Javier Ruescas and Javier Wrana, “The West Indies and the Manila Galleons: The First Global Trade Route” in *Probing Philippine-Spanish Connections in History: Selected Papers, Philippine-Spanish Friendship Day 2011* (2012). National Historical Commission of the Philippines and the History Department, UP Diliman, p. 8.

<sup>15</sup> Ibid., p. 28, 30

<sup>16</sup> Ibid., p. 188.

latter, leaving the *Santa Ana* to continue its voyage back to Acapulco alone and unarmed. In November 1587, the Cavendish fleet spotted the lone galleon sailing towards Baja California, chased it, and got control of the ship, the cargo, and the crew. After picking the best of the lot from the ship, Cavendish set the *Santa Ana* on fire and set off, leaving the burning ship which managed to drift to a nearby shore, eventually getting salvaged by the remaining crew and brought back to Acapulco.<sup>17</sup>

The Dutch were the more aggressive attackers of the galleons, who constantly dispatched ships to the Philippines. They had hoped to catch one of the incoming or outgoing galleons by blockading either Manila Bay or the San Bernardino Strait. One such encounter happened in December 1600 when Oliver van Noort led the attack in Cavite, which unfortunately resulted with the sinking of the *San Diego*.<sup>18</sup> It was this *San Diego* that was later excavated by underwater archaeologists in 1993, and the artifacts are presently housed in the National Museum of the Philippines and the Museo Naval in Madrid (Spain).

Let me end this study with an incident from the seventeenth century. One of the worst disasters for the Spanish flotilla was the tragedy that befell the *Nuestra Señora de la Concepcion*. The *Concepcion* had quite a reputation as the largest, most indestructible galleon of its time. It was built using the best tropical hardwoods in the Philippines and measured 160 feet long, 50 feet wide, with a carrying capacity of 2,000 tons. It was accompanied by the *San Ambrosio*, but had become separated from the *Concepcion* due to the strong winds they encountered. The *San Ambrosio* was able to stay the course and arrived in Acapulco safely; the *Concepcion*, however, did not.

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<sup>17</sup> [http://en.wikipedia.org/wiki/Thomas\\_Cavendish#Capturing\\_a\\_Manila\\_galleon](http://en.wikipedia.org/wiki/Thomas_Cavendish#Capturing_a_Manila_galleon), Accessed October 5, 2013.

<sup>18</sup> “Oliver van Noort’s Attack on Luzon” in Blair and Robertson, ‘Documents of 1600’, (Volume 11). The Philippine islands, 1493-1803 : explorations by early navigators, descriptions of the islands and their peoples, their history and records of the Catholic missions, as related in contemporaneous books and manuscripts, showing the political, economic, commercial and religious conditions of those islands from their earliest relations with European nations to the beginning of the nineteenth century / tr. from the originals, ed. and annotated by Emma Helen Blair and James Alexander Robertson, with historical introduction and additional notes by Edward Gaylord Bourne. 55 Vols. URL: <http://quod.lib.umich.edu/p/philamer/afk2830.0001.011/144?page=root;size=100;view=image;q1=blair>. Accessed October 5, 2013.

<sup>20</sup> Fish, p. 3.

<sup>21</sup> Ibid, p. 3-4.

<sup>22</sup> Ibid., p. 11-15. An annotated list of Transpacific Galleons, 1565-1815, can also be found in Fish, pp 492-523.

Fish (2011) relates that on September 20, 1638, the *Concepcion* encountered bad weather and crashed into a reef off the southern coast of the Northern Marianas, where it eventually capsized and broke to pieces. An investigation conducted in 1644 concluded that the ship's disaster:

*“...was brought about by a combination of bad weather and the lack of vigilance on the part of the pilots in charge of the ship's navigation. Apparently, there was a disturbance on the galleon which had become so out of control that the navigation of the ship was completely forgotten. Perhaps there was a fight among the officers and crew or a mutiny was attempted with a planned takeover of the vessel. Whatever happened on the galleon, it appears that no one was paying attention to the ship's course and the fact that it had been dangerously drifting towards the reef.”*

Eventually, the culpability was traced back to Manila and to the then Governor-General Sebastian Hurtado de Corcuera, who was held responsible. Fifty-nine charges were brought against Corcuera, among which were (1) appointing his inexperienced nephew as Commander of the *Concepcion* which was probably one of the factors that led to a near-mutiny aboard the ship; (2) illegally-transporting personal cargo of jewelry, gold, and other items aboard the galleons back to Mexico, to be sold for profit; and, (3) numerous violations of Spanish trade laws. A recovery team was sent to Saipan by the Spanish government in Manila in 1684, to at least retrieve the ship's cannons. But it was not until 1987 that an archaeological team led by William Mathers and his team of thirty men and women recovered the riches that the *Nuestra Señora de la Concepcion* buried off the waters of the Pacific for 375 years.

## **Conclusion**

The Pacific Ocean had been the last frontier for the Spanish expeditions in the sixteenth century; their final obstacle to reaching the coveted Spice Islands. Erroneously named *Pacifico* by Magellan in 1520 which he based on its calm demeanor when he first saw the vast ocean, the Pacific is anything but peaceful. For it is the birthplace of numerous tropical storms, the home of the world's most active volcanoes and tectonic plates, and the regular site of earthquakes and tsunamis.

The first hazard they had to overcome was the weather and the ocean current. A ship captain must possess enough skills and navigation know-how to even begin to sail the large ocean to lands unknown. Initially a venture based on trial-and error, they had to



leave Acapulco at a specific time of the year, and carefully keep a daily log of their latitudinal position to even have any hope of surviving the months-long journey or reaching an island to replenish supplies. Another challenge is rationing their food and water supply and combatting physical diseases like scurvy, or emotional distress like loneliness and boredom.

A second hazard is the violent climate. The Pacific is the birthplace of tropical storms, a phenomena entirely new to citizens of an almost hurricane-free Europe. As such, coping with shipwrecks, leaks, storms, and gales had become regular struggles for the hapless sailors.

A third form of challenge was finding the *tornaviaje* route back to Acapulco. For some reason, the Pacific waters behaved differently going back east than moving towards the west. Sixteenth-century navigation meant relying on wind and sea currents in the absence of modern instrumentation. It took Spain all of half a century before hitting the Kuroshio Current off Japan which finally gave them that coveted return trip to Acapulco with a shorter travel time. This historic discovery paved the way for Spain to master the Pacific Ocean, establish their empire, and build a lucrative trade route for the galleons for 250 years.

Finally, Spain had one last hurdle to overcome – piracy and attacks in the high seas. Carrying untold fortune between Manila and Acapulco, the galleons are virtual magnets to every daring treasure hunter with a sea vessel. The Portuguese had staked their claim over the Spice Islands and its surrounding lands and waters, and had used this ruse to capture Spanish vessels which wandered inside its territory. Meanwhile, the Dutch and British ships lie in wait in pivotal water channels like the San Bernardino Strait, Manila Bay, and Baja California. Although Spanish galleons frequently carry cannons and firearms to protect themselves, the length of the travel time and distance sometimes leave them weak and vulnerable to pirates and bounty hunters who maintain close proximity to the shore and thus remain healthy and ready to pounce on weary sailors.

The cost of conquering the Pacific may have been enormous for Spain in the sixteenth century. The payback, however, was their enduring legacy in structuring the earliest techniques for modern navigation and map-making, pioneering the methods to building

a formidable, cross-continent empire, and ushering in the first global trade by linking the largest landmasses of the earth – Asia, the Americas, and Europe.

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### **Biography**

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