

Over the Edge of the World

[Magellan's circumnavigation] by Laurence Bergreen (2003)

Note to reader: at times the author likes the shock factor & you might skip a section.

Had not Ptolemy & other astronomers/mathematicians grossly underestimated the size of the world [specially the Pacific Ocean], the Age of Discovery might never had happened. During this time spices [not gold] were the most precious commodity, so whoever controlled them controlled the world. Arab merchants misled buyers to the origins of spices in order to control the market. Arabs played on sailor's superstitions by stating how dangerous it was out there.

Spain needed money so it found a financial backer to find the spices & figured the Portuguese had better maps to get there. The greedy Archbishop Fonseca (who was in charge of commerce) sent his own son, Cartegena, (who was paid more than Magellan) to verify all that is loaded onto the ships [he didn't notice they were shorted on resupplies in Canary Islands]. Fonseca was a thorn in Magellan's side. And before Magellan left Portugal, had a bounty on his head.

They were called Armada de Moluccas [fleet of spice islands]. Antonio Pigafetta [AP] kept a detailed diary of the entire journey. Sailors that could read, liked the Travels of Marco Polo or Sir John Mandeville. Sailors lived mostly on salted meat, wine & hardtack [dried biscuits]. Later many died from scurvy [lack of vitamin C]. Lice, bedbugs, weevils & mice made their lives miserable.

Cartegena showed disrespect & suspect of mutiny; he was imprisoned. He had one man killed for sodomy. He was glad there were no Portuguese ships in Rio. Rio native girls sold their bodies for any metal objects. After 2 weeks of sensual pleasures the men did not want to leave. Each inlet they searched for deep water that would lead them to the Pacific. At times he would have to be so far away from land to avoid shallow waters that they could not see land.

Easter 1520 mutiny (idle hands & poor conditions) turned 3 of his ships against him. He quietly overtook one in the dark; blocked the bay; cut the anchors of another & waited for the currents to drag it to them where they opened fire & took control. Most traitors were forced to hard labor (empty ship for repairs). Now realizing they are short on food, they went hunting. They lost more provisions when the Santiago went down. 2 men went 70 miles for help. FM sent 24 men by land to bring them all back.

One day a naked giant showed up on the beach in Port San Julian. The natives helped them kill llamas [food & clothing]. FM took 2 captives [to take to Spain] & things began to deteriorate. The waters between South America & the Antarctica are treacherous for many reasons; one being Atlantic is 1500' deep & Pacific 15,000'; another would be the cold, strong winds. FM sent 2 ships out to explore the labyrinth of the strait. They found fish, fresh water & herbs (vit C) in the straights. FM tasted the water to see if it was saltier or not [closer to ocean or glacier].

AP documented the different cultures visited & spent countless hours with the Patagonian giant learning their language, as well as others encountered. But the giant died at sea.

Maggots were eating away at their food, clothes & sails. They began to see where birds at sea would fly to at night [land must be near] & color of clouds [reflecting water color below].

As FM was entering the Pacific, he had no idea of its immensity. FM felt he was on a mission from God. By the grace of God, they had trade winds behind them & were riding the ocean currents west. The Polynesian natives had no private property so they freely gave them food & water to restore their health, but then they also wanted to take things that didn't belong to them.

1405-1433 Cheng Ho [Ming Dynasty] had 1500 ships [5x bigger than FM] & 28,000 men to trade overseas. He had water-tight bulkheads [like a bamboo stalk]. He took tubs of soil onboard to grow plants. But the king [& later Ho] died & brought an end to the era & left a vacuum.

AP fell overboard & almost left in the Philippines [no more journaling] except he caught a rope & was saved. FM slave, Enrique, was taken from his home in the Philippines years ago & was actually the 1st to circle the world.

In the Philippines they traded iron for gold [lb for lb]. FM liked to show off their military strength by firing the canons & boasting of their armor. FM even said he would help servant chiefs in their tribal wars. FM converted 2000 natives & witnessed a miraculous healing & was feeling invisible. He was angered at a village that refused to accept Christ & burned their huts. Before he knew it, he accepted a battle chief Lapu Lapu.

FM was outnumbered 30:1, but he just boasted his men were worth 100 natives in battle. Rather than a surprise attack in dark with high tide; FM waited until the tide was low & the ships were far from shore. Even the longboats had to stop in the mud & became easy targets for poisoned arrows. FM was killed on the shore. Today there is a plaque: "Here on this spot chieftain Lapu Lapu repelled an attack by FM, killing him & sending his forces away." The slave of FM, Enrique, should be set free, but the crew needed him to translate. He disappeared.

The munity crew of the San Antonio told compelling stories back in Spain because their lives depended on it. The Spaniards bought the stories since they wanted to believe the Spanish crew & had grudges against the Portuguese. They cut off financial resources to the wife of FM. The king was upset that he could not pay off his debtors. To give you an idea of the value of spices; a clove tree takes 7 yrs from seedling to crop & only produces 8 lbs/yr until 25 yrs old & they are only grown on 5 mtns of 5 islands.

While at Tidore, they began trading [cloth & metal] & loading spices in a feverish pace. The king allowed each crew member a percentage of the cargo space as their spoil. While there, they found the Portuguese have been there for 10 yrs & they have been pursuing FM around the globe. The natives were more than willing to trade with anyone.

The newly voted capt of the Trinidad made major navigational mistakes as they headed north into the Pacific. Scurvy killed most of his crew as they returned to Tidore, only to be imprisoned by the Portuguese. Trinidad was sunk with its precious cargo. Espinosa squandered his

chance for glory. Meanwhile Elcano rode the currents to Cape of Good Hope [Africa]. But 100 mph winds & 60' waves made it hard.

When Trinidad reached Cape Verde Islands they came when there were no Portuguese ships at the time. As they were taking on supplies, someone slipped that they were part of FM fleet & the locals wanted them to surrender. They fled, hoping to safely home before they are caught, die to scurvy or drown [the ship was leaking again].

They were the first to realize a 24-hr gain while westerly circumnavigating the world [which is now 7,000 miles more that they thought]. They sailed 60,000 miles [15x more than Columbus]. The one ship had enough spices to make a profit for the bankers. The king was happy.

1453 Constantinople fell to the Turks & severed the overland spice route

1480 Ferdinand Magellan [FM] was born

1488 Bart Dias led Portugal into the Age of Discover by sailing the cape of Africa

1492 Catholic Monarchs began the Spanish Inquisition to purge Spain of Jews & Moors

1498 Vasco de Gama's crew were saved from scurvy by Arabs giving them citrus

1499 Vincent Pinzon of Spain found Brazil, but Portugal soon saw the value in its wood

1513 Ponce de Leon set out to find the Fountain of Youth

1517 Magellan rec'd his final rejection from Portugal to find water route west to Indies

1519 [Aug 9] **Magellan set sail from Spain with 5 ships & 260 sailors**

1519 [Dec 13] landed at Rio & ended a 2-month drought so the cannibals were calm for awhile

1520 [Jan 10] they seek shelter from a storm @ Rio de la Plata

1520 [Mar 31] took safe harbor at Port San Julian (200 mi from the straight, but winter is here)

1520 [Apr 1] squelched a mutiny & punished the traitors

1520 [May 22] Santiago went out to explore, washed ashore & fell apart (all saved)

1520 [Aug 24] Cartegena & priest were marooned in an island & FM left port

1520 [Aug 24] winter wasn't over & they took refuge at Santa Cruz River inlet

1520 [Oct 18] they left Santa Cruz River

1520 [Oct 21] they discover the opening to Strait of Magellan

1520 [Oct 28] San Antonio imprisoned her capt [Mesquita] & set sail for home

1520 [Nov 28] 3 ships emerged from Strait of Magellan & headed north [away from the cold]

1520 [Dec 18] FM changed course & headed west across the Pacific

1521 [Mar 6] land was spotted & they stopped at Guam after 98 days & 7000 miles

1521 [Mar 6] FM left Guam

1521 [Mar 18] FM reached the Philippines [Chinese traders left 100 yrs before]

1521 [Apr 27] **Magellan murdered by natives in Philippines**

1521 [May 1] 27 more were killed in a farewell ambush feast & the survivor set sail

1521 [May 2] Concepcion had too much shipworm damage & was burned

1521 [May 6] San Antonio arrived back in Spain

1521 [Jul 9] they were at Brunei [Malaysia]

1521 [Aug 14] they did repairs to the ships

1521 [Nov 8] they found the Spice Islands [Tidore & Mare]

1521 [Dec 15] ready to sail, but Trinidad was taking on water & had to stay for repairs

1521 [Dec 21] Victoria left [with AP] heading southwest alone

1522 [Jan 8] Victoria was taking on water herself & needed repairs near Malua

1522 [Jan 25] Victoria set sail again, but not after getting more food & water

1522 [Mar 18] Victoria had to man the pumps & make repairs in the middle of the Indian Ocean

1522 [Apr 6] Trinidad left Tidore with 50 tons of spices sailing northeast
1522 [May 13] Portuguese fleet arrived in Tidore & imprisoned the 4 left as a post
1522 [May 22] Trinidad finally rounded the cape of Africa
1522 [Jun 8] Trinidad crossed the equator & scurvy set in
1522 [Jul 9] Trinidad reached Santiago Island [held by Portuguese]
1522 [Jul 15] Trinidad fled Santiago [Cape Verde]
1522 [Jul 28] Trinidad spotted Tenerife Island
1522 [Sep 6] Victoria entered the San Lucar Bay with only 18 sick men [they took on help]
1522 [Sep 10] Victoria tied up at Seville [FM crew were the 1st around the globe]
1522 [Oct 18] Elcano & 2 crew were before King Charles
1525 Spain sent another fleet to the Spice island via the same route [8 out of 450 survived]
1527 Prisoners were released from Portuguese jail
1529 Spain unable to repay its debt to Portugal, gave up all rights to the Spice Islands
1580 [58 yrs later] Drake would be the next to circumnavigate the world
1795 [297 yrs later] did the British Navy finally insisted on sailors getting citrus in their rations

Magellan's ships:

Trinidad @ 100 tons, [flagship] was captured
San Antonio @ 120 tons, fled under mutiny
Concepcion @ 90 tons, destroyed by shipworms
Victoria @ 85 tons, returned to Spain
Santiago @ 75 tons, ship wrecked

St Elmo's fire would show up on their mast during a storm