Troubled Waters:

The Battle Over Shipwrecks, Treasure and History at the Bottom of the Sea

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Leslie G. Baehr

B.A. Environmental Science Anthropology University of Colorado at Boulder



SUBMITTED TO THE PROGRAM IN COMPARATIVE MEDIA STUDIES/WRITING IN PARTIAL FUFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE WRITING AT THE MASSACHUSETTES INSTITUTE OF TECHNOLOGY

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Signature of Author:_			
-		Program in Comparative Med	lia Studies/Writing
)		June 10, 2013
Certified by:	-		
			Russ Rymer
			Thesis Advisor
Accepted by:		1//	
·		y	Seth Mnookin
		Director, Graduate Program in Science Writing	

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By

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ABSTRACT

Though shipwrecks and treasure are deeply seductive to the public, the political, ethical, and scientific geography surrounding these sunken ships is not well publicized, except in cases involving large amounts of money. There is a battle for access rights to these objects with some claiming them as public historical commons, and others as commodity. Written for a popular audience, this thesis explores the history, technology and common sentiments surrounding shipwrecks from the people who have dedicated their lives to them: commercial firms (treasure hunters, salvors, etc.), academics (maritime archaeologists, conservators, educators, historians and cultural managers) and hobbyist SCUBA divers.

Thesis Supervisor: Russ Rymer

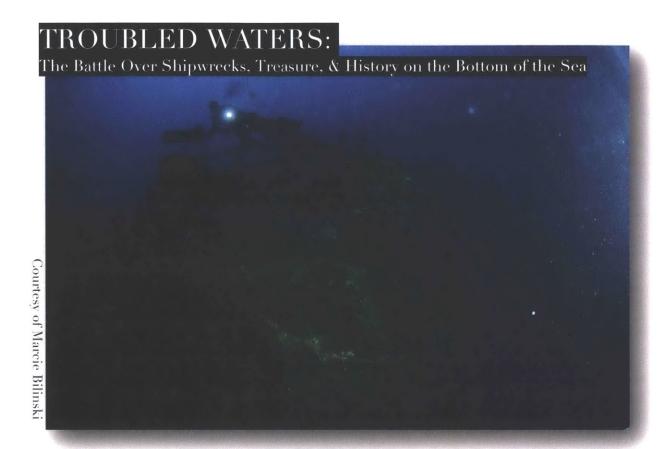
ACKNOWLEDGEMENTS

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he Phoenix must have looked from afar as though it were dizzy. The boat cut slowly through the milky mint green waters off the coast of Key West, made a u-turn and went back the way it came, then u-turned again. Wash, rinse, repeat. "Tropical" Mike, our captain, stood on the bridge, his salt-faded bill cap and yellow rain slicker combating the late winter chill and stray drizzles. It was March. The previous week, I was told, it had been eighty-five degrees. Now the sky was full of heavy cotton-ball clouds.

The boat's cargo—several dozen college students with their SCUBA gear—stared intently down into the water, likely hoping to spot our destination and stop the nauseating circles. Tropical Mike's depth finder sat on the dashboard in front of him, its small screen showing the

topography of the seafloor. I watched as the line on the depth finder climbed and dove like a stock market graph. We were in search of the wreck of an old schooner, and it was proving difficult to find. Oddly, given that it had already been found. The schooner was in about fifteen feet of water; if we passed over it, its protrusions would register as anomalous spikes on the screen. Mike circled again. "I've got seven feet over that way," he said, pointing with his head. "How far does it come up?"

"Bout five feet off the bottom," Corey Malcom answered, gazing off the port side, puzzled.

Malcom, the Director of Archaeology for the local Maritime Heritage Museum, had been out to this particular wreck many times. He is tall and friendly, with an easy-going nature—perhaps the result of a life spent half in the Midwest and half on a sub-tropical island. With him and Mike on the bridge was Dr. Alex Brylske, a professor for Marine Science and Technology at Florida Keys Community College. Tropical Mike retoggled his GPS and rang up a friend. "On the ledge. Line it up with the tower... okay ...yeah...right....It's gonna be on the left side of the channel," Mike said, repeating the directions that were coming into his ear. Still no wreck.

"Remember," said Mike to no one in particular, "the Atocha wasn't found in a day." This elicited many chuckles. The students were here as part of Brylske's Research Diving Course, and this expedition was part of the Maritime Archaeology portion of their class. Everyone in these parts knew about the Atocha. It had been found by famed treasure hunter Mel Fisher. The quest took Fisher sixteen years. Mike made another call. "Hey Keith . . . "

"We're gonna have a pee strike here," someone yelled from the deck below. Wet suits don't come off easily. They peel off reluctantly like the skin of an unripe banana. The only thing tougher than taking them off, is putting them back on. Hence the old diver adage: There are two types of divers, those who pee in their wet suits and those who lie about it.

"What?" Brylske teased, as the *Phoenix* continued its twirling heading to a new patch of sea some ways over to our left. "You don't like the harbor tour?"

"Right there!" someone shouted.

"Got it?" another voice hollered.

"Got it," Tropical Mike replied.

Suddenly we were floating fifteen feet above the wreck of the *Marie J. Thompson*.

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he house did not have portholes for windows. There was no giant anchor in the front yard and no telling red and white dive flag on the flagpole. Wreck diver Marcie Bilinski's house was just an ordinary suburban Massachusetts home floating in the late autumn leaves. I rang the doorbell. It did not play sea shanties.

Inside, I waited as Bilinski finished up some phone business, arranging accommodations for an upcoming dive conference. A set of large frames hung on the wall, each containing a multitude of triangular shapes, some as big as my palm. *Teeth?* I wondered. *And from what animal?* A whale, judging by their size, but judging by shape, they had to be from a shark. I pillaged my mental catalog of large-toothed sea life until Bilinski finished her call and we sat down to talk wrecks.

"They're Megaladon teeth," Bilinski said, as though that were an everyday adornment for one's wall. The Megaladon was a prehistoric shark that could have made an easy snack of a killer whale. Every inch of tooth was ten feet of shark, Bilinski explained, "So a five inch tooth means it was a fifty-foot shark." The larger teeth were smooth and from the ocean, where the movement of the abrasive saltwater had

dulled their ridges. The smaller, more jagged ones were from the alligator-infested Cooper River in South Carolina. Cue Indiana Jones-like Bilinski story. "I didn't believe it even had alligators the first time I dove," Bilinski said, "'cause it just seemed so easy." *Easy?* I thought, as she described the dive from hell.

Bilinski going for a tech dive.

Courtest of Marcie Bilinski.

In the Cooper River, there is next to no visibility and the water is near black, or reddish when the sun is bright. "It almost makes you think that it's bloody." The current is so strong that you need to bungee screwdrivers onto your wrists and stab them into the gravel to pull yourself upstream. "So it's spooky, but you're so busy looking for the teeth that you just kind of forget." How you can forget that you're in an alligator-infested river, searching for monster teeth in water that looks like blood, was something for contemplation.

"This is why they sent you to me, I guess," she said smiling at a basement stuffed with dive gear. Among wreck divers, Bilinski is hardcore, one of those enthusiasts who spend much of their time, and most of their

money, seeking out and SCUBA-diving shipwrecks. "When I'm not working for pay, I'm diving," she said. Technically, it is her hobby; in effect, it's her life.

She began her dive career as a sea-life diver—like a bird-watcher, but for fish and

marine life. When fishwatching boredom set in, Bilinski turned to technical diving-employing more complex equipment to stay underwater longer and to go deeper. Technical diving was a way to access wrecks and underwater caves. "Actually, I used to do a lot of crying when I first started getting into technical diving," she told me. The technical-diving world was as women friendly as a frat house in those days, a "macho male thing that

women shouldn't be doing." Her first deep wreck dive was in about 170 feet of water. "I could have killed the guy who took me," she said. Her instructor made her stay underwater where there was almost no visibility, until, frightened and disoriented, she found her own way out of the wreck.

Today Bilkinski deals with problems of a different sort. The underwater artifacts that she and others of her tribe have a passion for collecting are a cause of controversy. Shipwrecks are battlegrounds in a tangled squabble over the ethics of collecting, a squabble that engulfs not only the Bilinskis of the world, but many others: academics and hobbyists, students like those on the *Phoenix*, archeologists like Malcom, serious adventurers like Mel Fisher, museums,

corporations, governments and private citizens.

The polarized argument goes like this: Archaeologists have a leave-it-to-the-professionals attitude. Wrecks are public history and should be excavated and cared for by trained professionals and appointed custodians. Hardcore wreck divers propose a finders-keepers alternative, and cite a lack of government resources to get the exploration job done without the amateurs' help. By putting ships off limits to collectors, they argue, governments are cordoning off history and leaving it on the sea floor to rot: if amateur wreck divers don't collect artifacts and bring them up, who will?

The views in this conflict fall along a vast array of gradients, not just along the archeologist-collector continuum. Among those who collect artifacts, there are those who do it purely for sport and those who do it for financial gain. Some have turned collecting into a commercial business, and

sink significant resources into seeking out and surfacing objects from the most lucrative wrecks. (This category includes salvors, who rescue cargo from ships that have gone down at sea, and treasure hunters looking for all things shiny.) Some post academics—historians, conservators, and even archaeologists—work for commercial operations. Other academics think commercial wreck hunters should be gobbled by a rogue wave.

The disputes that make it into your morning newspaper, usually involve

disgusting amounts of money—typically when commercial treasure hunters run into property rights issues over a valuable wreck. Recently, one treasure-hunting outfit had to return the better part of \$500 million dollars in Spanish shipwreck gold to its mother country. However, wreck-ownership issues happen at much smaller scales as well. Bilinski herself had never run into problems, but knew people who had.

To complicate matters, each state can have its own laws and, often, each wreck can, too. Naval ownership rights persist even once the ship has sunk and even centuries later. You are no more allowed to take a naval ship's compass once it's sunk than when it

was still floating and operational (though naval ships only became off limits in the past couple of decades). Some wrecks, though centuries old, are still owned by long running salvagers, or by insurance companies that had original investments in the ship, even if they were not the ones to locate its wreck. The

rights to a ship sailing under the flag of a particular country are sometimes retained by that country no matter where or when the ship sank.

Some divers feel that the shipwreck laws are obscure in their goals and were "made late in the night by Congress with two men agreeing," Bilinski said. New England has its own homegrown wreck-rights conflicts, one of the most popular involving divers' rights within the boundaries of national marine sanctuaries.



These sanctuaries are created to protect the biological and cultural underwater heritage of a given area. As Matthew Lawrence, a maritime archeologist of one local sanctuary put it, "shipwrecks that lie on the seabed of the United States and the world belong to the people in general and they are not to be exploited for individual personal gain." You lose a lot of valuable historical information to people's living rooms when things are taken off the ocean floor and put on a shelf. "As a result, the world is poorer, because you can only excavate an archaeological site once," he told me. For Lawrence, the conflicts are a matter of miscommunication. "In many cases, with some education and experience, collecting wreck divers completely change their mentality and become some of the most vocal advocates for shipwreck preservation."

Bilinski sees it differently. "I just think it's kind of backwards. They're taking away from the public," she said. The sanctuaries were intended to "preserve waters and things for all of us tax payers who pay the salaries." It's understandable why wreck divers are peeved. Wreck diving is not only their hobby, it's often their lifestyle and a huge part of their identity. The innumerable artifacts in Bilinski's living room give you the overwhelming impression that you're looking, not just at the tactile history of ocean ghosts, but at the history of a person's lifelong obsession. The room was almost like her Dive Log, each object in it a nod to a specific place and time. "It's kind of a sickness, a disease," she said of collecting.

Bilinski showed me a small porthole from a wreck, off the New York coast, of a ship nicknamed Rum Runner. Rum Runner is filled, or rather was filled, with thousands of bottles. The cases of identical bottles are still there, mirroring the shape of the hull, but the wreck itself has since rotted away-except for such items as Bilinski's porthole. Next to the porthole was an entire shelf of metal trinkets: oil lamp parts, silverware and "these things that I don't have a clue what they are," from the Aransis, a Massachusetts shipwreck whose cargo was metals for melting. (With them on the shelf, a prized artifact from a Cape Cod pond dive: a car's air conditioning controls. "We call it the Wreck of the Saab.") Next came an old revolver, a cup she found while scouting along a pipeline route, an oakpizza-paddle-looking-thing used for rice-field irrigation, part of a tortoise's shell, some old (perhaps Indian) fishing weights, some bricks from the coast of Maine with names on them and then, of course, the bottles. Bottles from the West Coast railroad days with Asian characters on them, a glass bleach bottle, some pretty liquor bottles, square bottles with city names on them, some ink wells....did she know how many bottles she had? "I don't have a clue. I have a ton I haven't even cleaned yet,"... a ginger beer bottle from Sacramento, poison bottles with ridges on them ("so that if you grab one in the dark, you'll know by the feel of it," Bilinski was told), another ridged bottle with its original contents (including something that looked like a bug), and bottles with presidents faces...

"Most of us who do this a lot, we kind of take pride in cleaning up everything and preserving it," she told me. Her basement and "dive shop"— a two-roomed outdoor shed—house a giant personal air compressor, countless dive suits and air tanks, and an oven-sized sandblaster for cleaning found objects, among other things. And yet more artifacts soaking in water, awaiting their treatment. In this altar to fallen flotsam, it was difficult not to contemplate the rightful

home for all this bounty—if there even was one.

A shipwreck is an odd thing. Not only are wrecks anachronistically out of place, but they are doing something they were never meant to do: lay static on the ocean floor when they should be roaming the seas. Perhaps that's the anchor of the controversy—that wrecks just don't seem to fit in with the world we've got.

carrying goods from a variety of individuals and sunk in the waters off of Florida? What is the difference between someone unearthing a compass from a wreck ten years after the fact versus several hundred years? What if the compass belonged to the diver's father? What if it belonged to the diver's great great great great grandfather? Shipwrecks belong to everyone, no one, someone, and something (the sea), all at the same time.



These wrecks are a part of our history and yet they are not ours at all, challenging our infrastructure of ownership. We can barely figure out who "owns" what bit of sea, much less who owns a bit of property beneath it that shouldn't even be there in the first place. What are we to do with an object that came from Spain, was heading to a country in Central America that didn't exist yet, was

Perhaps even Bilinski was feeling the heft of the history in her living room. The work of gathering, cleaning, preserving and simply finding a place for all the artifacts, is a full-time job. Many wreck divers who have tried to donate or lend their artifacts to museums have been rejected. The establishments don't want to condone private collecting. Which is why, without heirs or

museums to take them, collections may become homeless when their owners die or divest, as lost as the day their ship went down.

Bilinski is lucky. The eventual prospect of packing up her ocean loot must be weighty, but at least she has diving relatives who could become the new custodians of her treasure one day. That day isn't coming any time soon. She has a move to Florida in mind and it's all coming with her

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he Florida Keys drip southward out of the state's mainland like 1,700 drops from a faucet. These islands separate the Atlantic to the east from the Gulf of Mexico, to the west. The islands drip southwestward, hitting their bottom-most point about ninety miles above Cuba. Underneath them is the eastern edge of the submerged Florida plateau. Once upon a time, before the existence of the Keys, corals, sands and organic materials migrated to this plateau and slowly built upon each other. When the last glaciation began and sea level dropped, the keys popped out of the ocean, ready to party.

Shortly after Columbus reached the New World, Ponce de Leon and his buddies stumbled upon the Florida Keys. To sailors, reefs are the devil. The keys were all reef. While the islands seem to be discrete entities, they are connected by a submerged reef that only sporadically pokes through the surface of the water. For sailboats, it's like an underwater wall. Rumor has it that Ponce and company were looking for the fountain of youth and stumbled instead onto the barren keys and named them Los Martires, the Martyrs. As one of Leon's

contemporaries put it, "...seen from a distance, the rocks as they rose to view appeared like men who were suffering; and the name remained fitting because of the many that have been lost there since." Many lives, and many ships.

At the extremity of it all is Key West, the southernmost island in the chain. Culturally, Key West is not quite the United States, but it's not quite the Bahamas either. Even, the water can't make up its mind, falling somewhere between deep Atlantic blue and Caribbean turquoise. Key West is a place where, when you tell someone you're writing an article on shipwrecks, they want to introduce you to their neighbor, cousin or friend in the shipwreck-know. Or they just tell you that they love shipwrecks, I get shipwrecked all the time. Oh wait, that's shitfaced.

Some towns mine coal. Some towns grow corn and others make cars. Key West salvaged wrecks. In 1856 the Key West wrecking business rendered the city the richest per capita in all of the U.S. In the 1800s, roughly one hundred ships a day were passing Key West. Not all made it. An average of one a week ended up stranded on the Florida reef. Key West's business became that of wrecking and Key West society became that of wreckers. These salvors were available in sunshine or storm to rescue the survivors and cargo, but not for free. High towers, some reaching ninety feet, dotted the Key West skyline. You can climb to a replica of one of these on the western end of Key West. The Shipwreck Museum is a rickety wooden structure encasing the history of Key West wreckers. On top of the museum, seventy-six stairs up from the second floor, is the platform of a lookout tower. Look east, you see the rest of Key

West and eventually the Atlantic. West, and your eyes meet the Gulf of Mexico. South, the Straights of Florida—the gates of the Gulf.

"Wreck ashore!" the men on the lookout would yell, and, as legend has it, every man in town with a boat—which was perhaps every man in town-would scurry to the site of the wreck. The first one to arrive would become the "wrecking master," the director of operations for the salvage and the receiver of the biggest piece of the salvage pie. The business was so dangerous that Lloyds of London, the insurers of the time, would have nothing to do with the wreckers. Reports circulated that wreckers would station themselves at particularly perilous reefs in large storms. The light from the wreckers' ship gave the illusory appearance of harbor. Then poof, Wreck Ashore.

Eventually, lighthouses went up and navigation aids improved, but the wrecking industry never quite went away. In the 1940's, Art Mckee became the grandfather of modern treasure hunting in the area, using new diving technologies to recover treasure from 1600 and 1700's wrecks. In the 1970's Mel Fisher took the baton as Florida Key's treasure hunter extraordinaire, becoming famous for his discovery of the Spanish galleon the *Nuestra Señora de Atocha*. The wreckage was found about thirty miles from Key West, a short boat ride away from our training wreck, the *Marie J. Thompson*.

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grabbed my mask and snorkel and dove into the light green waters concealing the Marie J.. The ship that came hazily into view had come into conceptual being in 1917, when Norbert Thompson decided he needed

a schooner for hauling lumber to make cigar boxes. "Thompson was the king of the Key West waterfront," Malcom said. He was involved in commercial fishing, made cigar boxes, had a fruit-canning factory, ran the famous turtle kraals (the turtle pens for commercial sales), had an ice company, owned multiple land plots up and down the keys and was even the mayor of Key West at one point.

The Marie J., named after Thompson's daughter, was built in the Bahamas. At 700 tons, she was the largest ship ever built there and is still a point of Bahamian pride today, Malcom said. Marie J. sailed the local seas in search of cigar box wood: Mississippi, Alabama, Louisiana, Cuba. She even made a couple of trans-Atlantic crossings. After only a year at sea, she was in need of repairs, and in the late 20's the ship was taken to Jamaica, the only place with muscle enough to haul the ship out for repairs. Unfortunately, they dropped her, damaging the keel. "And that was the end of it," said Malcom. Marie J. was brought back to Key West and used mostly as a work barge until slowly, over time, she sank. "She was a beautiful grand thing that never quite made it," said Malcom. The husband, now 96, of the Marie for whom the ship was named, called it, 'A race horse with a broken leg.' In recent years, Brylske and Malcom have used it as a training ship for young maritime archaeologists.

The archeologists-in-training, loosed from the deck of the Phoenix, wiggled about the wreck, SCUBA tanks strapped to their backs. Pairs of students took the wreck's dimensions with special tape-measures, scribbling notes on their underwater tablets. The visibility could not have been more than ten feet, and I had no tanks. I held my breath

and dove. When visibility is poor, you see things in puzzle pieces. The whole only exists in your mind.

A large projecting piece ran much of the length of the center of the ship and stretched upward toward the surface. The keel, I guessed. The remaining ribs of the hull extended out from the keel's sides. Beyond either end of the ribs was smattering of unidentifiable debris. Fish marched back and forth on the wreck guarding their territory. Orange sponges held their own against the current. "This is a place to live," Dr. Brylske told his students. The wrecks protrusions and crevices created apartments and campgrounds for a buffet of creatures. Toredo worms, which the professor stressed were not worms at all, but mollusks, chewed the wood into Swiss cheese.

I had always thought that shipwrecks have two lives, one on the surface sailing the seas, and a second when they are discovered on the ocean floor, but this appeared to be a third. Instead of sailors roaming their decks, fish did. I snorkeled the length of the wreck and watched as shadows of students took the ships dimensions, using tapes known as transects and its depth at different points, using gauges. Once I had gone from stern to bow, the pieces assembled. The *Marie J*.

looked frighteningly like a whale skeleton, keel-spined, and wood-boned. A mess like this was not easy to turn into history. For the last twenty plus years, Malcom had been busy doing just that with another wreck "out in the middle of nowhere."

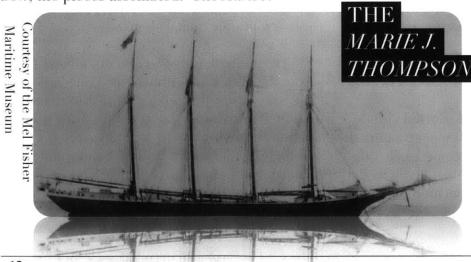
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n 1991, Malcom received a call from St. Johns Expeditions, a marine salvage corporation looking for wrecks in the Bahamas. They had detected an anomaly in the sea floor; would Malcom come check it out? "It was intriguing," said Malcom of the call. He arrived to a large hole in the sand. In the clear Bahamian waters, "you stick your face in, you see everything. It took me twenty seconds to see that these were all guns and that this was an old shipwreck." 'Just stop working,' Malcom told the salvage firm when he got out of the water. The cannons were clearly of the earliest sort found in this neck of the woods. He persuaded the St. Johns team that the Mel Fisher Museum had the equipment and infrastructure to deal with the wreck; would they yield the excavation to the museum? "As crazy as it sounds, they agreed to it," Malcom said.

This wreck "out in the middle of

nowhere" would be Malcom's office every summer for the next seven years. The nearest point of land was Memory Rock, three or four miles away and no bigger than a conference room.

"This was all we saw—a little spec on the horizon. And we



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always thought, my gosh, this is where all the survivors went to. This was all they had—this rock to cling to and pray that somebody comes along," Malcom said.

When he first returned to the wreck, the hole St. Johns had dug was filled back in by nature. It was just a sand flat like any other sand flat. "I always tell people...if this is what you see, get excited. It's a shipwreck." Every

summer a crew of about four to six people would live on a seventyfoot boat (the average size, as the team used different boats throughout the years) floating next to the

wreck. "We tried to load up as much as possible and stay there on site. Our record was two months without coming in," Malcom said.

This was Malcom's work day: "Hop in at eight in the morning. Come up. Lunch time. Sit in the sun for a couple of hours. Warm up and then go back down till sunset." His record bottom time in one day was ten and a half hours. Rather than carrying bulky dive tanks, the crew used something called a hooka rig. Each diver breathed through a long tube connected to an air-compressor on the boat. "They were fully spaghettied by the end of every single day," Malcom said of the breathing hoses. On the seafloor, the team spent its days carefully mapping and excavating the wreck in one square meter portions. The payoff of this kind of tedium is that every item sitting in their lab can be traced back to the exact position it came from. Archaeologists call this 'provenance,' from the French, provenir, "to come forth." One of the discipline's common complaints

is that treasure-hunted objects, or those found on the black market, often do not have a provenance, making history hard to reconstruct.

In the morning before our day on the *Phoenix*, Malcom sat the students down for a lecture on the process of archaeology. We filled into the third floor conference room and listened in the dark as Malcom flashed a

"IT TOOK ME TWENTY SECONDS TO SEE THAT THESE WERE ALL GUNS AND THAT THIS WAS AN OLD SHIPWRECK."

power point presentation onto the wall. One of the slides was of two objects side by side. The object on the left was shaped like a sword that had been trampled by a herd of elephants, then dipped repeatedly in concrete until it was several times its normal thickness. "Our goal is to take stuff like this," Corey said, referring to the picture, "and turn it into that," he pointed to the photo on the right: a simple sword. When you get inside a concretion, often nothing is left; the object has decayed away. But the conservation lab is able to use that concretion as a mold to remake the object. Hence the sword. "This is the real challenge of these shipwreck projects: the conservation, the stabilization, the restoration of the artifacts," Malcom said.

Everything on the wreck tells the team something about the past. For example, a few coins were found on the wreck which were completely rotted inside the concretion. The team had an artist render the coin's fossil-like imprint. "And fortunately, the parts he drew were exactly what we needed,"

Malcom said. From the design of the coins, they can tell they were minted in Mexico. "And what's even more important is this 'L' here and this 'O'," said Malcom. Those were the assayer's marks. Using records of assayers in the area, "we can do the math and we figured out that for a ship to be carrying coins from assayer 'O' and assayer 'L', it had to have sailed sometime after April of 1554, so that gives us a bottom date now."

"Some of that aging technology gives us the top date—those wrought iron guns, the crossbows. Those sorts of things were really falling out of favor by this time," Malcom said. With those two facts, the team determined that the ship wrecked between 1555 and 1575, and was Spanish, given the ceramics. Spanish records yielded eight possible matches for the wreck. Seven of those went down with treasure, with a significant body count or in the wrong location. "But what we did have was one ship that really stood out and it was a ship called the Santa Clara." It wrecked in 1564, "right in the middle of our time period," said Malcom.

"But here's the story of the Santa Clara in a nutshell:" a 300-ton galleon that sailed with two other ships on its way back to Spain from South America and Panama. The convoy hit several storms and the Santa Clara hit the Bahamian Bank in the middle of the night on October 8th, 1564, "near a place called mimere, Memory rock, mimere," Malcom related excitedly. She had run aground, and had filled with water, but was still sitting upright. This gave the crew time to move themselves and their goods to another ship in the convoy. Malcom and his team have yet to find anything on the St. Johns wreck bearing Santa Clara's name,

"but everything we see about the Santa Clara history and everything we see in the remains of the St. Johns wreck matches perfectly," said Malcom. "Whatever the case, the Santa Clara, certainly represents those very early ships that worked to stitch together—by all these hundreds and hundreds of thousands of crossings—the new and old worlds."

THE SANTA CLARA SWORD



The St. Johns wreck was submerged in about fifteen feet of water—reachable by a diver one hundred years ago assuming such a diver had the appetite for such a treasure-less wreck. Nevertheless, he would have the technology to do it. There are some wrecks whose depth has rendered them off limits. Even when people knew where they were, they'd been too deep for divers to get at. Until now.

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n Boston's 89.6 square miles, there are 87 local historic landmarks (just under one landmark per square mile). Near the northern end of the city, over 200 years earlier, men took up arms for the Battle of Bunker Hill. Just south of that, Paul Revere rowed across the Charles River to reach its northern banks and begin his midnight ride. And right around the corner, the Sons of Liberty turned a small portion of the harbor into a nice cup of English Breakfast. Boston is no stranger to history and neither are its waters. Beneath New England's Atlantic blue rest an estimated 10,000 shipwrecks. In Massachusetts alone, over 3,000.

The Boston Museum of Science is located just southwest of "Don't shoot till you see the whites of their eyes," and northwest of "One if by land and two if by sea." Its heavy edifice hunkers down at 1 Science Park on the bridge straddling the Charles River. To the museum's back stretches the river's bulk, and beyond it, the rest of the country. Outside its entrance, the Charles spills into Boston Harbor and into the grand Atlantic.

I entered the museum and was greeted by the sights and sounds that plague all museums on weekdays. Gaggles of school children undulated about the exhibit halls, each class an octopus with thirty legs. Their voices ricocheted off the high ceilings of the atrium. Few, if any, had likely pondered that the Charles might conceal its own trove of shipwrecks. We all shoved through the entrance turnstiles.

Before us was parked an elephant-sized yellow and black contraption. It was made up of two parts: a giant yellow mattress perched atop a snake nest of plumbing: metal bars, fans, robotic arms. It had the technological look of something from Cahners Computer Place, and the bulk of the beasts from the Machines and Transportation exhibit. But this strange creature wasn't from either of those. This beast hailed from SHIPWRECK!

SHIPWRECK! Pirates and Treasure, is a traveling artifact and deep-sea technology exhibit courtesy of the commercial wreck hunting firm, Odyssey Marine Exploration. The science-project contraption before us was a replica of an eight-ton remotely operated vehicle (ROV) named ZEUS, which has been used by Odyssey to recover "...over 20,000 artifacts and more than 600,000 coins," read a museum placard, and could travel as deep as 8,200 feet beneath the ocean surface. The giant yellow mattress contained synthetic foam flotation blocks "made of millions of tiny glass globes encapsulated in resin," designed to withstand pressures of up to 3,500 pounds on every square-inch. Operating ZEUS as the twenty-four hour deep-water eyes and arms of a salvage operation requires a posse of at least thirtyone people. Technology like ZEUS makes wreck hunting in the deep end possible, opening portholes to wrecks that could never before be reached.

Entering the museum's SHIPWRECK! exhibit was not unlike entering a busy port. The large room was stuffed with a nautical hodgepodge, an anachronistic jumble of old artifacts and technological innovation. Pottery and old coins sat next to interactive models of ZEUS's robotic arms and high tech images of the seafloor. ZEUS would have been the first thing to greet the old artifacts on the ocean floor, lifting them back to a place they hadn't seen for hundreds of years: land. Now the two were traveling the country together like an old married couple.

In a clear case, in a dark corner of the exhibit, slept an unimpressive mound of concrete mangled with shell-like objects. This is what treasure looks like when it has been on the ocean floor for 140 years. The shells were silver coins accreted together in a mass of "sediments, minerals and organic matter," according to the plaque. This treasure had come from the SS Republic, an 1800s steamship bound to New Orleans from New York, when a hurricane hit it, about 100 miles off the Georgia coast. The passengers made it to safety, but the ship's shiny cargo did not, sinking to a depth of 1700 feet. In 2003, Odyssey found the wreck and plucked over 51,000 silver and gold coins from its grave.

Treasure is mysterious, older treasure even more-so, perhaps because it no longer looks like modern currency. The cleaned-up Republic coins could have been minted

yesterday (or appeared so to someone who had forgotten her glasses). The gold bars on exhibit were unmistakably from another era. These were 17th century Spanish bullion from a wreck nicknamed Tortugas. The bars were "finger" bars, far smaller, less uniform and more delicate looking than their cinematic counterparts. Each

was marked with symbols to show the purity of the gold, a tax stamp, and the stamp of the New World Foundry, where the bars were made. Coins from the 19th century *Republic* and gold bars from the 17th century *Tortugas*, both on exhibit in the 21st century via the hands of technology only decades old.

"As long as there have been ships at sea," a video in the exhibit boomed, "there have been shipwrecks." And as long as there have been valuable shipwrecks, there have been shipwreck hunters.

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nything good down there? I asked David Hebb, nodding to the Hudson River slithering slowly outside his New York apartment window. Nothing of value, he said. And if there is anyone who knows, it's Hebb.



David Hebb's job is cooler than yours. He speaks six languages, travels all over the world, and you can barely find him on the internet. He has never advertised or sought out work in his current career and yet he has always been employed. No, he is not an international spy. Hebb is a historian, specializing in the treasure-heavy maritime

There he rummages through the records of every voyage of every Manila Galleon between 1568 and 1815. (Luckily, the Galleon records were condensed by two American scholars.) A promising wreck catches Hebb's eye. 'The largest vessel which had been constructed up to that time," says one account of the wreck. Worth, 'four and a half million pesos," says

"As long as there have been ships at sea...there have been shipwrecks." And as long as there have been valuable shipwrecks, there have been shipwreck hunters.

history period from 1500 to 1800. Really, he's an archival treasure hunter. He is the guy who finds wrecks for the people who find wrecks. "The strength that I think we bring to research," Hebb said of himself and his colleagues, "is that we understand the general history, the administrative systems in place at the time which produce records, and where those records might be and how to use them."

Here is how the process works: You say to Hebb, I've got some extra cash, and I want to find a sunken ship full of treasure in the Pacific. Hebb has a think on it and decides that focusing on the Manila Galleon trade is your best bet. Manila Galleons were Spanish ships that loaded silver and other goods in Acapulco, Mexico (then New Spain) and delivered them across the Pacific to Manila in the Philippines (then the Spanish East Indies) once a year.

Hebb's first stop is the old British Museum Library where "that aroma from old and polished leather," wafted through the large domed reading room and famous novelists inhabited the desks next to him. another. He jets over to archives in Seville, Spain, where he knows there will be more information.

In the Archivo General de Indias—which occupies the original headquarters of the Spanish-Indes trade controlling body—Hebb digs through large legajos (bundles of documents) brought to him by porters and thinks, "god, I can't read a word of this." Slowly, he gets the hang of the strange handwriting and smudged ink. Eventually: Bingo. Buried in one *legajo* he finds records referring to the salvage of bronze cannon. The records tell him only the island nearest to where the ship went down, Saipan. But Hebb knows that Jesuit missionaries went to that island forty years after the ship sank and that they regularly communicated with their head porters back in Rome. Off to Rome goes Hebb. He spends days in the Jesuit Archives going through documents until he finds a clue: a letter in which a Jesuit missionary describes his visit to Agingan Point near where 'the galleon had been wrecked in 1638.' And that is how Hebb found the Nuestra Señora de la Concepción, perhaps one of the larger and richer galleons of her day.

Hebb handed me a copy of a 1990 National Geographic story on the Concepción recovery expedition. He pointed to the photo of a large commercial vessel (chartered by Pacific Sea Resources, who found the wreck) anchored in brochure-blue water no more than a couple hundred yards offshore. Any closer and it would have been parked on the beach. It looks as though the commute would be shorter if a diver just waddled in from shore, Hebb commented. The photograph's turquoise waters quickly turned a deep blue

as they moved away from the island, indicating that the underwater terrain was steep, and the water deepening quickly. The Concepción would have gone from the safety of deep water to onthe-rocks in no time. The ship sunk in about fifty feet of sea (with much of its cargo retrieved from even lesser depths), shallow compared with the deep-water wrecks of today, but not atypical. Which brings us to myth one: that most ships go down in the middle of the ocean

courtesy of Neptune's wrath. Ships usually need something to hit in order to sink (Hebb marveled that early marine insurance at the time was priced by distance traveled rather than ports visited, as landfall was a greater invitation to disaster).

Myth Two: All shipwrecks contain treasure. The booty retrieved from the *Concepción* included over 1,300 pieces of gold jewelry alone. Finding such treasure on the ocean floor is not normal, for reasons Hebb explained.

"There's a fairly narrow time period in history in which large amounts of precious metals are moved and when sailing is fairly dangerous." Hence the following recipe for a lucrative future salvage: First, the ship must be valuable. Then it must sink. It sounds simple enough, but what this means is that there must be an empire smart enough to acquire and transport valuable metals, but dumb or unlucky enough to not be able to keep its vessels afloat. "The most interesting commercially feasible wrecks are from 1500

to 1800, roughly." Why? Because in those years, navigational knowledge was not yet established, sailing charts were not set in stone, and wars were forcing people to sail on routes or in seasons in which they normally wouldn't.

Hebb related the story of the *Dromadaire*, a French East India Company vessel that left Port Lorient, France and headed for Asia. Hearing rumors of war, and wishing to avoid English

warships, the captain received orders to head west of the usual route, into unfamiliar waters, unknown currents and a lot of fog. 'Breakers!' someone would have cried from the crows nest, meaning breaking waves, "and within a minute they'd smashed right onto it. And that's very typical, where war has been the prime force in the wreck," Hebb said. The 16th century was a good time for shipwrecks – according to Hebb, five to six percent of ships that went out to sea every year ended up on the ocean floor. By the 19th century, the number had dropped to around two percent. Precious metals were still being shipped, but mariners appeared to have

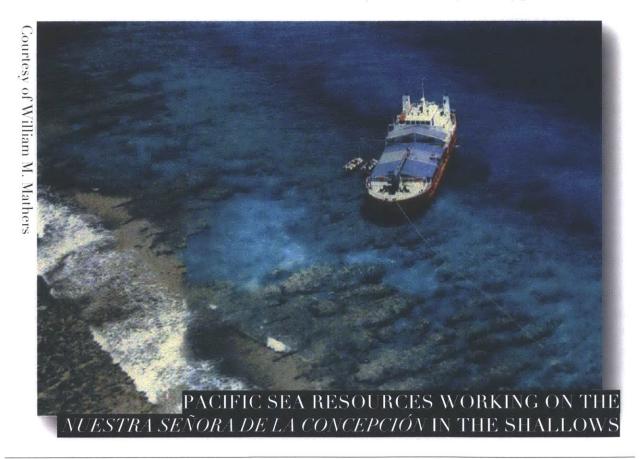


gotten their act together, resulting in fewer wrecks.

Even "valuable" shipwrecks come in many flavors. A very small percentage of ships carried treasure, along with food, textiles, lumber and other commodities. While an old ship's manifest may assign a high value to its cargo, the hold may have held nothing more than common goods. Hebb keeps this in mind when sifting through archives, and especially when reporting back to those who hired him. "A lot of the work that I've done has been saying, 'you're wasting your time,'" Hebb said.

"People are optimistic because they have to be. Otherwise they wouldn't do it," Hebb said. Hebb is not optimistic. He is realistic. Sometimes, despite hearsay, a ship never sank. Sometimes it sank, but without the presumed valuable cargo. Sometimes, there was never any treasure on board to begin with. "There's a group of shipwrecks in the Azores and if you look in the usual treasure hunting guides, they'll describe like twenty-two ships or something lost." This graveyard was one of Hebb's earlier jobs. A little investigation revealed that the Spanish, fearful of British interception in the Azores, built some fast frigates to take the valuable cargo on a more southern instead of putting it on the slower flotilla of twenty-two. "So the original ships in the fleet did wreck in the Azores, but they didn't have anything on them."

Myth Three: As long as there is treasure on the ocean floor, there is a fortune to be made. Treasure hunting requires, at the outset, investors, ones who have either money to lose or a gambling problem (and



perhaps both). Historically, these sorts of investors come along during economic booms. The 17th century was no exception. Hebb sent me a quote from fellow historian, Peter Earle, 'The projector, that tooenthusiastic man with an idea but no money, was a familiar figure in late seventeenth-century England,' he wrote. Such people could be seen on the Wall Street of their day trying desperately to convince potential benefactors '...that the improbable was not only possible but a downright certainty.'

I thought back to the SHIPWRECK! exhibit with its pirate swords, gold bars, model ships, interactive displays and nautical décor. The fact that it even exists is a testament to our times. The boom-and-bust business cycle of treasure hunting dates back hundreds of years, Hebb explained. Treasure hunting picks up when the economy does, luring risk takers with extra cash. This explains the treasure-hunting vogue extending from the 1980's to 2007. People were optimistic and had extra money from the dot-com boom, and that spilled over into the treasure hunting one. "Then slowly the reality of okay, yes there are a few treasures, but most people don't make any money or break even," Hebb explained. The Economist reported that, "Of fifty two annual reports filed by publicly listed shipwreck-recovery firms since 1996, only five show a net profit. In that time Odyssey, the biggest, has racked up losses of nearly \$150m."

Odyssey doesn't deny the downside. The company states blatantly on its investor page that "Our business involves a high degree of risk," "The research and data we use may not be reliable," and that, "The market for any objects we recover is uncertain."

To Hebb, the last thirty years bear

striking similarities to late 17th century England with "...a lot of money sloshing around the exchanges of the world and the 'animal spirits' of investors high enough to lead them to take a punt on risky but exciting ventures." Of course, it's not all about the money, "I've witnessed the satisfaction even hard-headed, tight-fisted business people get from bringing back objects long since lost to the sea," Hebb said, "There is real pleasure to be derived from achieving such recoveries, a quintessential happiness of the type recognized by Freud."

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Then the Phoenix turned around to head home, I was soggy and dazed with the post-aquatic euphoria surfers call "stoke." I sleepily eavesdropped on a conversation between Malcom and Loren Clark, a 23-year-old archaeologist who had come along to help out with the program. Clark's passion for archaeology is so contagious that it's difficult to stand next to her for too long without becoming infected—you'll find yourself Googling archaeology programs before bed. Clark and Malcom were talking about coins, an archaeologically touchy subject and one with a special home in Key West.

Malcom is not just the Director of Archaeology for the Maritime Heritage Museum. He is the Director of Archaeology for the *Mel Fisher* Maritime Heritage Museum. To some people, that makes all the difference.

Mel Fisher recovered 1,041 silver bars and over 140,000 silver coins from the *Atocha*, some of which sits in the museum today. Due to the value of once-sunken coins, if they end up on land at all, they often do so in the

hands of treasure hunters. If an archaeologist is looking for information on coins, he or she often has to look to work done by these hunters, a transgression in the maritime archaeology world.

When Clark first arrived in Key West from Indiana, she felt culture shock. And it wasn't just the midday margaritas. Key West was the most archaeologically upside-down place in the country. "A lot of colleagues, they just won't even set foot down here," said Mike Murray, another archeologist on board. Murray looks young—I figured him for late twenties—but the patient air with which he explained archaeological issues betrayed that he had been at this for well over a decade.

A degree in nautical archaeology often begins with getting the basics down on land, where archaeology's long established traditions make associated procedures, ethics and rights issues more clear-cut. Land archeology has a "deeper, steeper history," as Murray put it, with archaeologists generally well accepted as the custodians of tangible history. With diving technology making serious headway only recently, maritime archaeology has yet to evolve the same stable identity or static place in the public eye. "There's some debate as to what maritime archaeology is," Murray told me. Shipwrecks, he explained, were seen (and continue to be seen) as commercial items, long before maritime archaeology came on the scene.

The week before I arrived in Key West, Murray had given a talk on the "dichotomy of thought," between people's internal monologue when approaching an underwater site versus a terrestrial one, like a Native American burial site. There's a taboo associated with disturbing the latter, Murray explained. "With shipwrecks, traditionally, people were encouraged to go and salvage things and it actually began with salvage lawsaving wrecks that were in the process of wrecking," Murray said.

Nowhere is this more pronounced than in Key West, where the value of a shipwreck was, historically, what its goods could be sold for in the marketplace. If Key West is ground zero in the debate between archaeologists and treasure hunters, the Mel Fisher Maritime Heritage Museum is its bull's-eye. The Museums first headquarters were on a galleon. It literally sunk. What Mel Fisher began as the Treasure Salvors Museum, turned into the Maritime Heritage Museum in 1988 when the Heritage Society took it over and when Fisher donated his Atocha booty. The Mel Fisher Maritime Heritage Museum was originally founded "...to insure that there would always be a permanent Atocha artifact collection," a museum placard read.

To some, the set-up at the museum embodies a conflict with one of archaeology's core values. Archaeology lives and dies by the strict procedures employed to make it useful and accountable. "You have to follow this procedure as strictly as possible and you have to have all good intentions towards following that," Murray told me. "One fundamental thing is to not promote treasure hunting or the selling of artifacts of any kind."

It is true that the museum houses and glorifies treasure. In the gift shop are children's books with titles like <u>Hunting for Treasure</u>, and fake *Atocha* coin necklaces for purchase. *Atocha* gold (not for sale) features prominently in the exhibit halls, along with the story of Mel Fisher. In one picture

Fisher stands ankle deep in the water, adorned in a ridiculous white dress suit and white dress gloves. He is pulling treasure out of a white top hat. Even in Fisher's time, the archaeologist-hunter conflict was running store. You can buy authentic *Atocha* silver coins and other related jewelry for up to \$11,000, the likes of which have even been sported by young Hollywood. On the museum wall that flanks the entrance to Mel

Fisher's Treasure Sales is a sign:

"Mel Fisher's
Treasure Sales is
not part of the Mel
Fisher Maritime
Museum. These
two are separate
entities."

You can tell the museum has had problems before.

It would be misleading to say that the Heritage

Museum is all Mel-madness. In 1995, the museum unveiled: A Slave Ship Speaks: The Wreck of the Henrietta Marie, touted as the "...first major museum exhibition in this country devoted to the transatlantic slave trade." The Henrietta Marie was a 1700's slave ship and the first one to be identified by name. It was found by Fisher, then abandoned when he realized it was not the Atocha. Suspecting its importance, an archaeologist and a salvor resurrected the project, and now its artifacts and story are housed in the museum. The museum is also looking forward to exhibiting the artifacts from their Santa Clara project (St. Johns wreck).



high. Reads one plaque: "Mel added an archaeologist to his team....It was a significant step for Mel that set him apart from many other treasure hunters. He realized that some of the controversy surrounding his efforts would go away if he had an archaeologist in command of the excavation effort."

The not-for-profit museum is seen as further compromised by the fact that it shares the building with Mel Fisher Treasures, the unrelated *for-profit* business run by Mel's family, their offices just a floor above Malcom's. Toward the back of the museum, where dark gray tiles turn to shiny white, is Mel Fisher's Treasure Sales. It wears the look and air of a fancy jewelry

For Malcom, the attachment to Fisher is "a double edge sword." While many come there to see Mel Fisher's story, the association triggers problems in Malcom's professional life. Malcom has a clear love of archaeology, history, and bringing our underwater world to the public, but that shiny *Atocha* gold sitting two floors below his office has anchored him in controversy.

He was trained as an archaeologist at Indiana University. At twenty-two, he began working as an archaeologist for Mel Fisher's Atocha operations, and later came onto the museum's staff. In the academic archaeology world, working with treasure hunters can put you on a blacklist. "There are people who absolutely will not talk to me. They just can't get beyond the name Mel Fisher. They think that we are 'Treasure Salvors Incorporated,' or just a scam of some sort," said Malcom. There is also the misconception that because they have gold in the museum, they must be rich. "We're not selling that gold, that gold is the museum and those artifacts are the museum. If we sold them we wouldn't have a museum," Malcom said.

While some issues fade away with successive generations, this one has not. In the field of maritime archaeology, there aren't many jobs. "It's really hard for us coming out of college, all the pressures, student loans...and getting a job. It's easy for us to not look into something as deeply as we

"ONCE YOU'RE
TARRED WITH THAT
BRUSH, YOU CAN
NEVER GET CLEAN"

should," Clark said of commercial outfits that don't meet academic archaeological standards.

To Greg Stemm, the co-founder and CEO of Odyssey Marine Exploration (the parent company of the SHIPWRECK! exhibit), "...the image of commercial groups as profit-obsessed archaeological mercenaries is an inaccurate stereotype or — for some politically-motivated heritage bodies — wishful thinking."

When Stemm is described, it is always colorful. He is usually characterized by his grey beard and tall, tanned, lanky stature. From there the descriptions can fly in praise or reproach, depending on whom you ask. A 2008 New Yorker article described his, "...boyish manner with a bristling air of intellectual superiority," and irrepressible enthusiasm. "His own public relations staff has given up trying to manage him," wrote Business Week in 2012. For Stemm, commercial operations provide more boon than burden to the shipwreck community (the SHIPWRECK! Exhibit being one example). The website's "A Commitment to Archaeology" subheading reads:

"Odyssey Marine Exploration has pioneered a new branch of archaeology, which we call 'commercial marine archaeology,' defined as the pursuit of deep-ocean archaeological research and exploration as a 'for profit' venture. This model is currently the only practical way of sustaining highly expensive research and archaeological operations in the long-term and has enabled us to actually explore more shipwrecks than any university or institute in the world."

To Stemm's credit—whether in the form of Odyssey's traveling SHIPWRECK! exhibit, or with its Discovery Channel TV show, Treasure Quest—the company seems to have successfully gained the attention of the public. Odyssey has always considered the public its "ultimate stakeholders," Stemm told me. Archaeologists, he feels, have lost the support of the "man on the street" because they "...look down on the public who are more interested in the thrill of exploration and discovery than the more arcane studies on ship construction and other rather narrow studies associated with shipwreck sites."

Even with Odyssey's success archaeologists, like Clark and Murray, probably won't be working there anytime soon. "Treasure salvors can promote themselves as archaeologists all they want," but aspiring archaeologists beware, said Clark. Just because it calls itself an archaeology firm, doesn't mean a company has the stamp of academic approval. Taking a job with a commercial outfit, while providing momentary financial salvation, can lead to blacklisting in the archaeological community.

"Once you're tarred with that brush, you can never get clean," agreed Brendan Foley of Woods Hole Oceanographic Institution's Deep Submergence Laboratory. Compared with many maritime archaeologists, Foley is in a cushy seat. Woods Hole is one of the best-known oceanographic organizations in the world, with the weight to muster funding and access to some of the same cool toys of treasure hunters. Foley's goal? To map the entire Mediterranean ocean bottom looking for the oldest shipwrecks in the world. He's clearly grateful for his fortunate position. When I point out his privilege and ask how many people can feasibly do the work that he

does, his reply is a forlorn, "Very, very few. Very few indeed."

Due to the financial strain on the field, projects in maritime archaeology often have to be very basic. "They're not able to think big thoughts and so instead of dreaming and reaching for the stars, they end up doing things that some people have called 'so-what archaeology'," Foley said. But people want to think their work is important, and some archaeologists are guilty of trying to inflate their work, Foley explained. "It's a problem in the field."

Even if archeologists had all the funding they needed, it is debatable whether or not treasure hunters and archeologists will ever be on the same team. "I don't really see that there's ever gonna be any common ground, or any accord reached between those groups. I just don't see how there can be," said Foley "But you know it's a really interesting question." One of the thoughts Foley has been turning over in his head for years is what ought to stay on the ocean floor and what ought to come up. "Is it ethical? Is it proper? To go out and recover a couple hundred million dollars in gold from a historic era wreck...or is the wreck itself such a historically important sort of document in its own right, that those things should never be touched and the gold should just stay down there forever?"

It's a tug-of-war. On the one hand, treasure is money. On the other hand, shipwrecks are historical documents. Are all of them really more valuable as historical documents? "I don't really have an answer to this, but I will say that I am an expert in 19th century steamships and steam technology and I hear about Greg [Stemm] going out and recovering gold from, say, the Steamship

Republic [the subject of SHIPWRECK!], I don't think that the historical value of the wreck itself outweighs the monetary value of the cargo on that ship. I can't think of any questions to ask of that wreck that I couldn't approach a different way through non-archaeological means," Foley said. "Now I'm not saying Greg is doing archaeology out there. I think he's doing salvage, but I also wonder if you have to balance out what those two values are."

"The funny thing is, Greg Stemm came to our first Deep Archaeology conference at MIT," said Foley. It was 1999 and the topic was *Toward a New Synthesis*, exploring how technology and underwater archaeology should co-evolve. "He's just a kick to be around," Foley said of Stemm. Stemm had great stories, and was the kind of guy you wanted to get a beer with. "I'm not gonna vilify the guy. I don't agree with his approach, but I understand why he's doing it. He's after the money," Foley said.

When you are looking for ancient historical wrecks—like the Bronze Age vessels Foley is interested in—there's little sense in hoping for treasure anyhow. Foley is essentially looking for 4,000 year-old leftovers. More time on the ocean floor, means more time to be looted or bulldozed by trawlers. The missing pieces hurt the cause, "You know it's sort of like each shipwreck is a book, and any time someone goes down and removes an artifact, it's like

ripping a page out of the book. So by the end of a few centuries of disruption on



these sites, we've got maybe the cover of the book or maybe just the spine of the book and no pages left."

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he fate of shipwrecks is not all ethical conundrum and controversy. Sometimes it promises agreement and accord. People refer to Lake Champlain as an almost magical place where the dive community is banding together with the archaeological one to protect the things they both love. Even the role of commercial outfits may be changing. The Economist reported that due to tighter government regulation on commercial firms, "One response is to work more closely with governments. Odyssey has three contracts with Britain, with expenses paid on successful recovery."

Bilinski, for her part, is on the Massachusetts Board of Underwater Archaeological Resources to "make sure that we're not overly restrictive," said Victor Mastone, its Director of Archaeology. Despite the different work histories of Clark and Malcom, the two still go out for a day on the water, talk coins, and help archaeologistsin-training learn their basics. For aspiring maritime archaeologists, like some of those on the *Phoenix*, the basics include more than just the physical nuts and bolts of the discipline. Working in this field requires a deep contemplation on the ethical geography of shipwrecks and a professional future planned accordingly. Will the students become archaeologists like Foley or commercial hunters like Stemm? While the two camps may not be bunking together any time soon, it's not as though it's an all out gun fight.

After the conference, Stemm used to humorously call Foley every once in a while, put on a Darth Vader voice and breath heavily into the phone, 'Brendan, come to the dark side.'

"And he'd offer me a job," Foley said.
"And I would laugh and say, 'Yeah I'm gonna try this other thing first, Greg.'"

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n the walk home from the dock,
Malcom lamented that he could see
Clark's suspicion of him. The
dynamic is strange. While Clark and Murray
have no qualms with Malcom as a person and
even seem to like him, it's clear that they
would never take his job. The strict ethics
and procedures of archaeologists are,
arguably, what makes archaeology a science.
It has also earned archaeologists nicknames
like "archo-Taliban," from some treasure
hunters. One wreck diver even used a Hitler
quote "This is my last territorial demand," to
describe what he thought was a marine
sanctuary's unfair claim to certain wrecks.

For their part, archaeologists can find it tough to keep up with treasure hunters. "It's like the difference between the Post Office and Fed Ex," said a representative from a commercial company, explaining the differences in how much more his company could get done in day than the average archaeologist. Some have suggested that archaeologist's strict attitude comes not from ethics, but possessive jealousy.

Archaeologists don't have the same funding and, therefore, access to wrecks. They also can't promise to bring up heaps of silver or gold. All they can promise is history—stories, and tangible bits of the past.

"It's that whole aspect of learning new things, changing the history of the world. To me, these shipwrecks, they just give us insight that you don't find anywhere else. Plain and simple, into the past," Malcom said. "They're not just powerful icons; they help explain the past in a way that words never will." \#\frac{1}{2}

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Oxbow Books, 2013

MUSEUMS

Key West Shipwreck Treasure Museum

Key West, Florida

Mel Fisher Maritime Museum

Key West, Florida

SHIPWRECK! Pirates and Treasure Exhibit

Boston Museum of Science

Boston, Massachusetts **J**