AS IF HE HAD SEEN IT BEFORE

Deconstructing the "First Voyage" of Christopher Columbus

An Essay by Charles Sullivan

Presented to the Chit Chat Club
San Francisco, California
October 10, 2011

* * * * * * * * *

INTRODUCTION

The subject of my essay is Christopher Columbus, more specifically the so-called "First Voyage" of 1492-93, during which he is traditionally credited with discovering America.[1] It's a complicated subject, and our time this evening is limited. So I will concentrate on the points I consider most important. Additional details, notes, and references are included in the online text of the essay.

When I started writing about Columbus, I meant to compare the currently accepted or "standard" version of his celebrated discovery with a radical new version. The standard version says that a brash young European, wise in the ways of the sea, found this continent by accident while seeking the legendary riches of Asia.[2] A radical new version says that Columbus and other brash young Europeans, well aware of what awaited them, used copies of Chinese maps to sail to the Americas and beyond.[3]

I put aside that comparison after a while, because the radical new story doesn't hold water, particularly when it comes to Columbus's voyages. But also, on closer reading, what I'm calling the "standard" version of the Columbus story turns out to be less coherent, less settled, than you might expect. As told by his chief biographer, Samuel Eliot Morison (1887-1976), it involves two seemingly contradictory propositions. On the one hand, Columbus is said to have been a brilliant navigator, who knew how to reach a destination swiftly and surely.[4] On the other hand, we're asked to believe that Columbus didn't really know where he was going, when he set sail from

Spain in 1492. His great discovery is described as purely accidental: that is, unintended and unforeseen.[5]

Having extracted this seeming contradiction from hundreds of pages of narrative and commentary about Columbus and his achievements, I decided to focus on it, and to determine, if possible, which of the two propositions might be more accurate, given the evidence available to us now.

PROPOSITION ONE: COLUMBUS WAS A BRILLIANT NAVIGATOR

Initially I wondered if Christopher Columbus has been praised too much, simply because he got here, somehow--in spite of hazards real or imaginary, such as fearsome sea monsters, vanishing islands, rebellious crewmen, faulty compasses, the prospect of dropping off the face of a flat Earth, and so on?[6] Or was he truly a brilliant navigator, perhaps the most brilliant of all up to that time, using unsurpassed abilities to make an unprecedented journey? Morison and some other modern authorities are emphatically on Columbus's side, portraying him as a sort of maritime genius.[7] Exceptionally skillful at "dead reckoning."[8] Sometimes inaccurate with the crude instruments of his day, but nevertheless able to get where he wanted to go.[9]

And what does the evidence indicate? Although there are gaps in the record, this view of Columbus appears to be reasonably well documented, especially with regard to his "First Voyage." Later I will share with you some of the remarkable details of that voyage, so that you can appreciate how very swiftly and surely he did reach his destination, not only on the outbound passage from Europe to the Caribbean in 1492, but also when he sailed

homeward by a different route in 1493.[10] Evidently the man knew what he was doing, and he showed others how it could be done. As a result, transatlantic voyages became fairly routine within the next twenty years. Columbus deserved a lot of gratitude for making this possible.

PROPOSITION TWO: THE GREAT DISCOVERY WAS ACCIDENTAL

But what about the other proposition? If Columbus knew what he was doing as a navigator, on his "First Voyage" at least, does it make any sense to say that he didn't know where he was going? The answer, oddly enough, seems to be yes but no. Obviously he didn't know as much as we do, in terms of global geography. He was familiar with the Mediterranean, and with the Atlantic coasts of Europe and North Africa, including the Azores, Madeira, the Canaries, and other islands. But according to Morison, Columbus and his contemporaries had no awareness of the vast American continent, or the Pacific Ocean, as of 1492.[11] In that sense, Columbus really didn't know where he was going. How could he? The first European map depicting the Americas as a "new world," an unfamiliar landmass stretching thousands of miles from north to south, was not published until 1507, a year after his death.[12] And there's no convincing evidence that Chinese maps, mentioned earlier, were ever brought to his attention.[13]

In a more limited sense, however, it can be argued that Columbus actually did know where he was going. In the years leading up to his historic "First Voyage," he talked and acted as though he had a destination in mind, a definite place to go. He seemed certain of its existence and confident in his ability to reach it. Bartolomé de las Casas (1484-1566), an early historian

of the period, said that Columbus *"was as sure he would discover what he did discover, and find what he did find, as if he held it in a chamber under lock and key."*[14] This is hardly the description of a man who didn't know where he was going. On the contrary, it suggests that Columbus recognized the value of knowledge he already possessed, and wished to keep it secret.

Some of Columbus's contemporaries, hearing about his ambitious plans, may have written him off as brash, ignorant, or delusional. But his certainty, his self-confidence, were eventually justified by the results he achieved. I say this because, according to evidence provided by Morison and others, Columbus's westward course from the Canary Islands to his first landfall, in the Caribbean region, was virtually a straight line, taking advantage of prevailing winds and currents that are still utilized by sailors today.[15] The distance he traveled across the Atlantic was between 2,400 and 3,000 nautical miles, as he had anticipated.[16] The land that he found, an archipelago of islands large and small, appeared to be what he had expected to find.[17] All in all, his westward passage from Spain stands out as a triumph of oceanic navigation. Why then do Morison and later historians persist in the view that Columbus's great discovery was accidental?

WAS JAPAN HIS REAL DESTINATION?

They do this because of some confusion as to where he thought he was going. Following Morison's lead, they have assumed that Japan was the destination that Columbus intended to reach, in 1492, by heading west from Europe.[18] If this were so, his journey would have been extremely long and circuitous, 15,000 miles or more, depending on how soon he realized that he

had to find a way around what we call South America, before attempting to cross the uncharted Pacific.[19] Such a voyage might easily have ended in disaster. Instead, they say, Columbus stumbled upon the fringes of North America, less than 3,000 miles from his point of departure. A classic example of serendipity!

Let's dig a little deeper, and ask: why have Morison and other, more recent historians made the assumption that Columbus was trying to reach Japan? The answer is: because he said so—before, during, and after his "First Voyage."[20]

And why did Columbus say so? The answer seems to be: because he didn't know any better. Having read various appraisals of him, I surmise that Columbus was a gifted, enthusiastic, but poorly informed man, who made an innocent mistake. He came to believe in a fictitious image of Japan, confusing it with an entirely different cluster of islands, a real Caribbean destination that he evidently wanted to reach, thought he knew how to reach, and ultimately did reach in 1492.

And how could this mistake have been made? Very easily, I think, if Morison's account of his early life is accurate. Born in Genoa, Columbus was illiterate until age 25, and only sketchily self-educated thereafter. Supposedly he arrived in Lisbon by accident, in 1476, after swimming six miles as the result of a shipwreck. From then on, for some reason, he seems to have been obsessed with the dream of sailing westward to make a unique discovery. Not just one more island, or trading post, or fishing ground to be

added to the oceanic empire of Portugal or Spain, but someplace much bigger and more important. What we might call today a game-changer!

In pursuit of that glorious dream, Columbus learned to read and write, well enough to gather some encouraging ideas about global geography from old and inaccurate sources, such as Marco Polo[21] and Ptolemy.[22] They gave him the impression that Asia, otherwise known as "the Indies," was fabulously wealthy, hospitable to strangers, and not impossibly distant from western Europe. The island nation of Japan, overflowing with gold and precious silks and spices, was believed to be closest. Just waiting for some bold adventurer to come along, and fill his ships with treasure!

I suspect that such a heady mixture of misinformation and wishful thinking was too much for young Columbus to resist. With everything to gain and little to lose, he mistakenly attached the name of Japan, or "Cipangu" as he called it, to a previously nameless destination he already had in mind. This mistake gave him a strong personal incentive for undertaking his "First Voyage." Ultimately it offered a persuasive rationale for Ferdinand and Isabella, the rulers of Spain, to authorize and support his attempt.[23]

In any event, Columbus's geographic mistake was essential to getting the necessary resources for the "First Voyage." If he had tried instead to organize a costly expedition to a nameless place that he alone believed in, somewhere beyond the edge of the known world, who would have backed him? He needed the idea of Japanese wealth, as embroidered by Marco Polo and others, in order to promote himself and his project.[24]

COLUMBUS DID NOT MAKE A NAVIGATIONAL ERROR

But once he set sail, in August 1492, with a total force of 87 men in three small ships, his fanciful thoughts about Japan and its riches were of no immediate use. Columbus the navigator, a seasoned professional, took over from Columbus the promoter. His geographic mistake did not result in a navigational error. Let me repeat that point. Contrary to what Morison wrote, and others have echoed, I contend that Columbus did not make a "colossal" error of navigation.[25] As noted earlier, he reached his Caribbean destination swiftly and surely. What he chose to call that destination had no bearing on how efficiently he got there.

ASSESSMENT OF PROPOSITIONS ONE AND TWO

At this point in my research, I felt comfortable with the first proposition, that Columbus was a brilliant navigator, and ready to reject what the second proposition assumes, that he discovered America by accident, while trying to reach Japan. I think the acceptance of the second proposition, by Morison and other historians, has distracted them from dealing with some fundamental questions. But we are free to ask: if the destination that Columbus intended to reach in 1492 was not in fact Japan, what place was it? How did he know about it, and how did he manage to get there? The answers are to be found in the navigational details of the so-called "First Voyage." Let's take a closer look.

NAVIGATION DEFINED

Navigation, the art/science of getting from Point A to Point B as efficiently as possible, is largely a science now, heavily technical, but it was mostly an art when Columbus practiced it. He must have been very, very good at what he did. Harvard's J. H. Parry (1914-82), who wrote a definitive history of seagoing navigation, said that Columbus *"made astonishingly accurate landfalls, too often for them to be attributed to good luck; once he had been to a place, he could always find it again."*[26] I'm sure you will agree: this is the sort of navigator we would have wanted to be sailing with, if we were crossing an unfamiliar ocean towards an obscure destination in 1492. Or if we were hoping to get safely home again in 1493.

It's important to bear in mind that, when we talk about navigating from Point A to Point B, we're talking about reaching a specific destination, selected in advance. This is the distinctive purpose of navigation. Even today, if someone sails from Point A to nowhere in particular, he's not navigating. Exploring, or cruising aimlessly perhaps, but not navigating.

OUTWARD BOUND IN 1492

Outward bound from Palos, Spain in August 1492, Columbus sailed first to the south, some 600 nautical miles, down the coast of Africa. He paused in Spain's Canary Islands for four weeks to make various repairs and adjustments to his ships. Only then did he head due west across the Atlantic, with strong currents and prevailing winds helping him.[27] His chosen course was close to a straight line--in terms of latitude, about 28° North of the equator.

If he had followed that line to the very end, he would have touched North America near what is now Daytona Beach, Florida. Instead he landed among the Bahamas, and then sailed from one small island to another, in the general direction of Cuba.

The original *Diario* or ship's log from 1492-93 has been lost, like other key documents associated with Columbus. However, an abstract made by Las Casas in the 1530s is thought to be reasonably accurate and complete.[28] This daily chronicle, though fascinating in detail, is not very impressive at first. Hour by hour, there were many small alterations of the ship's course, many variations in wind and weather, many misleading signs that anxious mariners might be getting close to land, long before they actually were. But when we view this historic journey as a whole, we can comprehend what Columbus the navigator was able to accomplish. Here is how the numbers add up.

Overall, it took him just 36 days to complete the outbound passage from Ferro, in the Canary Islands, to his first recorded landfall in the Bahamas. Often he insisted on sailing as fast as the ships could go, day and night, seemingly regardless of rocks and reefs and other obstacles that might lie ahead.[29] Morison, himself an avid sailor, said: *"Any yachtsman today would be proud to make the records that the great Admiral* [Columbus] *did on some of his transatlantic crossings in the fifteenth century. Improvements in sailing vessels since 1492 have been more in seaworthiness and comfort than in speed."*[30]

Even more impressive than the speed was the accuracy of Columbus's navigation: an actual passage of about 2,915 nautical miles as compared to an estimated distance of 2,400 to 3,000 nautical miles. This result seems too good to be true, but the numbers come from reliable sources.[31]

Contrast the performance just described with earlier voyages of discovery, closer to home. For example, it had taken several different Portuguese navigators at least half a dozen voyages, between 1431 and 1452, to discover the Azores Islands one by one, and they are only 800 to 1,000 miles off the coast of Europe.[32] While Columbus undoubtedly learned from those efforts, his remarkable passages set a whole new standard for oceanic navigation.

We should note, however, that once he had entered Caribbean waters and explored some of the smaller islands, Columbus no longer seemed to be sure of where he was going next, or how to get there. He was still eager to find the larger islands of Japan, or "Cipangu" as he called it, but which way should he turn? The ship's log tells us that he did a lot of zig-zagging, or island-hopping, because of clues and directions he thought he was getting from natives with whom he could not communicate clearly. Cuba, which seemed quite promising at first, had little of the abundant gold he was seeking.[33]

HOMEWARD BOUND IN 1493

Going home in 1493, Columbus knew better than to try to head directly eastward. He said as much to his crew. This would have meant sailing against the same prevailing winds and currents that had carried him swiftly west-

ward on his outbound voyage. Instead he headed in a northeasterly direction, making use of different winds and different currents including the Gulf Stream.[34] Consequently he touched land in Portugal's Azores Islands rather than Spain's Canaries, and after delays and further difficulties with winter storms, he proudly announced his success to the King of Portugal, in Lisbon, before reporting to his sponsors, Isabella and Ferdinand, in Barcelona.

Reading the ship's log for his homeward passage, we can see that there was little hesitation or zig-zagging, once his ship emerged from the maze of Caribbean islands, into the open Atlantic. Columbus the brilliant navigator was navigating brilliantly again. On February 4, 1493, nearly three weeks at sea, the log says: *"He had an overcast and rainy sky and it was somewhat cold, because of which he says he knew that he had not reached the islands of the Azores. After the sun rose he changed course and went east."* On February 15, an island was sighted--the first land since leaving the Caribbean. *"The Admiral, by his calculations, figured that they were among the islands of the Azores, and believed that the island was one of them. The pilots and sailors figured that they were already off Castilian territory,"* i.e., the coast of Spain. Left to their own devices, Columbus's pilots and sailors, all experienced seamen, would have made a navigational error of more than a thousand miles.[35]

Adding up the numbers, it had taken Columbus 31 days to sail northeast about 2,830 nautical miles from Samana Bay, in the Caribbean, to one of the Azores Islands.[36] The shortest distance from point to point is 2,725 nautical miles.[37] Therefore any and all deviations in his course amounted to approximately 100 nautical miles, according to my calculations, despite the

vagaries of winds, waves, and currents. Columbus was supposedly the first European ever to make this ocean passage, from west to east, yet somehow his performance was nearly perfect. Morison commented: *"Without knowing it, Columbus had employed the best sailing strategy for getting home quickly."* [38] Without knowing it? This assumption closes off an area of extremely interesting inquiry. I would rather pursue the possibility that Columbus did know the best sailing strategy for his return to Europe. The question is how?[39]

HOW DID COLUMBUS MANAGE TO NAVIGATE SO WELL?

More broadly, the question is how Columbus managed to navigate so well on both passages of his historic "First Voyage," outward bound in 1492, homeward bound in 1493.

PROPOSITION THREE: COLUMBUS NEEDED OUTSIDE HELP

The "standard" account of the "First Voyage" gives no satisfactory answer to this question. Morison actually brushed it aside. "To Americans trained in the atmosphere of pragmatism," he said, "what Columbus did is. . . much more important that how or why he did it. . . ." [40]

Instead of a definite answer, we are offered what amounts to a third contradictory proposition: Columbus the navigator needed help from some outside source, or sources, in addition to his own nautical talents. Which is to say: brilliant he undoubtedly was, instinctively grasping the ways of the sea; but could he have accomplished everything he is credited with, entirely

by his own efforts? No navigator is that brilliant! So where might the needed help have come from?

Morison spent years identifying and evaluating many possible sources, including old geography books, shipping records, global maps, regional charts, contemporary letters, and popular tales about live informants who might have told Columbus what he needed to know. The implication is that one, or another, or some combination of these sources must have done the trick, though Morison does not explicitly commit himself to any of them. I will go over the most likely examples with you, in just a few moments. But when all is said and done, the bottom line appears to be this: none of those supposed sources could provide anything like the specific directions, the "navigational template," as I call it, that would have guided Columbus swiftly and surely to his destination in 1492. And home again in 1493.

The information we're looking for, it seems to me, has to be more than a vague promise that, if you sail far enough to the west of Europe, you'll be glad you did. How is a serious navigator supposed to make anything of a statement like that, with no Point A, no Point B, no compass bearings or distance estimates, much less any hint of latitude or longitude? And let us not forget the equally important question of getting home again. Except for those very early mariners who devoutly wished to end their days among the mythical "Isles of the Blest," anyone sailing westward across the Atlantic would have wanted a round-trip ticket.[41]

A NAVIGATOR'S TEMPLATE FOR THE "FIRST VOYAGE"

What we're seeking from the sources that Columbus might have consulted (books, maps and charts, or live informants) is specific, practical guidance. In effect a navigator's template for his "First Voyage," available to him before that voyage occurred. It would have to say something like this: Go south as far as the Canary Islands, then due west some three thousand miles to "the Indies." After leaving there, go northeast by east about two thousand, eight hundred miles to the Azores, then due east to return to Portugal or Spain. That in essence is what Columbus the navigator would have needed to know. How to get from Point A, to Point B, to Point C, to Point D, and thence back to Point A. Not a simple two-way route, but two different routes for different passages. One better for sailing to the west, the other better for going east to get home.

This essential information was not just pieced together after the fact, as a record of what Columbus did. Rather, it would have served as a guide for what he proposed to do. I think he formulated it himself, before he embarked on the "First Voyage." And he wanted to keep it to himself. "As if he held it in a chamber under lock and key," was how his near contemporary, las Casas, put it.[42] But shortly after returning to Spain in 1493, Columbus was commanded to make a "Second Voyage," with 1,200 men in 17 ships. What could be kept secret after that? Within a few years, much of the "New World" would be conquered and exploited. Transatlantic voyages would become increasingly routine, as maps and charts proliferated. By 1519, the knowledge and self-confidence of navigators had developed to the

extent that Ferdinand Magellan could attempt the first European circumnavigation of the globe. All this under the Spanish flag, though not necessarily giving credit to Columbus, for leading the way and showing what was possible. But all this would have been hard to imagine in 1492.

Perhaps you are wondering: how could anyone have formulated a navigational template, a set of fairly specific directions for sailing to the "New World" and back, if Columbus's celebrated "First Voyage" was truly the first? I have been wondering that for some time, and I will return to the question shortly, after a brief survey of the other sources of information that Columbus may have been aware of.

BOOKS

As to books, none of those supposedly read by Columbus could have provided the navigational template he needed. The two most often mentioned, Ptolemy's 2nd century geography book and Marco Polo's 13th century travel guide were useless in this regard. Other early books are no more helpful. Prior to 1492, no author known to us had successfully completed the westbound and eastbound passages that Columbus made. And obviously no author could write about this, in useful detail, without having done it—or at the very least, without obtaining first-hand information from someone else who had done it. So books were not sources for Columbus the navigator.

Let us note, however, that the needs of Columbus the promoter were somewhat separate and distinct from those of Columbus the navigator. The promoter might find use for a book that the navigator scoffed at. According

to Parry, the historian of discovery, Columbus *"did not study the available authorities in order to draw conclusions; he began with the conviction—how formed we cannot tell—that an expedition to Asia by a westward route was practicable and that he was the man destined to lead it. He then combed the authorities known to him, and selected from them any assertion which supported his case."*[43]

MAPS AND CHARTS

As to maps and charts, much has been made of the notion that Columbus got cartographic help from somewhere—if not the Vatican library, maybe the trade-minded Arabs, or the far-ranging Chinese, or some mariner or scholar he encountered in his travels. Maps come and go, charts are found and lost again, throughout the Columbus story. I believe he did look at a few world maps, for what they might be worth, and he sometimes made nautical charts of more limited scope, for sale or for his own use. But were any maps or charts actually used by him during the "First Voyage"? The short answer is: world maps, no; a nautical chart, probably yes. But then again, possibly no.

World maps seen by Columbus before 1492 would have been Eurocentric, very likely--showing just the known half of the globe, with one large body of water called the "Ocean Sea," and three continents (Europe, part of Africa, parts of Asia) lumped together.[44] Few European mapmakers bothered to depict the other half of the globe, the back half, since it was presumed to consist almost entirely of water, *Aqua Incognita* we might say, possibly as much as ten or fifteen thousand miles of it, stretching between Europe and Asia. Any voyage across that much ocean was inconceivable. So the world

maps of his day would have been worse than useless to Columbus, either for promotional purposes or for navigating to "Cipangu."

But how about world maps which included this American continent? We can say with some assurance that Columbus never saw one. As we know, the earliest European map to include the Americas was published a year after he died. Chinese world maps discussed by Gavin Menzies, if they ever existed, did not come to Columbus's attention. And that was very fortunate, for us as well as for him. If Columbus had been presented with a more accurate map, depicting four major continents rather than the usual three, he would not have mistaken the earth's geography so badly. He would have realized that his proposed voyage to "the Indies," in search of "Cipangu," was profoundly misconceived. There's a point to emphasize: if Columbus had known what we know, he probably wouldn't have attempted to do what he did.

NAUTICAL CHARTS

So much for maps of the world. During the 13th century, however, a different kind of map had begun to appear in Europe: the "nautical chart" of limited scope and more accurate detail.[45] Intended for safe and speedy navigation from one specific place to another, Point A to Point B and so on, each of these charts covered a relatively small part of the known world, bringing together the latest information on harbors, islands, coastlines, currents and prevailing winds, tides and hazards, and other navigational features. Columbus and his brother were among those making nautical charts in the 15th

century, both for their own use and for sale. Regrettably, no undisputed example of their work survives today.

THE CHART COLUMBUS BROUGHT WITH HIM

I was pleased but not entirely surprised to learn that, during his "First Voyage," Columbus may have made use of a nautical chart that he had drawn himself.[46] According to the *Diario* or ship's log, this chart depicted several of the smaller islands he was seeking, and it covered some areas of the ocean that he crossed, coming and going. Since we have no copy of this chart, we can't be sure it provided all of the specific details I included in the template of sailing directions, above. But supposedly it was accurate enough to guide Columbus westward to the first few islands he encountered, and then, later, homeward by way of a northeasterly course through the Azores.

Morison, who translated the ship's log himself, seems to have had no doubt that Columbus was using a nautical chart of his own making.[47] And two other translations tell us the same thing: Columbus brought with him a chart on which he had previously depicted certain islands in that sea, and on which he was marking the successive positions of the *Santa Maria* as he sailed westward.[48] But how was that possible? If this "First Voyage" was indeed the first, as traditionally described, how could Columbus or anyone else have drawn islands on a chart, long before sighting those islands?

COULD HE HAVE DONE IT WITHOUT A CHART?

Here we have reached a crucial point in the story, and from the standpoint of

traditionalists, it gets even worse. Columbus was so sure of where he was going—so far removed from Morison's concerns about accidental discoveries and miscalculations of distance--that he didn't really need any chart at all. I base this outlandish suggestion on a remark made by Columbus himself, two days after his celebrated arrival in the New World.

Referring to "San Salvador," the first small island on which they had set foot, he explained to his crew, *"this island is on an east-west line with the island of Hierro in the Canaries."*[49] Hierro, or Ferro as it is called today, is the last bit of land that Columbus would have seen as he set sail towards the west. According to modern charts, Ferro is not precisely on an east-west line with San Salvador, but close enough, by the standards to which Columbus would have been accustomed. If you ever contemplate a similar voyage yourself, just think of two parallel east-west lines, about 4° of latitude or 240 nautical miles apart, defining an ocean passage of some 3,000 miles. Stay within that relatively narrow band of the Atlantic, the whole way across, and you would more or less replicate what Columbus did so efficiently in 1492.

That's only part of the "First Voyage," of course. There's still the matter of finding one's way among the countless islands of the Caribbean, almost all of them uncharted when Columbus first arrived. And beyond that, there's the longer, less direct passage back to Europe. A straight line would not define Columbus's homeward course. But evidently he made use of the Gulf Stream, a broad and consistent current, which flows in several curving branches from the Gulf of Mexico to Europe, and has since been used by many other transatlantic sailors.[50] Thus it seems possible that Columbus

could also have done this part of his "First Voyage" without a chart, if necessary. As Parry put it, his sense of direction was like *"a compass rose in his head."*[51]

But whether Columbus used a chart for navigation, as Morison and others have described, or he was able to navigate without using one, the underlying question is in both cases the same: how could Columbus have acquired the information he needed to do this?

LIVE INFORMANTS

Columbus might have had live informants. Not necessarily writers of books or makers of charts, but people who knew things and were willing to share them. Early in his career, there were Portuguese mariners who could have given him useful advice about navigation near the coast of Europe. But Morison has proved (to my satisfaction at least) that none of those men had ventured much beyond the Azores or the Canaries.[52] So the necessary information about transatlantic crossings and faraway islands in the west had to come from someone else. Traditionally there are two major candidates for this all-important role in Columbus's story.

TOSCANELLI, THE MAN OF LETTERS

One live informant was a Florentine intellectual named Paolo Toscanelli (1397-1482) who theorized about sailing west from Portugal to "the Indies."[53] Supposedly Columbus corresponded with him, after arriving in Lisbon in 1476 and learning to read and write.[54] Supposedly Toscanelli

provided information, plus (you guessed it) a chart, which (you guessed it again) has long since disappeared.

What useful information was Toscanelli in a position to provide? I'm afraid that Morison, who published his own translation of this disputed correspondence, may have allowed himself too much leeway in summarizing it for his other books.[55] He credited Toscanelli with the notion of sailing 3,000 nautical miles west, from Spain's Canary Islands, which is what Columbus later did. Point B to Point C. But I have read these letters with particular care, several times, and I can't find Toscanelli making any such statement. Columbus got that segment of his big idea somewhere, somehow, but not from these letters. On the contrary, it's clear that Toscanelli (who died ten years before the "First Voyage") was writing about sailing from Portugal, rather than Spain. He prescribed a course due west from Lisbon.[56] This would have taken Columbus out through the Azores, against the prevailing winds and ocean currents, with some chance of discovering America in the vicinity of what is now Atlantic City, New Jersey. An intriguing possibility, I admit, but it does not get us closer to the source of the specific information that Columbus actually used to navigate successfully.

And what if Toscanelli really had provided information that Columbus made use of? Traditionalists would then be stuck with the question of where Toscanelli got it--Toscanelli having been an armchair voyager, who seldom traveled far from his book-lined study in Florence.[57]

THE ANONYMOUS PILOT

Another live informant in some accounts of Columbus is an unidentified man whose very existence may be doubted. He is sometimes referred to as "the anonymous pilot." This is his tale.[58] Supposedly a ship going from Spain to England or some other destination in the 1470s or 1480s had been blown far off course by violent winds, blown all the way westward to unknown islands. Somehow the ship's pilot managed to get ashore, meet some natives, obtain supplies, and re-embark on a slow, difficult homeward voyage, from which he was the only survivor. His ship, with damaged sails and rigging, somehow reached Portugal or one of its possessions. There, of all people, this anonymous pilot happened to encounter Columbus, a friend of his, who took him in and tried to save him. Alas, this poor fellow soon weakened and died, but not before imparting to Columbus the highlights of his wild adventure, including a chart or enough navigational details for Columbus to draw one. Presumably this chart later enabled him to find his way to the Caribbean islands mentioned in the log of the *Santa Maria.*

Morison, who often sailed in the Atlantic, flatly dismissed this pilot story as *"impossible."*[59] He had never heard of winds blowing hard enough, long enough, to push a vessel thousands of miles westward from Europe. But that aspect of the story could have been exaggerated by naïve people who were not very familiar with the realities of transatlantic sailing. A rapid westward passage was, after all, one of the outstanding features of Columbus's success in 1492. Also, we should bear in mind that the anonymous pilot, unlike Columbus, would not have been aiming deliberately for any particular destination on this continent. In a crippled ship, unable to steer, he was at

the mercy of the elements. So he could have been driven ashore anywhere along our lengthy Atlantic coastline, from Newfoundland in the north down to Tierra del Fuego in the south, depending on the currents, prevailing winds, and weather conditions he met with.

As to his homeward voyage, the anonymous pilot could have been carried along on the Gulf Stream, as Columbus presumably was in 1493. Columbus too encountered rough weather even before he had passed the Azores, and worse storms after that; thus the slowness of the anonymous pilot's return, in this story, is not at all improbable.

Columbus died, as we know, in 1506. But the story of the anonymous pilot did not die with him. It circulated in Spain and elsewhere, and it contributed to the problems encountered by Columbus's heirs, who sought to continue the honors and rewards that he had been promised in perpetuity by Ferdinand and Isabella.

For Morison, this pilot story presented a different sort of problem. If it turned out that Columbus really hadn't been the first to discover America, his own life's work would be ruined. Therefore he criticized the critics. *"Certain modern pundits,"* he said, *"whose critical standards are so severe that they reject Columbus's sea journals as unauthentic, snap at this Tale of an Ancient Mariner and swallow it, hook, line and sinker."*[60]

Why would those pundits accept such a far-fetched tale? Why didn't they agree with Morison that the anonymous pilot's story was "impossible"? Perhaps they were desperate for a solution to the puzzle that Morison con-

tinued to avoid, namely: if Christopher Columbus truly was the discoverer of America, how could he have brought with him the information he needed in order to make this discovery on his so-called "First Voyage"? Implausible as it may seem, the story of the anonymous pilot does offer an answer: someone got here accidentally in the 1470s or 1480s, say, and literally brought his discovery to the attention of Columbus after that, providing him with a nautical chart or at least a set of sailing directions to follow. But if those events actually took place, and we could find proof, then whatever Columbus did in 1492 and later would be reduced to insignificance, buried among the many lesser consequences of an all-important earlier discovery. No wonder that Morison tried to dismiss this pilot's tale and the "pundits" who went for it!

I'm not suggesting we should re-name October 12 as "Anonymous Pilot Day," and launch a whole new series of celebrations. But I do suggest that the pilot's story, or something like it, is within the realm of the possible. A man of extraordinary capabilities could have done what the pilot's story says he did, just as we believe that a man of extraordinary capabilities did what Columbus's story says *he* did.

ANONYMOUS BETA?

The anonymous pilot is one embodiment of an elusive but indispensable "someone" who might have preceded Columbus, gathering the specific information he needed to navigate, and somehow communicating it to him. The story of the "First Voyage" really needs a character like this, in order to explain how Columbus knew where he was going, before he got here in

1492, and how he knew the best route for returning to Europe in 1493. But if the anonymous pilot himself is unacceptable, we could conjure up a different "someone" instead. Call him "Anonymous Beta," give him the opportunities for ocean voyages, the means to take part in them, the courage and strength to endure a long, unexpected ordeal, and the navigational ability to make sense of it day after day—accurately enough for storm-driven passages westward and eastward to be repeated later, under more normal conditions. But that would be too much hypothesizing for many of us.

ASSESSMENT OF THE THIRD PROPOSITION

At this point I think it's fair to say that the third proposition fails. The list of possibilities has been exhausted. Except for a purely hypothetical informant, "Anonymous Beta" or the equivalent, there is no outside source (book, map, or person) capable of supplying the navigational details that Columbus needed, to supplement his own considerable skills. Someone would have had to do what Columbus did, before he did it on the "First Voyage." But that "someone" remains unidentified, conjectural, perhaps nonexistent.

So where do we go from here? For that matter, where are we? I think we have been drawn, step by step, into a perceptual cul-de-sac. And now we must try to get out of it, in order to bring our intellectual exercise to a conclusion. What do I mean by "perceptual cul-de-sac"? A plausible but misleading array of possibilities, that ends up blocking progress. Just as proposition number two (by emphasizing Japan) has had the effect of obscuring Columbus's real destination in the Caribbean, I suggest that

proposition three (by focusing on outside sources of possible help) tends to distract us from a much simpler and more interesting explanation.

PROPOSITION FOUR: COLUMBUS MADE AN EARLIER VOYAGE

Let's be parsimonious. Let's not assume that outside sources of information were necessary for Columbus the navigator to succeed. Let's consider, instead, the possibility that he knew where he was going, knew it from the beginning, because he had already been there himself. Yes--I'm suggesting that Columbus might have discovered America long before his celebrated arrival in 1492! The story of his great discovery becomes considerably less complicated, with fewer "somehows" and "probablys" to explain things, if we assume that Columbus created his own template for navigation, so to speak, basing the carefully planned, fully authorized "First Voyage" of 1492-93 on an unplanned, unauthorized, unrecorded voyage some fifteen or twenty years earlier.[61]

I have been considering this possibility for quite a while. It seems fantastic at first, but there's nothing in the record to rule it out. Columbus clearly had the opportunities, the professional skills, and the personal qualities to do what an anonymous pilot supposedly did, only better. And Columbus had every reason to keep quiet about it, afterwards, as he figured how to make the most of an earlier, accidental discovery.[62]

RECONSTRUCTING THE STORY OF DISCOVERY

During his "First Voyage," December 21, 1492, Columbus boasted: *"I have been at sea 23 years without leaving it for any time worth telling, and I have seen all the east and west. . . ."*[63] Whether or not he was alluding to previous discoveries in the New World, those 23 years included many months off the record—his whereabouts a series of question marks for modern historians--during which Columbus could easily have taken part in voyages of long duration.[64] Given such opportunities, plus his remarkable ability to navigate, and his legendary determination, all he required was a pilot's job, or just a sailor's modest berth on a merchant ship heading out into the Atlantic. After that, the possible adventure of the anonymous pilot could have been the real adventure of Columbus himself--with severe weather conditions, the ship driven westward by unrelenting winds, an eventual landing among small, exotic islands, and so on.

When might this hypothetical "early discovery" have occurred? If I were able to do the research, I would go back to Portugal, and Columbus's mysterious arrival there in 1476, from parts unknown. Supposedly this happened as the result of a shipwreck, after which Columbus swam six miles to get ashore. I say "parts unknown" because the melodramatic incident of the shipwreck has never been confirmed, insofar as it involves Columbus. His name does not appear on the lists of those aboard the ships in the convoy he was supposedly sailing with, according to Morison.[65] Whether or not he really swam that far through waves and surf, Columbus could have been arriving from almost anywhere, on the sinking hulk of a ship, or clinging to

driftwood. Why not from a harrowing adventure on the far side of the ocean?

"AS IF YOU HAD SEEN IT BEFORE"

Ferdinand and Isabella wrote to Columbus in 1494, at the height of his success: *"It seems to us that all which at the beginning you told us that you could find has, for the greater part, been true, as if you had seen it before you spoke of it to us."*[66] Seen it before? Perhaps he had. Perhaps not. The last word about Admiral Columbus has yet to be written. There's plenty of time between now and 2092 for a new generation of seagoing historians, the next Morisons, to search more deeply.[67] Starting, I suggest, with the sunken remains of an old wooden ship, about six miles off the coast of Portugal, where a young man emerged from obscurity with a big idea—just one, but big enough to occupy him for the rest of his life.

Let us conclude with a well-deserved toast to Christopher Columbus—"Admiral of the Ocean Sea," as he wished to be known—the brilliant and determined navigator, who managed to discover America at least once, somehow, and conceivably twice.

Columbus!

* * * * * * * *

NOTES

[1] The title of this essay refers to a letter, cited in the text, that Ferdinand and Isabella sent to Columbus in 1494. Regarding the subtitle, to "deconstruct" something is not to destroy it. In the context of physical construction, "deconstruction" is the selective dismantling of building components, specifically for re-use, recycling and waste management. A similarly positive outcome can be achieved in history and the study of human behavior, as I hope to show.

[2] Most of the following information is taken from two of Samuel Eliot Morison's studies of Columbus: *Admiral of the Ocean Sea* (1-volume edition, hereinafter abbreviated as AOS), and *Christopher Columbus, Mariner* (hereinafter CCM). The 2-volume edition of *Admiral of the Ocean Sea* (hereinafter AOS/1, AOS/2), which won the Pulitzer Prize for biography in 1943, has also been consulted because of the voluminous notes it contains, but it is now out of print and not readily available to most readers. Some copies of this essay include a picture of Columbus's ships departing from Spain in 1492. The original drawing was one of many made by Lima de Freitas to illustrate Morison's book, *Journals and Other Documents on the Life and Voyages of Christopher Columbus* (hereinafter JOD), p. 49.

[3] Chinese world maps are described but not reproduced in Gavin Menzies, *1421: The Year China Discovered America* (hereinafter 1421). His controversial thesis is expanded in a subsequent book, *1434: The Year a Magnificent Chinese Fleet Sailed to Italy and Ignited the Renaissance* (hereinafter 1434). It is intricate, and interesting to read, but again no illustrative maps are shown.

[4] Morison (AOS, p. 670) called Columbus "the greatest navigator of his age," and said further: "The ease with which he dissipated the unknown terrors of the Ocean, the skill with which he found his way out and home, again and again, led thousands of men from every Western European nation into maritime adventure and exploration."

[5] Morison, CCM, p. 3.

[6] Contrary to some accounts of his life, Columbus was not a globalist held back by critics who thought the earth is flat. The issue for him was the size of the globe. Larger meant wider expanses of ocean to cross. Smaller meant that western Europe and eastern Asia could not be prohibitively far apart. So he found a few small-globe authorities and cited them successfully in promoting his "enterprise of the Indies."

[7] Morison (CCM, p. 3) declared that "no other sailor had the persistence, the knowledge and the sheer guts to sail thousands of miles into the unknown ocean until he found land. This was the most spectacular and most far-reaching geographical discovery in recorded human history." See also J. H. Parry's historical study, *The Discovery of the Sea* (hereinafter DOS), p. 203; and James E. Kelley, Jr., "In the Wake of Columbus on a Portolan Chart" (hereinafter CPC) in De Vorsey and Parker, *In the Wake of Columbus* (hereinafter IWC), p. 79.

[8] According to Morison (CCM, p. 40): "Columbus relied almost completely on 'dead reckoning,' which means plotting your course and position on a chart from the three elements of direction, time and distance." Comparing Columbus to 20th century mariners,

with their much more sophisticated equipment and techniques, Morison (AOS, p. 195) said: "No such dead-reckoning navigators exist today; no man alive, limited to the instruments and means at Columbus's disposal, could obtain anything near the accuracy of his results." Elsewhere (AOS, p. 183) he added: "Over and above his amazing competence as a dead-reckoning navigator, he had. . . that intangible and unteachable God-given gift of knowing how to direct and plot 'the way of a ship in the midst of the sea'."

[9] Columbus's use of navigational instruments is described and illustrated in Morison, AOS, pp. 183-196, "How Columbus Navigated."

[10] Robert H. Fuson, "The *Diario de Colón:* A Legacy of Poor Transcription, Translation, and Interpretation" (hereinafter DDC), in De Vorsey and Parker, IWC, pp. 51-75. As to Columbus's brilliance, Fuson (p. 67) says: "His ability to hit the Azores dead on during the return trip suggests rather dramatically that he was a master navigator."

[11] Morison (CCM, p. 16) said: "We must constantly keep in mind that nobody in Europe had any conception or suspicion of the existence of the continent that we call America."

[12] Known as the "Waldseemüller map," it has a long and complex history, only some of which can be traced in recent books, e.g., Seymour I. Schwartz, *Putting "America" on the Map*, or Toby Lester, *The Fourth Part of the World* (hereinafter FPW). A full-size facsimile of the map is displayed in Washington, DC at the Library of Congress, which purchased the original in 2001 for $10,000,000. Unusually large (98" x 54") and awesome to see in person, it is more easily studied on an interactive Smithsonian Web site with "zoom" capabilities for magnifying details.

[13] For illustrated examples and explanations of world maps in use before, during, and after Columbus's lifetime, see Parry, DOS, and Lester, FPW.

[14] Bartolomé de las Casas, *Historia de las Indias,* quoted in Morison, AOS, p. 103. His book, based on many original documents including the ship's log of the "First Voyage," was begun in 1527, but not printed until 1875.

[15] Columbus's outbound and homebound courses are shown on a chronological chart commissioned by Morison (AOS, following p. 222). It includes the date for each day's segment of the passage, so that an approximate position at sea can be correlated with the *Diario* or ship's log entry for that date. See also Kelley, CPC.

[16] Columbus had calculated the distance from the Canaries to "Cipangu" to be as little as 2,400 miles (Morison, CCM, p. 38). The distance of 3,000 nautical miles was supposedly suggested to Columbus by Toscanelli (Morison, CCM, p. 18), a Florentine intellectual mentioned later in this essay. The figures of 2,400 and 3,000 nautical miles are also found in Morison's table, "Transoceanic Distances in Nautical Miles," in *The European Discovery of America: The Southern Voyages* (hereinafter EDA/S), p. 30.

[17] Morison, AOS, pp. 237-253, "The Quest for Japan."

[18] For instance, Morison (AOS, p. 238) said: "So it was in quest of Japan that the fleet sailed SSW on the afternoon of October 14." Japan as a destination is taken for granted in recent books such as Lester, FPW; David Abulafia, *The Discovery of Mankind;* Simon Winchester, *Atlantic;* Carol Delaney, *Columbus and the Quest for Jerusalem;* Charles C. Mann, *1493;* Laurence Bergreen, *Columbus: The Four Voyages.*

[19] For some reason, Morison specified distance by air (10,600 nautical miles) from the Canaries to Japan, which is meaningless in relation to Columbus. Distance by sea would

have been substantially longer than that in 1492, before Magellan's strait was discovered and, of course, long before the opening of the Panama Canal.

[20] In 1492, Columbus "had begun the voyage by steering a course due west for Japan, and so he wished to pick up land [i.e., make his first landfall] on a due west course" (Morison, AOS, p. 223). See also Morison, AOS, pp. 237-253, "The Quest for Japan," and pp. 254-266, "Pursuit of the Grand Khan."

[21] Marco Polo (c. 1254-1324), Venetian merchant who supposedly lived and traveled in Asia for 24 years. Believed to be author of *The Book of Ser Marco Polo, the Venetian: Concerning the Kingdoms and Marvels of the East,* originally published c. 1300. This was for many years the primary source of information/misinformation for Europeans about "the Indies" and their limitless wealth.

[22] Claudius Ptolemy (c. 90-c. 168 A.D.), Roman citizen of Egypt who wrote in Greek. His *Geography* and other treatises were still considered authoritative in Columbus's day, and Columbus the promoter took advantage of his small-globe approach to cartography, shortening the estimated distance to "Cipangu."

[23] Morison, "Columbus's Great Idea," EDA/S, pp. 26-31.

[24] Morison, EDA/S, p. 39. Columbus made several unsuccessful presentations to the King of Portugal before turning to Spain. Also, it's suggested that Columbus's brother Bartholomew approached the rulers of England and France on his behalf in 1489. The apparent ease of access by these unknown, impecunious young outsiders is puzzling.

[25] Morison, EDA/S, p. 30.

[26] Parry, DOS, p. 203.

[27] For more technical details of Columbus's navigation due west from the Canary Islands, see Kelley, CPC, pp. 92-93, "Was Columbus a Latitude Sailor?" Also see Arne B. Molander, "A New Approach to the Columbus Landfall" (hereinafter ANA), in De Vorsey and Parker, IWC, pp. 114-118.

[28] See the introductory pages to "The Journal of the First Voyage" (hereinafter JFV) in Samuel Eliot Morison (Translator & Editor), *Journals and Other Documents on the Life and Voyages of Christopher Columbus* (hereinafter JOD), pp. 41-179.

[29] Sailing in the dark can be thrilling but dangerous, especially in waters uncharted or unfamiliar. Ultimately the *Santa Maria* ran aground at night, December 25, 1492, and could not be saved. Columbus got back to Spain in the smaller *Niña.*

[30] Morison, CCM, p. 41. Columbus was called "The Admiral," short for "Admiral of the Ocean Sea," a title conferred in 1493 by Ferdinand and Isabella at his insistence.

[31] The figure of 2,915 nautical miles (converted from 1,093 leagues) is the sum of the outbound distances traveled each day, according to Kelley (CPC, pp. 80-81). Columbus had estimated the entire distance from the Canaries to "Cipangu" to be as little as 2,400 nautical miles (Morison, CCM, pp. 38). The distance of 3,000 nautical miles was supposedly suggested to Columbus by Toscanelli (Morison, CCM, p. 18), as noted earlier. The figures of 2,400 and 3,000 nautical miles are also found in Morison's table, "Transoceanic Distances in Nautical Miles," EDA/S, p. 30.

[32] Morison, "The Discovery of the Azores," in *Portuguese Voyages to America in the Fifteenth Century* (hereinafter PVA), pp. 11-15.

[33] Parry, DOS, p. 210, remarked: "Columbus's wanderings among the islands show an apparent aimlessness, in sharp contrast with the steady determination of his westward

course across the ocean; they had, nevertheless, a perverse consistency. The one characteristic of Cipangu on which all reports agreed was the abundance of gold."
[34] Morison, JFV, p. 155. For more technical details of Columbus's "dead reckoning" navigation to the Azores, see Kelley, CPC, pp. 97-98, "The Homeward Voyage."
[35] Oliver Dunn and James E. Kelley, Jr. (Translators and Editors), *The Diario of Christopher Columbus's First Voyage to America* (hereinafter DCC), pp. 357, 373. This edition, published in 1989, is considered the best English translation of the ship's log.
[36] The figure of 2,830 nautical miles (converted from 304.6 leagues) is the sum of the homebound distances traveled each day from Samana Bay, on the Caribbean island of Hispaniola, to Santa Maria Island in the Azores, according to Kelley (CPC, pp. 86-88).
[37] The distance of 2,725 nautical miles was calculated by taking the shortest distance between Santo Domingo and the Azores (4,613 km), subtracting the distance from Santo Domingo to Samana Bay (93 km), adding the distance from the beginning of the Azores to Santa Maria Island (530 km), and converting the result to nautical miles.
[38] Morison, CCM, p. 67.
[39] Although he frequently praised Columbus's performance as a navigator, Morison did have second thoughts occasionally. For instance, with regard to the crucial change of course on February 4, 1493, that got Columbus to the Azores, he questioned Columbus's explanation (JFV, p. 160, footnote 1): "This statement seems to be a *non sequitur,* because the Azores are noted for cold, rainy weather, in comparison with the tropics. . . ."
[40] Morison, PVA, p. 4.
[41] The Fortunate Isles, also known as Isles of the Blest or Blessed, were featured in Greek and Roman myths, among others; see Lester, FPW, p. 115.
[42] Cited above, page 6.
[43] Parry, DOS, p. 197.
[44] For example, see the illustration "World map, engraved, from Ptolemy, *Geographia,* Rome, 1478," in Parry, DOS, p. 67. See also the illustration "The world of Henricus Martellus (circa 1489-90)," a map depicting the known world just before Columbus's "First Voyage," in Lester, FPW, Plate 9 following p. 272.
[45] For the history of nautical charts (also known as "marine charts") with illustrations, see Lester, FPW, especially pp. 89-95.
[46] Morison, JFV, p. 57.
[47] According to Morison (JFV, p. 57, footnote 1): "Las Casas thought that this chart was the one Toscanelli sent to Columbus. . . . But since Columbus and his brother Bartholomew were both professional map-makers, it seems unlikely that he would have brought along a conjectural chart of the Atlantic sent him years before." If Toscanelli's chart was conjectural, and not useful enough to bring along on the "First Voyage," then why bother to debate its authenticity or, for that matter, its existence?
[48] Dunn & Kelley, DCC, pp. 41, 43; also John Boyd Thacher, *Christopher Columbus,* Vol. I, pp. 524-525.
[49] Dunn & Kelley, DCC, p. 69.
[50] The Gulf Stream was officially "discovered" by Ponce de León in 1513. Columbus's discovery of it 20 years earlier is disputed by Simon Winchester, *Atlantic,* pp. 115-120.
[51] Parry, DOS, p. 203.
[52] Morison, PVA, especially "The Western Route to the Indies," pp. 72-75.

[53] This account of Toscanelli is based on Morison, AOS, pp. 33-35, 63-68.
[54] "The Toscanelli Correspondence," in Morison, JOV, p. 11.
[55] Morison, AOS, p. 68; EDA/S, p. 30. In *Admiral of the Ocean Sea,* Morison (p. 63) said: "Somehow or other, Columbus got wind of the fact that Toscanelli had the same idea as he that a westward voyage from Spain to Asia was practicable." But according to Morison's own translation of this correspondence, as noted earlier, Toscanelli was talking about sailing west from Portugal rather than Spain.
[56] "Toscanelli's Letter to Canon Martins, 25 June 1474," in Morison, JOV, pp. 13-14.
[57] Gavin Menzies could rejoin the discussion at this point, with his assertion that Toscanelli's information, including his chart, came from Chinese sources (1421, p. 353); also see Menzies' later book, *1434*, in which Italy is visited by a fleet of Chinese junks.
[58] This account of the "anonymous piloit" or "Unknown Pilot" is based on Morison, AOS, pp. 61-63.
[59] Morison, AOS, p. 62.
[60] Morison, Ibid.
[61] Morison (AOS, p. 40) expressed his exasperation at one point: "Again probably (and no reader can be more tired than I am of these interminable probabilities), the Columbus couple spent most of the next few years [following their marriage in 1479] in the island of Madeira." If so, this was not a very convenient location for Columbus to be educating himself, corresponding with Toscanelli (who died in 1482) in Florence, and otherwise promoting and preparing for his proposed journey across the Atlantic.
[62] In his analysis of Portuguese claims to discoveries made in the 15th century, Morison ridiculed the notion that such voyages might have been kept secret for some reason by the government of Portugal. See Morison, PDA, "The Policy of Secrecy," pp. 76-86. Yet secrecy on the part of Columbus might help to explain the lack of documentation about his activities from one year to the next, both ashore and at sea.
[63] Dunn & Kelley, DCC, p. 253.
[64] For instance, Morison (AOS, p. 35) remarked: "Columbus's exact movements during the eight or nine years that he spent under the Portuguese flag can never be cleared up, for the Lisbon earthquake [of 1755] destroyed notarial and court documents where we might have found some trace of his activities."
[65] Morison, AOS, p. 23.
[66] Quoted in John Noble Wilford, *The Mysterious History of Columbus*, p. 82.
[67] I haven't been altogether kind to Samuel Eliot Morison in this essay. But I wish he could have been with us, somehow, to discuss it. Morison lived in the Bay Area after earning his Ph.D. from Harvard in 1912. He worked as an instructor in history at UC Berkeley for three years, then returned to Harvard and rose quickly through the ranks. During World War II he served in the US Navy in various capacities. Later he visited here again, and steamed northward along the California coast for several days, as guest of honor on a Coast Guard cutter. He was interested, naturally, in seeing the places that may or may not have been discovered by another brilliant navigator, Sir Francis Drake. I share this interest of Professor Morison's, and I hope to pursue it in a future essay

* * * * * * *

BIBLIOGRAPHY

Abulafia, David. *The Discovery of Mankind: Atlantic Encounters in the Age of Columbus.* New Haven and London: Yale University Press, 2008.

Bergreen, Laurence. *Columbus: The Four Voyages.* New York: Viking Press, 2011.

Delaney, Carol. *Columbus and the Quest for Jerusalem.* New York: Free Press, 2011.

De Vorsey, Louis, Jr., and John Parker (Editors). *In the Wake of Columbus: Islands and Controversy.* Detroit: Wayne State University Press, 1985. Previously published as Vol. 15 of *Terrae Incognitae,* 1983.

Dunn, Oliver. "Columbus's First Landing Place: The Evidence of the Journal." In De Vorsey and Parker, *In the Wake of Columbus,* pp. 35-50.

_____. "The *Diario,* or *Journal,* of Columbus's First Voyage: A New Transcription of the Las Casas Manuscript for the Period October 10 through December 16, 1492." In De Vorsey and Parker, *In the Wake of Columbus,* pp. 173-231.

_____, and James E. Kelley, Jr. (Translators and Editors). *The Diario of Christopher Columbus's First Voyage. 1492-1493. Abstracted by Fray Bartolomé de las Casas.* Norman and London: University of Oklahoma Press, 1989.

Fuson, Robert H. "The *Diario de Colón:* A Legacy of Poor Transcription, Translation, and Interpretation." In De Vorsey and Parker, *In the Wake of Columbus,* pp. 51-75.

Kelley, James E., Jr. "In the Wake of Columbus on a Portolan Chart." In De Vorsey and Parker, *In the Wake of Columbus,* pp. 77-111. Originally published in *Terrae Incognitae,* 1983, Vol. 15, pp. 77-111.

Lester, Toby. *The Fourth Part of the World: The Race to the Ends of the Earth, and the Epic Story of the Map that Gave America its Name.* New York: Free Press, 2009.

Menzies, Gavin. *1421: The Year The Chinese Discovered America.* New York: William Morrow, 2003.

_____. *1434: The Year a Magnificent Chinese Fleet Sailed to Italy and Ignited the Renaissance.* New York: William Morrow, 2008.

Molander, Arne B. "A New Approach to the Columbus Landfall." In De Vorsey and Parker, *In the Wake of Columbus,* pp. 113-149.

Morison, Samuel Eliot. *Admiral of the Ocean Sea: A Life of Christopher Columbus.* (1 vol.) Boston: Little, Brown, 1942.

_____. *Admiral of the Ocean Sea: A Life of Christopher Columbus.* (2 vols.) Boston: Little, Brown, 1942.

_____. *Christopher Columbus, Mariner.* Boston: Little, Brown, 1942, 1955.

_____. *The European Discovery of America,* Vol. I: *The Northern Voyages, A.D. 500-1600.* New York: Oxford University Press, 1971.

_____. *The European Discovery of America,* Vol. II: *The Southern Voyages, A.D. 1492-1616.* New York: Oxford University Press, 1974.

_____. *Portuguese Voyages to America in the Fifteenth Century.* Cambridge: Harvard University Press, 1940.

_____ (Translator and Editor). *Journals and Other Documents on the Life and Voyages of Christopher Columbus.* New York: Heritage Press, 1963.

Parker, John. "The Columbus Landfall Problem: A Historical Perspective." In De Vorsey and Parker, *In the Wake of Columbus,* pp. 1-28.

Parry, J. H. *The Discovery of the Sea: An Illustrated History of Men, Ships and the Sea in the Fifteenth and Sixteenth Centuries.* New York: Dial Press, 1974.

Power, Robert H. "The Discovery of Columbus's Island Passage to Cuba, October 12-27, 1492." In De Vorsey and Parker, *In the Wake of Columbus,* pp. 151-172.

Schwartz, Seymour I. *Putting "America" on the Map: The Story of the Most Important Graphic Document in the History of the United States.* Amherst, NY: Prometheus Books, 2007.

Thacher, John Boyd, *Christopher Columbus,* Vol. I, originally published in 1903. Available online from Google books.

Verhoog. Pieter. "Columbus Landed on Caicos." In De Vorsey and Parker, *In the Wake of Columbus,* pp. 29-34.

Wilford, John Noble. *The Mysterious History of Columbus: An exploration of the Man, the Myth, the Legacy.* New York: Knopf, 1991.

Winchester, Simon. *Atlantic: Great Sea Battles, Historic Discoveries, Titanic Storms, and a Vast Ocean of a Million Stories.* New York: HarperCollins, 2010.

* * * * * * *

SUGGESTIONS FOR FURTHER READING

Boyle, David. *Toward the Setting Sun: Columbus, Cabot, Vespucci, and the Race for America.* New York: Walker & Co., 2008.

Mann, Charles C. *1491: New Revelations of the Americas Before Columbus.* New York: Knopf, 2005.

_____. *1493: Uncovering the New World Columbus Created.* New York: Knopf, 2011.

Polo, Marco. *The Travels of Marco Polo.* Translated by Ronald Latham. New York: Penguin, 1958. Originally published in the 13th century A.D.

Ptolemy, Claudius. *Ptolemy's Geography.* Translated and annotated by J. L. Berggren and Alexander Jones. Princeton, NJ: Princeton University Press, 2001. Originally published in the 2nd century A.D.

Reston, James Jr. *Dogs of God: Columbus, the Inquisition, and the Defeat of the Moors.* New York: Doubleday, 2005.

Royal, Robert. *1492 And All That: Political Manipulations of History.* Washington, DC: Ethics and Public Policy Center, 1992.

Sorenson, John L., and Martin H. Raish. *Pre-Columbian Contacts with the Americas across the Oceans: An Annotated Bibliography.* (2 vols.) 2nd ed. Provo, UT: Research Press, 1996.

Vignaud, Henry. *Toscanelli and Columbus.* London: Sands & Co., 1902.

Washburn, Wilcomb E. "The Meaning of 'Discovery' in the Fifteenth and Sixteenth Centuries." *The American Historical Review,* Vol. LXCIII, No. 1. October 1962.

Williams, Glyn. *Arctic Labyrinth: The Quest for the Northwest Passage.* Berkeley and Los Angeles: University of California Press, 2009.