THE HISTORY OF ENGLISH PODCAST TRANSCRIPTS

EPISODE 145: A SEA CHANGE FOR EUROPE

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Welcome to the History of English Podcast – a podcast about the history of the English language. This is Episode 145: A Sea Change for Europe. In this episode, we're going to begin our look at a very important development that helps to mark the transition from the Middle Ages to the modern era. That development is the period of exploration that led to the European discovery of the New World in 1492. This is an important part of the history of English because it set the stage for the expansion of European languages around the world. And it allowed English to spread beyond the British Isles to become a true international language. But it all began with a sea change in the way people thought about the world in the mid-1400s – literally 'a sea change.' They started to think about the ocean differently. It went from an obstacle to a global highway. And that global highway soon led to the discovery of the New World. So this time, we'll explore those interesting developments in the world of navigation and seafaring.

But before we begin, let me remind you that the website for the podcast is historyofenglishpodcast.com. And you can sign up to support the podcast and get bonus episodes and transcripts at Patreon.com/historyofenglish.

Now before we begin, let me note that this is really the first of two episodes about the period of exploration and discovery in the late 1400s. This time, we'll look at how Europeans dipped their toes into the water and began to think about crossing the open seas in ways they had never done before. That'll take us up to the year 1492. And then next time, we'll continue the story with the voyages of Christopher Columbus and the impact of those voyages on the English language.

As we go through these episodes, I want you to think back to the earliest episodes of the podcast about the original Indo-Europeans. There are definitely some important parallels. In those early episodes, we saw how the Eurasian steppe was a barrier to the earliest humans who lived there. But over time, as they domesticated horses and other animals, and as they developed wheeled wagons, they were able to move out into the steppe, and the steppe went from a barrier to a large highway. And those early Indo-Europeans became nomadic herders. And once they started moving, they didn't stop. Their linguistic descendants eventually expanded westward all the way to the Atlantic Ocean. But that was as far as they could go until the current point in our story in the late 1400s.

In much the same way that the original Indo-Europeans figured out how to the transfer the steppe from a barrier to a highway, European sailors in the late 1400s did the same thing with the Atlantic Ocean. And when they figured out how to sail great distances beyond the horizon, they were able to carry their languages with them.

So let's begin our look at the period of European exploration and discovery by picking up where we left off last time with the beginning of the Tudor era in England. As we saw in the last episode, Henry Tudor defeated the last Yorkist king in 1485, and thereby became Henry VII – the first Tudor king of England. The Wars of the Roses finally came to an end, but Henry inherited a kingdom that had been rocked by decades of infighting and civil war. During that period of

conflict, the country's international trading power had experienced a major decline. So one of Henry's early goals was to reverse that trend.

In the late 1400s, foreign merchants poured into London and other parts of England. The people of England were buying lots of those foreign goods, but they weren't selling very much in exchange. Henry quickly realized that England was importing way too much and exporting way too little. So there was a significant trade imbalance. In addition, most of the goods that moved in and out of the country passed on ships that were owned and operated by foreign traders.

One of Henry's very first acts as king was to deal with that problem. In 1485 – the year he became king – he implemented the first of two Navigation Acts. The other act was adopted four years later. Those two Navigation Acts were designed to increase England's exports and improve the country's commercial base. The new law required English merchants to use English ships when exporting their goods if an English ship was available. The second act adopted a similar rule for imports. The idea was that English merchants would export more goods like wool and cloth if they had easy access to local ships that could transport those goods. It would be cheaper and more efficient because English merchants wouldn't have to compete for limited space on foreign ships, and they wouldn't have to pay the costly shipping fees charged by those vessels. And the profits would go directly to English shippers.

But there was one major problem with this plan. England had very few ships that could be used for that purpose. So Henry encouraged merchants to build more ships. He actually gave ship builders a payment or reward for each new merchant ship that was built, as long as the ship could be converted to military use in a time of war. [SOURCE: Naval Accounts and Inventories of the Reign of Henry VII, M. Oppenheim, Ed., p. xxix.] And he further encouraged ship building by constructing the country's first permanent shipyard in Portsmouth on the southern coast of England. In the year he became king, a dry dock was built there. The dock was designed to make it easier to build and repair ships.

Previously, ships had to be built and repaired on the edge of the shore, but the new dry dock was a basin that could be filled with water and drained as needed. So a ship could be built in the dry dock, and then the dock could be filled with water, thereby allowing the ship to float out to sea. Similarly, a ship in need of repairs could be brought into the dock, and then the water could be drained out so the repairs could be made. This type of dock made the building and repair of ships much easier and more efficient, and the word *dock* actually entered the English language at this point in history. The word was borrowed from Dutch, and it first appeared in English in a summary of Henry's naval accounts which was compiled in the second year of his reign and updated again a few years later.

That particular account summary was compiled by the clerk in charge of the king's ships, and it shows the expenses that were incurred to maintain those ships. The account summary was written in English, not Latin or French. By this point, English was once again the language of the bureaucracy. That summary of Henry's naval accounts also gives us the first recorded use of the word *scuttle* meaning 'a small hole in a ship's deck used for lighting, ventilation or communication.' It was borrowed from the Romance languages – probably French, but Spanish

and Portuguese had similar forms of the same word. The word *scuttle* was later extended to a hole in the side of a boat, which caused it to sink. So the meaning shifted from a useful hole to let in air or light or to let sailors to communicate to a very bad kind of hole — one that causes the boat to sink. And that's how we got the verb 'to scuttle' meaning 'to terminate or bring an end to something.' If your plans are scuttled, they're brought to an end. Later, it became common for ships to have a large water container on the deck with a hole in the top of it. Those containers were also called scuttles, presumably because of the hole in the top. Sailors would use a dipper to gather water at the scuttle when they were thirsty. As sailors gathered around the scuttle, they would tell stories and spread gossip, and that gave us the term *scuttlebutt*. So it was an early version of spreading gossip around the water cooler. At any rate, all of those 'scuttle' words can be traced back to the first recorded use of *scuttle* in Henry's naval accounts.

So the word *scuttle* began as a term for a hole in a ship – originally a hole created on purpose, and later a hole created by accident. Well, an unintended hole in the bottom of a ship could cause a leak. And the first recorded use of the word *leak* as a noun, as in 'a leak,' occurs in this same naval account summary from Henry's reign. The account includes a list of items that were lost on a ship "by occasion of a leke falling in the same."

The account summary also contains the first use of the word *raft* in the sense of a floating platform. *Raft* is actually a Norse word for a log – a sense still found in the Old English word *rafters*. But the first time we see the word used in reference to a series of logs being fastened together as a floating device is in Henry's naval accounts where it refers to payments being made "for cariage of certeyn mastes to the Watyrsyde and ther to be made in a Raff & so to be conveyed to Portesmouth" – 'for carriage of certain masts to the waterside and there to be made into a raft and so to be conveyed to Portsmouth.'

Another new term found in that account summary is the word *poop* – not in the scatological sense, but in the sense of the stern or back part of a ship. By the way, those two versions of *poop* are completely unrelated. The nautical sense still survives in the term *poop-deck* – a deck on the back of a ship. And some etymologies suggest that the adjective *pooped* is derived from the same source. Sometimes the poop or rear part of a ship was overtaken by a large wave causing the ship to become damaged or overwhelmed. Some scholars think that led to the modern term *pooped* to mean exhausted or overwhelmed.

By the way, the term *overwhelmed* was also a new word in the English language in the 1400s. And it was also originally a nautical term. We don't use the word *whelm* by itself very much anymore, but it was common in Middle English, and it meant 'to turn upside down.' In the early 1400s, the word *over* appeared for the first time in front of the word *whelm*, giving us *overwhelm* with a specific sense of a boat being turned upside down by a wave. So a wave washing 'over' the boat could cause it to 'whelm' or turn upside-down. Today, *overwhelm* applies to any situation where someone or something experiences defeat, exhaustion or the inability to cope with a given situation.

Henry's naval accounts also give us the first known use of another interesting term, but in an unusual context. It contains the first use of the term *sweepstakes*. Now today, we associate that term with a contest like the Publisher's Clearinghouse Sweepstakes in the U.S. And it refers to the risk a person takes when gambling – when you're playing for 'all the stakes.' If you win big, you 'sweep' or win everything at stake. Thus, the term sweepstakes. This term with that general meaning as 'one who takes everything' goes back several centuries, but the first recorded use of that term is in that summary of Henry's naval accounts. It actually appears as the name of one of his ships. It appears under the heading "Stuff delyuered to the Kynges Bark called Swepestake." **Bark** meant 'a small ship' and is related to the word **barge**. Interestingly, all of the earliest written references to the word *Sweepstake* is to the name of various ships. So what did a ship have to do with sweepstakes? Well, nobody knows. It's a bit of mystery. Some have suggested that it implied that the ship was capable of sweeping away its competition. But we might have another clue in one of the earliest uses of the term outside the name of a ship. The Oxford English Dictionary cites a reference from a play composed in the 1500s which references a character as "a swepestake and all is fysshe that commeth to the nette with hym." So maybe the word was commonly used for ship names because it referred to fishing nets that were put out and swept up all the fish in the vicinity of the ship. Those were the stakes of the fishing trip. Again, no one really knows for certain. But we can say that the oldest known 'sweepstake' was a ship that belonged to Henry VII.

So as you can see, English was acquiring a lot of nautical terms in the late 1400s as Henry VII began his reign as the first Tudor king of England. And several of those terms appear for the first time in the accounts maintained by the clerk in charge of his ships. Other sailing terms recorded for the first time in those shipping records include *ballast*, *bulkhead*, and *masthead*.

There was also another word that entered English around this time, and it also had a nautical sense sometimes. It was the word *trade*. It pre-dates Henry's reign by a few decades, but it was a word that describes one of Henry's early obsessions. The word *trade* was borrowed from Dutch, and it actually comes from the same Germanic root as the English word *tread* in the sense of a track or trail or line of footprints. And that was the original meaning of the word *trade* as well when it was borrowed in the mid-1400s. It meant a track or trail. It could also refer to a path or course like the path of a ship as it traveled from one port to the next. That sense is recorded in the 1480s around the time Henry VII became king. And in the next century, that meaning was expanded even further to include the modern sense of the word *trade* as the commercial activity that occurs when goods flow back and forth between countries or between individuals within those countries. So if a merchant 'treads' from port to port, he is engaged in 'trade.' Again, *tread* is Old English, and *trade* is Dutch.

It probably isn't surprising that the word *trade* entered English around this time. Trade was a very important activity in the late Middle Ages. The economies of Western Europe depended on it – not just direct trade with each other, but also indirect trade with regions in the east like India, China and other parts of the Far East. All of those regions were linked together by extended trade routes. But in 1453, that East-West trading relationship had been suddenly interrupted by events in modern-day Turkey. In that year, the Byzantine capital of Constantinople fell to the Ottoman Turks. I mentioned that event in a prior episode because it was landmark event in the

history of Europe. It brought an end to the Byzantine Empire, and it gave the Ottomans control of the city. And that was a big deal because the city was located along the only sea passage between the Mediterranean and the Black Sea. And it was also the point at which travelers by land crossed back and forth between Europe into Asia. The city was a major gateway to the Near East, and ultimately to India and the Far East, and it provided direct access to that old trade route known as the Silk Road. But now, control of the city passed to the Muslim empire of the Ottomans.

The Ottomans decided to take advantage of the situation by placing heavy taxes on the goods that passed through the region. For Europeans, the only alternative was to ship goods across the Sinai in northern Egypt into the Red Sea and then out to the Indian Sea. But that route was also controlled by Muslim leaders who restricted and taxed the western trade that passed through the region.

So the two major trade routes between east and west were now obstructed. It became much more difficult to move goods back and forth, and those goods that could be moved became much more expensive. Throughout western Europe, merchants and middleman started to look for another alternative because the taxes and restrictions levied by those eastern rulers were cutting into their profits.

Those middlemen included merchants and sailors in the Italian republics of Genoa and Venice. Those cities were strategically located in the northern Mediterranean. From that position, they served as intermediaries between Europe and the Near East. And they became very wealthy in the process.

We've encountered the importance of those cities before. Back when I talked about the Black Death, I mentioned that Genoese merchants had a trading post in the Black Sea region, and that's where their ships picked up the plague and brought it back to Italy where it then spread throughout Europe. Well, many of those Genoese trading posts in the Black Sea region were also lost due to Ottoman expansion. So Genoa was really feeling the pinch.

By the way, the connection between trade and disease will be a recurring theme as we move forward. In the same way that Genoese traders brought the plague to Italy, European explorers eventually took a variety of European diseases to the New World. And they brought at least one disease back with them when they returned to Europe. We'll discuss that more in the next episode, but the link between trade and disease reminds us that trade doesn't just involve the movement of merchandise. It also involves the movement of people, and people carry things with them like diseases, and new ideas, and languages. So while we're focusing on trade here, we should keep in mind that the processes at work are really much larger than that.

I said that trade involves both merchandise and people, but sometimes, that merchandise was people. And that points to another recurring theme in the story of European exploration and discovery – the institution of slavery. It's a fundamental part of European colonialism, but it was present long before then. And we can see evidence of that earlier trade in human beings in the word *slave* itself.

The word *slave* is derived from the word *Slav* – an inhabitant of the Slavic regions of eastern Europe. Over the course of the Middle Ages, those regions had been invaded by the Mongols and then the Turks. And it was common for the Mongols and Turks to take prisoners as they invaded, and then to sell those prisoners to wealthy Europeans to work as personal servants. In the Middle Ages, the term *Slav* became synonymous with forced servitude throughout Western Europe. And that ethnic term not only produced the word *slave* in English, it also produced a similar term for slavery in many of the other languages of Western Europe. English actually borrowed the word from French in the Middle English period.

Those Eastern European slaves were traded though the same ports that handled merchandise and goods. That was because slaves were just another type of property that could be bought and sold. And once again, Genoa became the major hub of that slave trade in the Middle Ages. [SOURCE: 1492: The Decline of Medievalism and the Rise of the Modern Age, p. 10.] So Genoa was a very important trading port at the current point in our story.

Interestingly, the economic power of Genoa at the time is still reflected in the English language. The name of the city gave us the term for something that many of us wear all the time – *jeans*. Believe it or not, the word *jeans*, as in 'blue jeans,' is derived from the name of Genoa. Sometimes goods that were traded were named after the place where they originated. Well, Genoa produced a certain kind of coarse cloth called 'gene fustian' – literally 'Genoa fustian' or 'Genoa cloth.' That term was gradually shortened to just *gene*, and then *jean*.

Well, believe it or not, the first recorded use of the word *jean* in the English language is in that inventory of Henry VII's naval accounts that I mentioned earlier – the collection that includes the first use of words like *dock*, *scuttle* and *poop*. Well, it also includes the first reference to *jean* textiles in a passage that refers to "Cables of diverse sortes that is to say of Jeane makyng" – 'Cables of various sorts that is to say of jean making.' So this is a reference to a type of cable or rope made in Genoa. The term *jean* was soon applied to the specific type of cloth that I mentioned earlier. And in the 1800s, it came to refer to a kind of pants or trousers made out of that cloth.

Now today, you might refer to those pants as 'denim jeans,' and interestingly, *denim* has a similar history. It literally means 'de Nimes' – 'of Nimes' – a city in Southern France. It referred to a similar type of cloth that was produced in that city. It was a cloth 'of Nimes' or 'de Nimes.' And it passed into English as *denim* in the late 1600s. So both *denim* and *jeans* ultimately refer to the region where a specific cloth material was produced.

Of course, lots of places produced cloth for a variety of purposes – for clothing, for bed spreads, for table coverings, and for something else that was important to merchants sailing on the high seas – mops. A bundle of cloth could be attached to the end of a stick to enable sailors to clean the deck of a boat or to apply water-proofing materials to the outside of the boat. And guess what, the word *mop* was also recorded for the first time in English in that same inventory of Henry VII's naval accounts. Under a section entitled 'Shepeskynnes,' we find a reference to the following expenditure: "Also payed for iiij dossen shepeskyns bought & spent abought makyng of mappes for layng on of piche Rosyn & talow uppon the seid ship" – 'Also paid for four dozen

sheepskins bought and spent for making mops for the laying on of pitch, rosin and tallow upon the said ship.' Again, at least according to the Oxford English Dictionary, that's the first recorded reference to a mop in the English language. It was spelled 'm-a-p-p-e,' and that reflects the French origin of the word. In French, the word referred to a small piece of cloth or a napkin. In fact, the word *napkin* is also derived from the same root word thanks to a sound change at the beginning of the word from M to N. *Mappe* produced *nappe* which produced *napkin*.

These pieces of cloth were also used for something else that was becoming increasingly important to merchants and sailors. In the Middle Ages, before paper became common, scribes wrote on parchment and vellum which was incredibly expensive. But merchants and sailors needed something cheap to write on to plan their course of travel from one place to another. They needed a visual representation of where they were, and where they were going, and what lay in between. So rather than use expensive parchment, they often used pieces of cloth.

Well, geographers also used cloth for their illustrations. And those illustrations drawn on cloth or *mappe* became known as *maps*. So our very common word *map* actually refers to the cloth material that was used to make those early maps. It also means that the word *map* is cognate with *map* and with *napkin*. They're all based a word for the cloth material that was used to make each of those items.

Some of these early maps were just crude illustrations, but others were much more sophisticated. In the 1200s, geographers and scholars had begun to produce large illustrations of the entire known world. In Latin, this type of illustration was called a *mappe mundi* – literally 'map of the world.'

What's so fascinating about these early European world maps is how small the known world was at the time. The map makers had a pretty good idea about the size and shape of Europe and the Mediterranean. Traders and merchants had throughly explored those regions for centuries. So Europe and the region around the Mediterranean were usually depicted with a certain amount of accuracy. That included northern Africa, the Near East, and parts of Western Asia. But beyond that, it was anyone's guess.

Those map-makers had no knowledge of the Americas or Australia. And they had very little knowledge of Africa or Asia beyond the Mediterranean. The writings of some foreign travelers like Marco Polo had provided some information, as did accounts from traders along the various trade routes who heard stories about those far away places. But much of that information was vague and inconsistent. So on those early world maps, Africa and Asia were either not included or drawn in a very crude and rudimentary way – not reflecting the actual size or dimensions of those continents.

This also helps to explain the very confusing use of a common term in the early modern era. That term was *India* and the *Indies*. Today, we associate the word *India* with a specific country in South Asia, but the term was used much more loosely in the Middle Ages and in the early modern era. It not only referred to the region we know today as India, it could also refer to much

of Eastern Asia and the South Pacific. And the uncertainty in the use of that term reflects the European perspective of the world at the time.

Europeans of the Middle Ages had a general sense of the region that lay to the east of the Mediterranean. That familiarity came from the Crusades, and centuries of pilgrimages, and the extensive trade between the two regions. Throughout the podcast, I have generally referred to that region as the *Near East*, but many of you may prefer the more modern term *Middle East*. Another term for that same region or a part of that region is the *Levant*. And I mention that term because it appeared in an English document for the first time in the late 1400s. And guess which document it appeared in? Well, it was another term that's recorded for the first time in that summary of Henry VII's naval accounts that I mentioned earlier. It appears in a passage that references a group of items being delivered to merchants for "a viage to be made into the levaunt" – 'a voyage to be made to the Levant.' It's a term that English borrowed from French, and it's derived from a Latin word that meant 'to rise' because the Sun rose in the east in the direction of this region in the eastern Mediterranean.

By the way, this is the same way we got the terms *Orient* and *Oriental*. *Orient* was based on another Latin word meaning 'to rise,' and it also passed through French into English as a term for the east. And many maps of this period, like the mappa mundi that I mentioned earlier, were drawn in reference to the east with the east at the top of the map. The compass was still relatively new to Europe, so maps didn't tend to use north as the primary bearing yet. They used the east. The sun rose in the east, so it was easy to get one's bearings in reference to the east or the 'Orient,' and that's how we got the verb 'to orient' in the sense of orienting oneself in a particular direction. It literally meant to get one's bearings in reference to the east. Well, when the term *Orient* was originally coined, it specifically referred to the Near East – the same area that we might called the Middle East or the Levant today.

These terms point to the European familiarity with the Near East. But beyond the realm of modern day Iraq and Iran, Europeans only a vague idea what existed. To the east of that region was a major river called the Indus. The name was based on an Indo-European root word used throughout the region that meant 'river.' The Indus flows from the Himalayas down to the Arabian sea, and it runs through modern-day Pakistan. The region beyond the Indus was referred to as *India* from the name of the river. And today, that's where the modern nation of India is located. But again, medieval Europeans only had a vague sense of what lay beyond the Indus, so the term *India* was sometimes extended to all of the land beyond the Indus, all the way to the sea that existed at some point in the far east.

Like so many words that originated in that region, the word *India* passed from ancient Persian, to Greek, to Latin to English. And it actually arrived in English during the Anglo-Saxon period. And all of those various peoples along the way used the word *India* in that some loose way – in both a limited sense as the region adjacent to the Indus and in a broader sense as everything beyond the Indus. The Anglo-Saxons sometimes referred to those farthest regions as 'fyrran' India – literally 'Farther India.'

Throughout Western Europe, that tradition was maintained, so much so that the islands of the South Pacific came to be known as the Indies. And even though the use of that term has declined over the past century or so, we still have some remnants of that usage in the name of *Indonesia*, which literally means the 'India islands,' even though they are located in the South Pacific.

As we'll see next time, that's why Christopher Columbus called the native people he met in the New World 'Indians.' He thought he had reached the islands off the coast of Asia – what he considered to be the Indies. So he referred to the native people he met there as *Indians* – a name that stuck and continued to be used over the centuries for native Americans.

So today, when we encounter historical references to the trade with *India*, we have to keep in mind that the term can be used very broadly to encompass trade with much of Asia. And it can encompass all types of goods and wares from spices and other foodstuffs, to silks, dyes, perfumes, medicines, cotton thread, ivory, and lots of other items. [SOURCE: Cathedral, Forge and Waterwheel: Technology and Invention in the Middle Ages, Frances & Joseph Gies, p. 280-1.] And that helps to explain why it was such a big deal when those trade routes became obstructed in the mid-1400s.

When the Ottomans began to charge heavy taxes on goods passing through the eastern Mediterranean, Europeans started to look for a different way to get to those goods in those faraway places in India and the Far East. They started to entertain the idea of sailing directly to those eastern ports bypassing the Near East altogether. But how would they do that? Well, at the time, there was one potential option being explored by the Portugese.

As I noted in an earlier episode, the Portuguese had finally figured out how to sail down the west coast of Africa. It still wasn't clear if they could actually sail around the bottom of Africa, but if they could find a way to do that, they could sail all the way around the tip of Africa and then continue on to India. That would open a brand new trade route, and it would cut out all the middlemen in the Near East.

You might remember from that earlier episode that the person credited with much of that early effort was a Portuguese grandson of John of Gaunt named Prince Henry or Henry the Navigator. Gaunt's daughter Phillip had married the Portuguese king, and their descendants continued that line of Portuguese kings. And that line also included Henry the Navigator. All of that means that the Portuguese royal family were cousins of the new English royal family – the Tudors. They were both descended from John of Gaunt.

Until the 1400s, Europeans didn't know very much about Africa beyond the Mediterranean because their ships were effectively blocked by Cape Bojador in Morocco in the northwest corner of Africa. The geography of that region was difficult for European sailors because the winds blew westward out to sea, and the ocean currents also moved westward. In the Middle Ages, sailors preferred to sail close to land if they could. They didn't like to sail in the open sea unless they knew for certain where they were going. And the winds and sea currents at Cape Bojador meant that European ships were forced out into the open sea. And even if those ships could

manage to maneuver around the cape, it was thought that those westward winds and ocean currents would block any return trip back to Europe.

Henry the Navigator tried to solve that problem by organizing a group of Portuguese sailors and teaching them how to use the latest technologies like the compass and maritime astrolabe. Sailors who knew how to use those tools could determine their position and direction in the open ocean. [SOURCE: A Brief History of British Sea Power, David Howarth, p. 69.] So those ships could sail out to sea and find their way back without too much difficulty. They also learned how to use the trade winds and sea currents to maneuver around the eastern Atlantic. Henry the Navigator's expeditions began in the 1420s. And in 1434, his sailors figured out how to maneuver around Cape Bojador and sail back home.

So Henry the Navigator's sailors learned to 'navigate' around the cape. We have those words *navigator* and *navigate*. And of course, we have the related words *navy* and *naval*. 'The navy navigates to its naval base.' But we also have the word *nautical* for things related to ships and navigation. And I noted in an early episode of the podcast that the word *nausea* comes from the same root as *nautical*. *Nausea* referred to the seasickness that was commonly experienced at sea. It was also a new word in English in the 1400s. So why do *navy* and *naval* and *navigate* have a 'v' sound in the middle, whereas *nautical* and *nausea* don't have that sound. Well, the answer is simple. They're all based on an Indo-European root word that meant 'boat,' and that word passed into both Greek and Latin. The Latin version developed a 'v' sound, and the Greek version didn't. So *navy*, *naval* and *navigate* come from Latin, whereas *nautical* and *nausea* come from Greek. But they're all cognate. And I should note that the Greek version also gave us the suffix '-naut' in words like *astronaut* and *cosmonaut* – literally someone who navigates the stars or cosmos.

So thanks to Henry the Navigator, and his nautical school, the Portuguese had found a way to explore the west coast of Africa. That was about a decade before the Ottomans captured Constantinople, so the Portuguese weren't really looking to a different way to get to Asia. They were just looking for new places to trade with Africa. They were focused on the natural resources of Africa, especially gold which the Europeans craved. More than half of Europe's supply of gold at the time came from West Africa. African traders brought it by camel across the Sahara to the Mediterranean. [SOURCE: Fourth Part of the World, Toby Lester, p. 179] So the Portuguese knew that there was gold to be found on the continent. There were even rumors of a great River of Gold south of the Sahara. [Ibid. P. 183] That was why they were so intent on finding a way around Cape Bojador and exploring the western coast of the continent.

Over the years, the Portuguese sailed further and further south along the coast. They didn't find much gold or many other natural resources, but in 1444, they did find something else of value – people. Specifically, people who could be taken as slaves. In that year, Portuguese sailors returned to their home port of Lisbon with 240 African slaves. Once again, we see the connection between trade and slavery, and this was a landmark event for the history of both Europe and Africa because it marked the very beginning the European slave trade in Africa. [SOURCE: *Stamped From the Beginning, Ibram X. Kendi, p. 23.*]

As I noted earlier, slavery was not a new institution in Europe, or even in Africa for that matter. But when that Portugese ship returned with African slaves in 1444, it was the first time that Europeans had traveled directly to the west coast of Africa and took natives captive and brought them back to Europe to be sold as slaves. [SOURCE: 'The Fourth Part of the World,' Toby Lester, p. 192]

As the supply of eastern European slaves dried up with the obstruction of those eastern trade routes, it was replaced with a new supply of African slaves obtained from the west coast of Africa. [SOURCE: *Stamped From the Beginning, Ibram X. Kendi, p. 23.*]

That slave ship arrived in Portugal in the year after Constantinople fell to the Ottomans. So from this point onward, Europeans were starting to think about a new route to the Far East. And thanks to those early Portuguese explorers, a route around Africa seemed like it might be a possibility. With those developments, Portugal started to emerge as center of international trade, and people from other parts of southern Europe started to flock to the country to take advantage all of the new commercial activity in the Portuguese ports. And many of those new residents were Italian merchants and sailors from Genoa, Venice and Florence. The center of commercial activity was shifting westward from Italy to the Iberian Peninsula.

One of those Genoese sailors who headed west to Portugal was a young man named Cristoforo Colombo – better known today by the Latin version of his name, Christopher Columbus. Columbus sailed on some of those Portuguese ships that were now making the trek up and down the Atlantic coastline.

But while most sailors were entertaining the idea of sailing to Asia by sailing south around the tip of Africa, Columbus was starting to consider a completely different idea. He was embracing a new and much more radical notion – that European sailors could sail due west directly across the Atlantic and reach Asia that way. If it was possible, it would allow Europeans to sail directly to Asia without having to pass through the Muslim-controlled territories of the Near East and without having to travel the vast distance around Africa, if that was even possible.

Now there are a lot of common myths associated with Columbus's first voyage to the New World. One of the most popular myths is that people thought the world was flat and that ships would fall off the edge of the world if they traveled too far out to sea in the Atlantic. In reality, people had known that the world was round for centuries, at least certain people did like sailors, and traveling merchants, and pilgrims, and astronomers, and geographers. Even the ancient Greeks depicted the earth as a sphere. Anyone who studied the stars and traveled long distances knew that the position of the stars varied as they moved north and south, and that happened because the world was round. So let me explain what I mean.

Let's begin with the compass. The compass has its origins in China, and it wasn't introduced to Europe until the 1100s. And even then, it took a while for Europeans to figure out how to use it effectively. So historically, travelers had to determine their direction by other means. The sun rose in the east and set in the west. And at night, the North Star – or Pole Star – maintained a more or less fixed position in the northern sky as the other starts moved around it. So travelers

looked to the sky to get their bearings. And the North Star was especially important because it could be consulted throughout the night. So it was truly a guiding star. But as travelers moved over long distances, north and south, they noticed that the position of the North Star would change. As they traveled northward, the star's position moved higher in the sky. And as they traveled southward, the star's position moved lower.

Most travelers understood that the star got lower in sky as they moved southward because the earth was round, and as they moved along the surface of the earth, the angle of their perspective changed. The further south they went, the closer the star got to the horizon. And if they kept traveling southward beyond the equator into the southern hemisphere, the North Star would disappear completely beneath the horizon, and they would lose sight of the guiding star altogether. That was another reason why Europeans didn't really know what lay beyond the equator. No one really wanted to tempt fate by traveling that far south. If they lost sight of the North Star, they might not be able to find their way back home.

So the spherical nature of the earth was well-known, and sailors knew that it was theoretically possible to travel around the world in one direction and eventually end up where you started. That's how circles work. So they understood that you could sail west from Europe and you would eventually reach Asia. So what was the problem? Why hadn't someone tried to do that before now?

Well, the answer was the size of the earth, and therefore, the size of the ocean. Europeans of the 1400s actually a good idea how big the earth was. In fact, that measurement was first made by the ancient Greek astronomer and mathematician Eratosthenes in the third century BC. He estimated the circumference of the earth to be about 40,000 km – or about 25,000 miles. It was a remarkably accurate measurement, and it was generally accepted in the late Middle Ages. So given the size of the earth, and the known size of Europe, and the presumed size of Asia, a little bit of basic math told you that the distance across the Atlantic from Europe to Asia was well over 10,000 miles. And there was no way to stock a ship with enough supplies to sustain a crew for a voyage that long. Remember that they had no idea that North or South America existed. So the biggest barrier to a westward route was the sheer size of the ocean and the distance that a ship would have to travel with limited supplies.

But in the 1400s, a new view of the earth was starting to emerge – one that was much smaller than the accepted version. That view was incorrect, but it started to gain widespread acceptance, and it was embraced by those who thought they could sail west to go east. So where did this notion of a smaller earth come from? Well, it came from several sources.

First, Europeans had recently re-discovered a long lost manuscript written by the Athenian scholar Ptolemy called 'Geographia' in Latin or 'Geography' in English. It was basically an early atlas that was composed in the second century AD or Common Era, and it compiled most of the geographical information that was known at the time. It was one of many ancient works that had been lost to Western Europe about a thousand years earlier with the fall of the Roman Empire. So Europeans had no knowledge of the book for most of the Middle Ages. It was finally reintroduced to Europe by a Greek scholar named Manuel Chrysoloras in the late 1300s. It was

soon translated from Greek into Latin. And the Latin translations were often accompanied by maps prepared in accordance with the descriptions contained in the book.

Now this particular manuscript is important to our story for two reasons. First, in the manuscript, Ptolemy underestimated the size of the earth and overestimated the size of Asia, so it fostered the notion that the earth was smaller than it really is, and that European ships could reach Asia without too much difficulty. Secondly, the maps that were made from the book's descriptions revolutionized the way maps were made and used at the time. Ptolemy described how gridlines could be used to accurately measure the earth's surface, and the maps that were based on his descriptions incorporated those grid lines. They were an early version of what we know today as lines of latitude and longitude. And that was an idea that European map makers and explorers seized upon in the late 1400s. By using a grid pattern, maps that depicted vast regions – even the entire earth's surface – could be drawn to scale. That enabled those maps to be drawn much more accurately – and to depict distances with incredible precision. [SOURCE: The Day The Universe Changed, James Burke, p. 85.] And even though Ptolemy's descriptions were based on old and outdated information, the maps that accompanied the book were often updated with more current information. All of this allowed map makers to produce updated maps of the known world with grid lines superimposed on top. And sailors used those new maps to maneuver in the open ocean. All they needed was the map, an astrolabe to determine their latitude based on the location of the North Star in the sky, and a compass to point them in the right direction.

But again, Ptolemy's manuscript underestimated the size of the earth and overestimated the size of Asia, so the popularity of the book fostered the notion that Western Europe and Eastern Asia were closer than they actually are.

So that was one major development that was changing the way people viewed the world in the late 1400s. Another significant development around the same time came from the city of Florence in Italy. It was there that a highly respected mathematician and astronomer named Paolo Toscanelli made a series of calculations, and he also determined that the earth was smaller than everyone thought. He thought that the distance between Europe and Asia was about half the distance suggested by most traditional sources. And he argued that the distance was short enough that a ship could easily cross it. [SOURCE: The Day the Universe Changed, James Burke, p. 89]

Toscanelli's research reached the Portuguese king in the mid-1470s at a time when the king had become frustrated that his sailors still had not reached the tip of Africa. The king was starting to entertain this idea that the earth was smaller than originally thought, and that it might be possible for his ships to sail westward across the Atlantic to Asia. Toscanelli got word of the king's interest and wrote to the king in 1474 explaining his calculations. He also included a map which was divided into grid lines to show the exact distance between the continents. Today, we know that his map was wrong, but it gave further support to the idea that the quickest way to Asia was to sail westward. [SOURCE: Dogs of Gold, James Reston, Jr., p. 131.]

Interestingly, the Portuguese king didn't pursue the idea. Maybe he wasn't entirely convinced. But some people were convinced, and one of them was that young Genoese sailor named Christopher Columbus. Several years later, when he tried to obtain funding for a voyage across

the Atlantic, he used Toscanelli's map to justify his proposal. And when he made his first trip across the Atlantic in 1492, he carried a copy of the map with him.

Now before we go any further, it's also important to note that Europeans were already exploring the Atlantic by the time that Toscanelli sent his map to the king of Portugal in mid-1470s. It's tempting to think of the Atlantic as this large empty ocean west of Europe, but it's actually not. There are several large island clusters off the west coast of Europe and Africa, and Europeans had discovered all of them by this point in the late 1400s.

The most obvious island chain is the Canary Islands. It's a group of islands off the northwestern coast of Africa. These islands had been known since the Roman period, and in fact, the name Canary Islands was coined by the Romans. You might think that the islands were named after the birds known as *canaries*, but it was actually the other way around. A lot of those birds are found on the islands, so the birds came to be known *canaries* after the name of the island chain. So where did the name of the islands come from? Well, the name is apparently derived from the Latin word for a dog – *canis* – which English has borrowed as *canine*. The Romans supposedly found a lot of wild dogs on the islands, so they named the islands after the dogs. So based on that little bit of etymology, it means that the words *canary* and *canine* are cognate. The birds are named after the island chain which is named after dogs. [SOURCE: 1492: The Decline of Medievalism and the Rise of the Modern Age, Barnet Litvinoff, p. 27-8.]

In addition to the Canaries, there's also another island chain located way out in the middle of the Atlantic about 900 miles west of Spain and Portugal called the Azores. There are maps from the 1300s that appear to include the islands, but much of the credit for discovering the islands goes to Henry the Navigator's sailors in the early 1400s. They reached the islands in 1427. The islands were uninhabited, but apparently, the early explorers found hawks and other large birds there. The name *Azores* is derived from the Portuguese word for *hawk* The existence of Azores nearly a thousand miles out at sea proved that the Atlantic wasn't just a big empty ocean. The Portuguese actually sent several expeditions westward from the islands over the following decades, but at that latitude, the winds blow from the west and effectively prevented sailors from making any further westward progress. [SOURCE: 1492: The Year the World Began, Felipe Fernandez-Armesto, p. 178.]

So by the late 1400s, Europeans knew of several major island chains out in the Atlantic. The existence of these islands proved that there were places to be discovered beyond the horizon. Those islands could also be used as 'jumping off points' for excursions further west.

And in addition to those islands which had been discovered and confirmed, there were also rumors of other islands, and many maps of this period included depictions of those legendary islands. Even the ancient Greeks had talked about mythological places in the Atlantic like the lost island of Atlantis. And medieval Europeans told stories of other large islands that supposedly existed beyond the western horizon.

One of those mythological islands was called Antillia. It was based on a legendary tale about a group of Christians who fled to the island many centuries earlier during the Muslim conquest of the Iberian Peninsula. The island was depicted on many maps produced in the 1400s, even though it doesn't actually exist. However, the name still exists. You may know that the Caribbean Islands are sometimes divided into two groupings called the Lesser Antilles and the Greater Antilles. Well, the term *Antilles* is derived from the name of this legendary island of Antillia which supposedly existed somewhere out in the Atlantic west of Spain and Portugal.

And Antillia wasn't the only mythological island depicted on many of those maps produced in the 1400s. There was also another mythological island usually depicted north of Antillia off the coast of the British Isles called Brasil. Now it's very tempting to link this island with the region of South American known as Brazil, but the two are completely unrelated. And the names are also unrelated. It appears that the name of the mythological island in the North Atlantic was a Celtic name. The origins of this mythological island are unclear, but it's possible that sailors from the British Isles has ventured out into the ocean looking for new fishing grounds and had confused Greenland or Newfoundland with a new island. At any rate, this mythological island is depicted on many maps from the 1400s. [SOURCE: The Fourth Part of the World, Toby Lester, p. 209.]

Rumors about this north Atlantic island extended all the way down to Portugal. And in 1477, Britain got a visit from one of those sailors who had been sailing with the Portuguese up and down the Atlantic seaboard. That visitor was Christopher Columbus. According to some accounts, he arrived in Bristol in the west of England and took part in a trading mission up to Iceland. By this point, England had an active trading relationship with Iceland. And cod fishing was the mainstay of that trading relationship. A lot of ships sailed out of Bristol up to Iceland to brought cod back to England.

Now I said that cod fishing was a 'mainstay' of that trading relationship. And I used that word for a reason. It was another nautical term that entered English around this same time in the late 1400s. The word *stay* in the nautical sense refers to the ropes and other rigging that support the mast of the ship. The *mainstay* is the rope that stabilizes two masts on a large ship. And from that nautical sense, the word came to mean the primary means of support – or the thing that is relied upon the most. And guess where the word *mainstay* is found for the first time in English? If you guessed that's it found in that same inventory of Henry VII's naval accounts that I mentioned earlier, you would be correct.

By the way, ropes became worn and frayed very quickly with constant use on a ship. So they had to be replaced from time to time, which is why Henry's accounts mentioned the purchase of ropes for a mainstay. And in the 1400s, a new word appeared in English for old ropes on a ship that could no longer be used for their intended purpose. That word was *junk*. Some scholars suggest that the word has a French origin, but it isn't entirely clear where it came from. I mention it because it was originally a nautical term. So if you have a lot of junk that needs to be thrown away, or if you get a lot of junk emails, now you know that the word goes back to old discarded ropes used on sailing vessels in the 1400s. And that inventory of Henry VII's naval accounts includes one of the earliest uses of the word *junk* in the English language.

So if a mainstay became old and worn, it turned into junk, both in the original sense of the word junk and in the modern sense, because a mainstay was a primary means of support. And that's why I noted earlier that cod fishing was a mainstay of England's trading relationship with Iceland during this period. Those ships from Bristol transported a lot of cod from Iceland to England. And those ships not only sailed back and forth to Iceland, they also explored the North Atlantic looking for new fishing grounds. And when Christopher Columbus arrived in Bristol in 1477, he was on his way to Iceland as part of one of those trading missions. But there is also some speculation that he was looking for that mysterious island of Brasil which was supposedly located somewhere out in the North Atlantic.

Not much is known about this northern voyage by Columbus, but he later reported that he heard an intriguing story during this trip. He heard that two bodies had washed ashore near Galway in the west of Ireland. And the bodies didn't appear to be Europeans. Their skin was light brown, and the faces had a flat appearance. They seemed to be people of an unknown race.

If the story was true, it's likely that the bodies were native Inuit people who lived in places like Greenland. They may have gotten lost at sea while fishing and the ocean currents may have taken them eastward to Ireland. But Columbus thought they were natives of Asia. In the margin of one of his maps, he noted the story and identified the two bodies as being from 'Cathay,' which was the common term at the time for China. To Columbus, the story was further proof that Asia was much closer than everyone had previously thought. It was close enough that the bodies of Asian fishermen had washed up on the shores of Ireland. That meant that Ptolemy and Toscanelli were right. It was possible to sail westward across the Atlantic. And the journey could be measured in weeks – not months and years as previously thought. [SOURCE: Dogs of Gold, James Reston, Jr., p. 121.]

Columbus returned to Portugal, and a short time later, he approached the Portuguese king with his ideas about sailing westward across the Atlantic. Portuguese sailors had still not reached the tip of Africa, so Columbus thought the king might be interested in this alternate route to Asia. The king was King Joao II – again, a direct descendant of John of Gaunt. Based on the accounts of Marco Polo's journeys to the Far East, Columbus knew that the island of Japan was located off the eastern coast of mainland Asia. And Columbus suggested that the distance from Portugal to Japan was a mere 2,800 miles. If you sailed out to the Azores, you were nearly half way there. But Columbus's calculations were wrong, and the Portuguese king and his mathematicians knew that he was wrong. The actual distance is about 12,000 miles – more than four times what Columbus was suggesting. [SOURCE: Christopher Columbus: The Four Voyages, p. 13]

In 1485, the Portuguese king formally rejected Columbus's proposal, but Columbus was convinced that his calculations were correct, and he refused to take 'no' for an answer. If the Portuguese king wouldn't give him the money, maybe the married king and queen who lived next door would. Those married monarchs were Isabella of Castile and Ferdinand of Aragon.

Now today, we call Portugal's neighbor on the Iberian Peninsula 'Spain,' but at this point in the late 1480s, it was only beginning to be unified into a single nation. The two largest regions were Castile and Aragon. The Castilian monarch was a queen named Isabella. And as you may recall

from prior episodes, she was another direct descendant of John of Gaunt from his second marriage to Constance of Castile. So Henry VII of England, the Portuguese monarchs, and Isabella of Castile were all distant cousins thanks to that common descent from Gaunt.

Isabella had married Ferdinand, the heir to the throne of Aragon, and when Ferdinand's father died, Isabella and Ferdinand became joint rulers of both kingdoms. This was the beginning of a unified Spain. Castile was the larger region, and the Castilian dialect of Spanish emerged as the dominant dialect of Spanish over the next couple of centuries. That's why the Spanish of the peninsula is sometimes called Castilian – or Castellano.

There was also a separate kingdom in the northeast called Navarre which was added in the 1500s, and a small region at the southern tip of the peninsula called Granada, which was still under Muslim control. Very early in their reign, Isabella and Ferdinand set their sights on capturing Granada and unifying Spain under Christian rule. It was during this period that they launched the Spanish Inquisition to identify and persecute Christian heretics, and they laid siege to Granada to force out the last remaining Muslim ruler on the peninsula.

I should note that the capture of Granada was part of a larger anti-Muslim movement in Spain at the time. There was an obvious religious aspect to the movement as represented by years of warfare to reclaim the peninsula from Muslim rulers, and further represented by the Spanish Inquisition and the persecution of non-Christians. But there was also a racial aspect to the movement. Spain had a very diverse population – a mixture of Christians, Muslims and Jews, and a mixture of white Europeans and darker-skinned people of African and Mediterranean descent. Over many generations, those various people had intermarried and mixed together. But many of the aristocratic families of Castile pointed to their 'pure' European ancestry. And those that had very fair or light-colored skin claimed that their complexion was evidence of their pure European blood. They often noted that their skin was so white that you could see the blueness of their veins through their skin. They claimed to be 'sangre azul' – literally of 'blue blood.' That Spanish term eventually found its way into English in the 1800s with its English translation as a 'blue blood' meaning a person of upper-class or aristocratic background. But it's ultimately derived from a Spanish term, and it traces back to medieval Spain when the aristocratic families of Castile looked down on Muslims and Jews. And we have to keep that background in mind when we think about the larger context of the Spanish Inquisition and the reconquest – or Reconquista – of Spain from Muslim rule.

So when Christopher Columbus arrived in Spain in the late 1400s, he was walking into a country at war against the Muslims rulers of Granada and at war against non-Christians throughout the country. So, in that context, Columbus had a tough time convincing Ferdinand and Isabella to focus on his proposed expedition across the Atlantic and to part with the funds necessary to make it happen.

That was probably why they refused to say 'yes' and give him the money. But they didn't give him a firm 'no' either. Columbus was basically told that it wasn't a good time to fund the voyage, but they might consider it down the road. The matter was ultimately sent to a special commission for further study and consideration. [SOURCE: '1492: The Decline of Medievalism and the Rise

of the Modern Age, 'Barnet Litvinoff, p. 51.] While the commission debated the fate of Columbus's proposal, he had little choice but to remain in Castile and bide his time.

A short time later, in December of 1487, the Portuguese explorer Bartolomeu Dias finally made his way to the southern tip of Africa. Upon reaching the tip, he turned around and went back to Portugal to report the news. Back home, the discovery was met with excitement because it suggested that there was now a way to sail around Africa. It provided hope of a new route to India. And that's why the Portuguese called that landmark 'Cabo da Boa Esperança, or in English, the 'Cape of Good Hope.'

Back in Spain, Columbus was becoming impatient as he awaited a final decision from Ferdinand and Isabella. Month after month passed, and in 1489, it appears that he sent his brother Bartholomew to England to see if the English king Henry VII might be interested in financing the voyage. But nothing came of the trip. [SOURCE: A Brief History of British Sea Power, David Howarth, p. 71.] Again, the numbers just didn't add up.

Within a few months, that special commission appointed by Ferdinand and Isabella rendered its final opinion and rejected Columbus's proposal. Once again, they determined that his calculations were wrong and that Asia was much further way that Columbus claimed. But there were some in the royal court who were starting to think that Columbus might be on to something. Ferdinand and Isabella were convinced by an advisor (Luis de Santangel) to keep Columbus in their service until the matter of Granada could be resolved and resources might be freed up to fund the voyage. [SOURCE: '1492: The Decline of Medievalism and the Rise of the Modern Age, 'Barnet Litvinoff, p. 54.]

Finally, in January of 1492, the Muslim forces in Granada were defeated. The defeat brought an end to Muslim rule on the Iberian Peninsula, which had stretched back nearly eight centuries to the early Middle Ages. Columbus was there when Granada fell to the Spanish forces. And he knew that the Spanish victory would enable the royal court to give him a final answer to his proposal. And, sure enough, a few days later, he got that answer – 'no.' To his surprise, the answer was still 'no.'

It was bitter disappointment, but again, Columbus wasn't going to take 'no' for an answer, so he decided to leave Spain for France in hopes that the French king might give him an audience. But after he left, Ferdinand and Isabella reconsidered. And it's probably fair to say that Isabella reconsidered. Ferdinand was always a skeptic, but Isabella was intrigued by Columbus and his grand ideas. The Spanish monarchs also realized that the discovery of the Cape of Good Hope by Portugal meant that Portuguese sailors would soon be able to reach India by sailing around Africa. If Columbus could reach the Indies by sailing westward, then Spain could counter Portugal's African route with its own Atlantic route. It was worth a try. So a messenger was sent out on horseback to catch up with Columbus as he rode out of town. The messenger reached Columbus about ten miles outside of Granada and told him that Ferdinand and Isabella had changed their mind. They had decided to fund the voyage after all, and in doing so, they changed the world forever. [SOURCE: The Fourth Part of the World, Toby Lester, p. 255]

Next time, we'll look at what happened when Columbus headed west across the Atlantic. You're probably heard that in 1492, Columbus sailed the ocean blue. But if that's all you know about his voyage – or voyages (because there were four of them) – then you may be surprised at the details of the full story. And you may also be surprised that even though he was an Italian explorer who sailed for Spain and encountered people who spoke Native American languages, his voyages actually had an influence on the English language. So next time, we'll explore those developments, and we'll see how English was affected by the discovery of the New World.

Until then, thanks for listening to the History of English Podcast.