

**THE HISTORY OF ENGLISH PODCAST  
TRANSCRIPTS**

**EPISODES 141 - 145**

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## TABLE OF CONTENTS

Episode 141: The Great Vowel Shift (Part 1) . . . . .	1
Episode 142: The Great Vowel Shift (Part 2) . . . . .	15
Episode 143: The Great Vowel Shift (Part 3) . . . . .	27
Episode 144: A Murder of Crows and Princes . . . . .	40
Episode 145: A Sea Change for Europe . . . . .	55

## **EPISODE 141: THE GREAT VOWEL SHIFT (PART 1)**

Welcome to the History of English Podcast – a podcast about the history of the English language. This is Episode 141: The Great Vowel Shift (Part 1). In this episode, we’re going to delve into the Great Vowel Shift by looking at a series of changes of that affected certain vowel sounds pronounced in the front part of the mouth. We’re going to focus on the two highest front vowels, and we’ll explore how the sound of those vowels evolved in the late Middle English period. Those were some of the earliest developments in the major event that’s known today as the Great Vowel Shift. Over the next couple of episodes, we’ll continue our look at changes that took place in other parts of the mouth. Collectively, these changes will help to mark the transition from Middle English to Modern English. So over the course of these episodes, we’ll break down the Great Vowel Shift piece by piece, and we’ll see how those changes shaped the language we speak today.

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

Now before we begin, let me make a quick programming note. Last time, I mentioned that I would going to discuss the Great Vowel Shift over the course of two episodes – one focusing on the front vowels and one focusing on the back vowels. Well, as I started to delve into this episode, I realized that I couldn’t really cover the front vowel changes in one episode. There’s an extra vowel sound in the front of the mouth, and the changes there were a bit more complicated. So I’ve decided to break the discussion of the Great Vowel Shift into three parts. In this episode, we’ll focus on the two highest front vowels. Next time, we’ll look at the lower front vowels and what happened to them. And then in the third episode, we’ll explore the changes to the back vowels. I don’t usually divide a topic into multiple parts like this, but this one of those topics that deserves some attention. And I know from the feedback I’ve received that many of you are interested in this topic. So we’re going to spend the next three episodes on this important event in the history of English, and then we’ll pick back up with our regular historical narrative and move into the 1500s.

Now one of the reasons why the Great Vowel Shift is so important to the history of English is because it marks a transition point in the language. Over the course of the podcast, there are two events that seem to come up over and over again. The first is the Norman Conquest of England in 1066, and the other is the Great Vowel Shift. Both of those events come up a lot because they’re transition points. The Norman Conquest helped to trigger the transition from Old English to Middle English. And Great Vowel Shift was a major factor in the transition from Middle to Modern English. The vowel shift re-shaped the pronunciation of the language into the language we have today.

Now even though the Norman Conquest and the Great Vowel Shift are very important events in the history of English, there is a big difference between the two. The impact of the Norman Conquest is well-known and generally understood, but the Great Vowel Shift is shrouded in a bit of mystery. While it’s easy to say that the long vowel sounds in English shifted around during the

1400s and 1500s, it's difficult to convey the details. It can be very technical and dry. And in fact, linguists still don't agree on all of those details. They also aren't even sure why it happened in the first place.

While early linguists were aware that the pronunciation of certain vowel sounds had changed between the time of Chaucer and the time of Shakespeare, they tended to see it as a random series of changes – a period of instability in the language. But in the early 1900s, a Danish linguist named Otto Jespersen looked a little closer at what happened in English. And where others saw chaos, Jespersen saw order. He recognized that most of the long vowel sounds were raised during the 1400s and 1500s. Generally speaking, all of the long vowel sounds shifted upward one position and came to be pronounced with the adjacent vowel sound – the sound that was one step higher. He saw all of these changes as being tied together in what linguists call a 'chain shift,' so they all moved together, either at the same time or in a series of related movements. These types of shifts usually affect a small number of vowel sounds, but for some reason, this particular vowel shift affected all of the long vowel sounds in English. Apparently, they all moved in relation to each other. It was Jespersen who coined the term 'the Great Vowel Shift.' He wrote that the Great Vowel Shift consisted of a "great raising of all long vowels." [SOURCE: *'Inventing English,' Seth Lerer, p. 101.*]

Now hopefully, you listened to the last episode – Episode 140. And if you did, Jespersen's comments may actually make some sense. We saw last time that each vowel sound is made in a specific part of the oral cavity, and vowel sounds that are located next to each other in the mouth sometimes shift back and forth over time because there is nothing to block the movement between them. So what Jespersen was describing was a phenomenon whereby all of the vowel sounds shifted to the position next door – the position that was one step higher. And the highest two vowels essentially moved out of the way and shifted down toward the central part of the mouth. Again, this process only affected the vowels when they were pronounced as long vowels where the pronunciations were stretched out a bit. When the vowels were pronounced as short quick vowels, they tended to stay in place and didn't move.

So in order to make some sense out of all of that, we really need to understand the positions that the vowels occupy in the mouth. And that's why I wanted to take you through that in the last episode.

I should also make one other point here – a point of clarification. Even though many linguists speak of vowels in terms of the position they occupy in the mouth, and they use illustrations that outline those relative positions, it is important to note that the oral cavity is just that – a cavity or open space. So the sound itself doesn't really occur in any specific part of the mouth. The sound occurs throughout the mouth. The position or location really refers to what the tongue is doing. So when a linguist describes the /i:/ ('ee') sound as a high front vowel, what they really mean is that the tongue is raised slightly and placed in that position. As you progress downward from /i:/ ('ee'), to /e:/ ('ay'), to /ɛ:/ ('eh'), and so on, the tongue itself lowers and flattens out a bit. The same thing happens in the back of the mouth. When we pronounce the highest back vowel sound /u:/, there is a slight raising of the back part of the tongue towards that position. And as we move lower, from /u:/ ('oo') to /o:/ ('oh') to /ɔ:/ ('aw'), and so on, once again, the tongue lowers and

flattens out a bit. So technically speaking, the positions relate to what the tongue is doing, but it's easier to think about specific vowels being articulated in specific parts of the mouth because that makes it easier to visualize what's going on, and it makes it easier to follow these types of vowel shifts when one sound starts to be pronounced like the sound next to it.

As I noted last time, the pronunciation of vowel sounds is far from precise. Even among people who speak with the same accent, a particular vowel sound can vary a little bit from one speaker to the next. There is usually a range of acceptable pronunciations of any given vowel sound. That range can vary over time. Sometimes people extend their vowel sounds into the spaces occupied by the neighboring vowels. They might pronounce /ɛ:/ as /e:/ or /æ:/. But it can also work the other way. Where the pronunciations vary quite a bit, speakers may restrict those different pronunciations back down to one sound.

That's one way that a vowel shift occurs. The vowel is pronounced in different ways for a while, and then settles down on a new and slightly different pronunciation. Sometime this process can affect one specific vowel sound – or that vowel sound and its neighbor. But sometimes, the instability causes a chain reaction. As the pronunciation of one vowel sound expands to encompass its neighboring sound, the pronunciation of that neighboring sound can also expand. Sometimes it has to expand to prevent a merger. As we've seen, vowels can merge together, but when that happens, you get a lot of new words that are pronounced the same way. Languages can deal with that phenomenon up to a point, but there is a limit. At some point when vowel sounds start to expand and crash together, you get so many words that are pronounced the same way that communication starts to be a problem.

If I'm feeling a bit overweight and my doctor tells me I'm getting 'fat,' it will probably cause me to eat a little less and exercise more. But if his accent changes, and he starts to raise his /æ/ sound up to /i/, then instead of telling me that I'm getting 'fat,' he may tell me that I'm getting 'fit.' And that may lead me to think I'm in great shape, and I can throw that out that diet and cancel my gym membership. So vowel shifts can create problems.

To account for those problems, people will try to keep those words distinct. So if *fat* starts to sound like *fit*, people may start to compensate by slightly changing the pronunciation of *fit* to something else – maybe to 'fet' or 'feet' or some other closely-related sound. That's how chain shifts occur. To prevent those sounds from crashing together and creating confusion in the language, people have a tendency to adjust their vowel sounds to keep words distinct. It produces a chain reaction sort of like falling dominos. A change in one vowel sound produces a series of related changes as the neighboring vowel sounds adjust. This type of chain shift usually affects a small group of closely-related vowels, but for some reason, this type of chain shift affected ALL of the long vowels in English from the 1400s through the 1600s. And arguably, it has never completely stopped.

Now Jespersen's orderly process has been questioned by other linguists. They suggest that the process wasn't orderly at all – that there was an extended period of linguistic confusion where the vowel sounds in many words could be pronounced multiple ways. And over time, as people adopted and settled on certain specific pronunciations, the vowel sounds became a bit more

fixed, and we ended up with the vowel sounds we have today. And they would say that the process only looks orderly in retrospect if we compare the Middle English sounds to the Modern English sounds, and if we try to draw out certain patterns based on those changes. To make this point, they note that the changes were not uniform throughout Britain. The changes were far more extensive in the south of England where the standard dialect of English emerged, but the changes were more limited in the north. Also, as we'll see, there were many exceptions and irregularities, and there were also cases where the vowel sounds actually did crash into each other and merge. And some vowel sounds didn't just move next door. They kept moving and ultimately ended up several steps away from where they began. [SOURCE: 'An Introduction to Early Modern English,' Terttu Nevalainen, p. 120-1.]

Now this difference in perspective among scholars points to the fact that many of the details of the Great Vowel Shift are still disputed, and they remain the subject of much debate.

For example, there is still no agreement about the cause of the shift. Some linguists tend to think that it was caused by some major social upheaval. Others tend to think it was a natural development within the language.

For those who think there was an outside influence that spurred the changes, they often point to the social disruptions that stemmed from the Black Death in the mid-1300s. The argument goes something like this. As we saw in previous episodes, the massive plague that swept across England and the rest of Europe disrupted the feudal system and allowed peasants that were previously tied to the land to negotiate for their labor services. Many of them left the manors and moved to towns and cities. That led to a significant migration from the countryside to cities like London. It is estimated that the population of London in the year 1500 was about 75,000 people. A century later, it had tripled to over 200,000 people. About 50 years after that, it had doubled again to around 450,000 people. [SOURCE: 'The English Language,' Robert Burchfield, p. 21-22.]

With people pouring into cities like London from the countryside, there was suddenly a great mixture of dialects in those cities. That was especially true for London which was relatively close to most of the major dialect regions at the time, except those in the far north. So people would have been pronouncing the same words very differently, often with different vowel sounds. Over the course of that period from the 1400s through the 1600s, speakers gradually settled on certain common pronunciations, and the vowel sounds stabilized. There may also have been social factors at work like the preference for one particular dialect or manner of speech among several competing options because that dialect was seen as more prestigious or more proper. At any rate, by the end of that period, a new system of vowel pronunciations had emerged. [SOURCE: 'Inventing English,' Seth Lerer, p. 111.]

Now that's a very simplified version of the view advocated by some scholars. Another view suggests that vowel shifts are actually very common within languages given the fact that vowels are pronounced in the open cavity of the mouth and therefore tend to be a bit unstable. So this alternate view assumes that the vowel changes were part of a natural process and weren't really dependent on outside influences like the migration of people from the countryside to the cities.

Many of these scholars point to the fact that the Chinese language also experienced a large-scale vowel shift over a thousand years ago in the 800s.

And more limited chain shifts have also been identified within most other Germanic languages, even though they didn't experience a wholesale shift of all the long vowels like in English. For example, the German word for 'white' is *weiß*. The two words evolved out of the same Germanic root, which was something like *\*hweit*. And even though the vowel sound has changed over time within both languages, notice that both modern words have the same vowel sound today. Also, note that the German word for 'house' is almost identical to the English word. They're both pronounced as 'house.' Again, they came from the same Germanic root word which was *\*husan*. In standard English, the vowel evolved from *hus* to *house*, and obviously the German word has experienced a similar change. So again, some of the changes that took place in English have parallels in other Germanic languages, and that has led some scholars to argue that the English changes were just part of a natural process. [*SOURCE: 'Long Vowel Shifts in English: c. 1050-1700,' Gjertrud Stenbrenden, p. 10-11.*] But even for those who find parallels in other Germanic languages, the fact is that the changes within English were much more extensive. Again, the Great Vowel Shift affected ALL of the long vowel sounds within English, not just some of them.

So the ultimate cause of the Great Vowel Shift remains a bit of a mystery. There are some interesting theories, but there's no real consensus or agreement among scholars. The same is also true for the timing and sequence of the shifts. Some scholars think the highest vowel sounds shifted first, and that opened up the space for the lower vowel sounds to move up higher. However, there are alternate views. Some scholars think some of the lower vowels moved up first and that pushed the higher vowels out of the way. There are also theories that the vowels all moved at the same time, sort of like a game of musical chairs where they all shifted around in unison. It's difficult to establish a definitive answer from the surviving documents, but there is very strong evidence based on the way words were spelled that the highest vowel sounds moved very early on. So that's the version that I am presenting here – that the highest vowels shifted out of the way and the lower vowels moved up to fill the gaps. It's a somewhat traditional view of the Great Vowel Shift, but again, it is 'a' view – not necessarily the only or the definitive view.

So with that bit of background out of the way, let's delve into those vowel changes. And again, this time we're going to focus on the changes in the upper front part of the mouth. We'll deal with the other vowel sounds over the next couple of episodes.

Last time, I took you through the location where each of the front vowels is pronounced, and I gave you the mnemonic 'Eat Aged Eggs At Ollie's.' That little phrase illustrates the order of the vowels pronounced in the front part of the mouth from highest to lowest. The highest is /i:/, then one step down we have /e:/, then we move down to /ɛ:/. This time, we're going to focus on those two highest vowels – /i:/ ('ee') and /e:/ ('ay').

During the course of the Great Vowel Shift, each of those sounds shifted higher or further back, sort of like a conveyor belt. And these appear to be two of the earliest changes that can be confirmed via spellings in the surviving documents. In fact, I've touched on both of these changes in earlier episodes. So let's start at the top.

That highest vowel sound in the front of the mouth is the /i:/ ('ee') sound. Again, I'm not talking about the letter E. I'm just talking about the actual sound that comes out of your mouth. It's the sound that you hear in words like *feet*, and *dream*, and *brief*, and *elite*, and *ski*. As those words indicate, that sound can actually be spelled a lot of different ways. It is a common vowel sound, and it has been a common sound within English from the very beginning. But during the late Middle English period, most of the words that had that sound started to be pronounced differently. Over the next three or four centuries, that sound continued to evolve, and it eventually ended up as the sound that we pronounce today as /ai/ ('eye'). So to Geoffrey Chaucer, a specific point in the day was the /ti:m/ ('teem'), but to us, it is the *time*. To Chaucer, a married woman – and in some cases, even an unmarried woman – was a *wif* ('weef'). To us, she is a *wife*. To Chaucer, the number after eight was /ni:n/ ('neen'). To us, that number is *nine*. That's the ultimate evolution of that sound.

As I've noted before, that /i:/ ('ee') vowel sound was traditionally spelled with letter I. We hear that original sound in a word like *ski* which was borrowed in the modern era. But of course, we generally use that letter for the /ai/ sound today in words like those I just mentioned – *time*, *wife* and *nine*. In fact, that's how the letter I came to be called the letter 'I.' Not to confuse you too much, but it was once called 'ee' because that was the sound it represented. But as I just noted, the /i:/ ('ee') sound gradually evolved into the /ai/ ('eye') sound. And the letter followed along with that change – both the name of the letter and the sound it represents.

So in the Prologue to the Canterbury Tales, Chaucer used the word *ride*. After all, the pilgrims were riding to Canterbury. But he would have pronounced it /ri:d/ ('reed'). And at least in some places, he spelled it R-I-D-E, just like we do today. Over time, the pronunciation shifted from /ri:d/ ('reed') to /raid/ ('ride'), but that common spelling remained the same. So the letter went along for the ride – no pun intended. And today, the letter has that newer /ai/ ('eye') sound within English.

But other European languages didn't make that change. Most of them continued to use letter I to represent its traditional /i:/ ('ee') sound. And English continued to borrow words from those languages after the sound had shifted within English. So when those words came into English, they came in with their /i:/ ('ee') sounds which were still represented by letter I. That's why we still use the letter I to spell the /i:/ ('ee') sound in words like *ski*, and *police*, and *elite*, and *spaghetti*. As I noted last time, this actually gives us a good general rule to use to distinguish an older word that pre-dates the Great Vowel Shift from a more recent loanword that came in later. When you look at a word where the letter I represents the /ai/ ('eye') sound like *time*, *vine*, *life*, *five*, *write*, *side*, *child*, *like*, and so on, you're normally looking at an old word that went through the vowel shift. But when you look at a word where the letter I represents the /i:/ ('ee') sound like *ski*, *police*, *elite*, *machine*, and so on, you're normally looking at a loanword that came into English after the Great Vowel Shift with its original sound in tact.

This is also why V-I-N-E is pronounced /vain/ ('vine'), but R-A-V-I-N-E is pronounced /rə-vi:n/ ('ra-veen'). *Vine* is an older word that went through the vowel shift. But *ravine* is a newer word that was borrowed after the shift. *Ravine* is first recorded in English in the late 1500s. We see a similar situation with L-I-C-E which is pronounced /lais/ ('lice'), as compared with P-O-L-I-C-E is pronounced /po-li:s/ ('police'). Again, *lice* is older, going all the way back to Old English, and it went through the vowel shift. But *police* is a French loanword that came in later and retains its original vowel sound.

Sometimes we find English words that are still a bit unsettled with both pronunciations like *either* ('ee-ther') and *either* ('eye-ther'), and *neither* ('nee-ther') and *neither* ('neye-ther'). Today, there tends to be a regional divide in the pronunciation of those words, but that regional divide only developed over the past couple of centuries.

We also have a few loanwords that were borrowed into English after the vowel shift with their original /i:/ ('ee') sound, but the sound has started to drift over to the /ai/ ('eye') sound in the modern era. Think about the various pronunciations of A-N-T-I. Some people say /anti:/ ('an-tee') and some say /antai/ ('an-teye'). It's ultimately a Greek prefix that came into English from French and Latin in the 1500s. It came in with its original pronunciation as /anti:/ ('an-tee'). But over time, some speakers have Anglicized it to /antai/ ('an-teye'). So in a way, it has experienced the pull of the Great Vowel Shift several centuries after the shift was supposedly complete.

Another example is the Latin word spelled V-I-A meaning 'by way of.' It also came in after the Great Vowel Shift with its original vowel sound pronounced /vi:ə/ ('vee-uh'). But many English speakers have converted it into /vai-ə/ ('veye-uh'). So again, we still hear the lingering affect of that old vowel shift on some of these words.

These dual pronunciations also provide a clue as to how the vowel shift might have occurred in the first place. There was probably a period in the 1400s when there were lots of words that could be pronounced both ways. And over time, people gradually settled on the /ai/ ('eye') pronunciation. So if that history is a guide, it suggests that pronunciations like /anti:/ ('an-tee') and /via:/ ('vee-uh') may eventually give way to /antai/ ('an-teye') and /vai-a/ ('veye-uh').

At any rate, it might be helpful to think of this first vowel shift as the /vi:a-via/ shift because it's a shift that is still reflected in words like that.

So we've seen that this vowel sound shifted from /i:/ ('ee') to /ai/ ('eye'), but let's look a little closer at that change because it wasn't as simple as I've made it sound. The sound actually went through an intermediate stage before it ended up as /ai/ ('eye'). And this little bit of detail is important to understand how the Great Vowel Shift presumably got underway.

At some point in the late 1300s, and some scholars think it might have been even sooner than that in some places, English speakers started to change the way they pronounced that /i:/ ('ee') sound when it was pronounced as a long vowel. Instead of saying /i:/ ('ee'), which is a pure vowel sound, they began to put a little sound in front of it. And that new sound was /ə/ ('uh').

Last time, I mentioned that this /ə/ ('uh') sound is called 'schwa,' and it's pronounced in the middle of the oral cavity. So instead of saying /i:/ ('ee'), people started to say /ə-i/ ('uh-ee') – or /əi/ ('uhee') when pronounced in normal speech. You might remember that when two vowel sounds are combined it's called a diphthong. So linguists would say that speakers converted the pure vowel /i:/ ('ee') into the diphthong /əi/ ('uhee').

Now let's think about that change in terms of location and position. The original /i:/ ('ee') sound is the highest vowel sound that can be produced in the front part of the mouth. And this /ə/ ('uh') sound is produced more in the middle of the mouth. So whereas before, this vowel was pronounced in the highest position in the front of the mouth, it now started to be pronounced in two different places. The pronunciation started in the center of the mouth and moved forward. The new sound was clearly distinct from the old sound. And since the old sound was no longer being used, that allowed the vowel sound pronounced underneath to move up and fill the gap, but more on that later.

So we've seen that the high /i:/ ('ee') vowel was now being pronounced as /əi/ ('uhee') beginning in the center of the mouth and sliding forward. But the shift wasn't done yet. A couple of centuries later, in the 1600s and 1700s, it shifted again. The initial sound dropped from /ə/ ('uh') in the center of the mouth down to /a/ in the lower part of the mouth. So instead of saying /ə-i/ ('uhee'), people began to say /a-i:/ ('ah-ee') – or /ai/ ('eye') in normal speech. And that's how we got the modern /ai/ ('eye') sound. Even though we might think of the /ai/ ('eye') sound as a single vowel because we spell it with a single letter, it's actually two sounds put together. It's the /a/ ('ah') sound followed by the /i:/ ('ee') sound. That's why I didn't talk that sound in the last episode – because it's not a pure vowel sound. It's a diphthong.

So in order to trace that evolution, let me give you a few examples. Whereas Chaucer would have said /ti:m/ in the 1300s, Shakespeare would have probably said /təim/ in late 1500s, and we would say *time* today. /ti:m/ – /təim/ – *time*. And whereas Chaucer would have said /ni:n/, and Shakespeare would have said /nəin/, we would say *nine*. /ni:n/ – /nəin/ – *nine*.

If you try to mimic those pronunciations, you'll hear how the sound actually moves back and lower each time. No one really knows why that shift happened, but it was essential to the Great Vowel Shift because, as I noted earlier, it cleared the way for the other front vowels to move up as part of a larger chain shift.

So today, in Modern English, we still have the sounds at the beginning and the end of that shift – the /i:/ ('ee') sound and the /ai/ ('ai') sound. But what about that sound in the middle – the /əi/ ('uhee') sound? It was common during the time of Shakespeare, but it largely disappeared when the sound dropped down to the modern /ai/ ('eye') sound. But here's something you may find interesting. That sound can still be found in some English dialects. And those dialects have that sound due to a more recent vowel shift within those particular dialects that mirrors what happened during the Great Vowel Shift. In other words, the same sound shift happened again – at least the first step in the shift.

Here's what happened. In the 1700s and 1800s after the Great Vowel Shift was complete. People in and around London started to change the way they pronounced their /i:/ ('ee') sound. That sound was still a common sound in English, but due to the Great Vowel Shift it was found in a brand new set of words. And in those words that had acquired that sound during the Great Vowel Shift, those speakers started to change the vowel sound again. And just like their ancestors had done three or four centuries earlier, they shifted that sound from /i:/ ('ee') to /ɔi/ ('uhee'). And that is more evidence for the theory that these types of changes are natural changes within the language.

At any rate, this new pronunciation became common in the working-class accent spoken in London which came to be known as Cockney. And shortly thereafter, there was a significant migration from London to the new colony of Australia. And this same feature pops up in Australian accents as well. In fact, there are lots of similarities between the Cockney accent and the Australian accent due to that close historic link.

So I thought it might be interesting to hear this pronunciation as it exists today in those two accents. Let me play you a few samples from listeners where you can hear a modern version of this same vowel shift.

First we have Matt from London who read two of the sentences I provided on the website. The first sentence is "The 10 steel beams are still supporting the tin roof." That sentence features the word *beam* which has that long /i:/ ('ee') sound. And the second sentence is "We had to prepare a meal with only a tomato, an egg, and a block of goat cheese." That sentence features the word *cheese* which also has that long /i:/ ('ee') sound. Notice in these sentences that we hear the word *beam* pronounced more like /bɛim/ ('buh-eem') and the word *cheese* pronounced more /chɛis/ ('chuh-ees').

[CLIP]

Now let's listen to a few samples from Australia. First we have Lisa from Canberra. Again, notice the pronunciations of *beams* and *cheese*.

Now let's listen to John from Melbourne reading the same two sentences.

[CLIP]

Finally, here's a clip from Geoff in Australia – and notice how Geoff catches himself when he pronounces *beams*.

I hope you could hear that vowel sound. Again, that vowel is not common in standard English anymore, but it does exist in those specific dialects, and it exists due to a later vowel shift that was similar the shift that occurred in the early stages of the Great Vowel Shift.

[CLIP]

So we've just covered the first major vowel change in the Great Vowel Shift – the shift from /i:/ ('ee') to /θi/ ('uhee') to /ai/ ('eye'). The important thing to take from that discussion is that the /i:/ ('ee') sound changed to a new sound. That meant that the /i:/ ('ee') sound wasn't really being used anymore, so other words could now use that sound without creating any confusion or overlap with the words that had that sound before.

So for example, the word *bite* was pronounced as /bi:t/ ('beet') before the Great Vowel Shift. That how Chaucer would have said it. But when /bi:t/ ('beet') became /bθit/ ('buh-eet') on its way to *bite*, it meant that there was no word pronounced as /bi:t/ ('beet') anymore. But there was a type of root vegetable grown in gardens called a /be:t/ ('bait'). And now the pronunciation of that root vegetable expanded. Some people still called it a /be:t/ ('bait'), but some people started to pronounce that vowel a little bit higher. They called it a /bi:t/ ('beet'). And that was OK because the old verb /bi:t/ ('beet') was evolving into *bite*. So there wasn't any risk that someone would say 'I like to bi:t bi:ts' ('beet beets'). They would say 'I like to bθit bi:ts' ('buh-eet beets'). And a couple of centuries later, they would say 'I like to bite beets.' So if that old root vegetable called a /be:t/ ('bait') started to be pronounced as /bi:t/ ('beet'), it was OK. There was no merger or overlapping. And if you followed that example, then you followed the second major step in the Great Vowel Shift.

Remember our old mnemonic 'Eat Aged Eggs.' That phrase illustrates the front vowels in descending order – /i:/, /e:/, /ɛ/. So at the top, we have the /i:/ ('ee') sound that we just looked at. And immediately beneath that high /i:/ ('ee') sound is the /e:/ ('ay') sound. It was found in a lot of words in Middle English. And when that high /i:/ ('ee') sound shifted to a diphthong, words with that slightly lower /e:/ ('ay') sound started to fill the gap that was left behind. So in other words, the long /e:/ ('ay') sound was raised up to /i:/ ('ee'). That's how that root vegetable known as a /be:t/ ('bait') became known as a *beet*. And that's also why the phrase 'bite a beet' didn't create any confusion at the time. No one said 'bi:t a /b:it/' ('beet a beet') because the verb had already shifted to /bθit/ ('buh-eet'). So *bite* and *beet* never crashed into each other. This type of order and spacing was usually maintained in the Great Vowel Shift. It appears that speakers generally tried to avoid mergers. If two different vowel sounds crashed together, it would create a bunch of words that sounded the same, and that would create a lot of confusion in the language. So again, in order to maintain some degree of order, vowel sounds usually moved together in a chain shift. That kept the words distinct from each other.

So let's look a little closer at this second vowel shift from /e:/ ('ay') up to /i:/ ('ee'). There were lots of words affected by this shift. For example, /be:t/ ('bait') became *beet*. /tre:/ ('tray') became *tree*. /be:/ ('bay') became *be*. /swe:t/ ('sway') became *sweet*. /bre:f/ ('brayf') became *brief*. And so on. Again, in terms of location, this second highest front vowel – /e:/ ('ay') – moved up and occupied the position of the highest front vowel – /i:/ ('ee').

The original sound of this vowel was traditionally spelled with letter E. And once again, the sound changed, but the spellings remained the same. So as the sound shifted up to /i:/ ('ee'), the letter also started to be called 'ee'. And that's how the letter got its name in English.

But just as we saw before, other European languages continued to use letter E to represent the older /e:/ ('ay') sound. And English has borrowed quite a few of those words since the Great Vowel Shift ended. And that's why the letter E represents that other sound in more recent loanwords like *café*, *fiancé*, *resume*, *saute*, *ballet*, *buffet*, and *gourmet*.

Once again, we can turn that into a good general rule. When we have a word where the letter E represents the /i:/ ('ee') sound, it's probably a old word that went through the Great Vowel Shift. But when we have a word where the letter E represents the /e:/ ('ay') sound, it's probably a newer loanword that was borrowed after the vowel shift was complete, and therefore avoided the effects of the vowel shift.

We have one really good example of this in Modern English. It's the words *medley* and *melee*. Both words are ultimately derived from the same Old French root word meaning 'to mix or mingle.' *Medley* was borrowed into English in the 1300s, so it went through the Great Vowel Shift. The pronunciation shifted from /med-le:/ to *medley*. But then in the 1600s, after the Great Vowel Shift, English borrowed another version of the same word. That was the word *melee* – and of course, *melee* has the original vowel pronunciation as /e:/ ('ay'). So between the words *melee* and *medley*, we can hear the vowel shift at work.

We also have a few words in English that can be pronounced either way. The word spelled S-H-E-I-K or S-H-E-I-K-H was borrowed from Arabic in the 1500s, and it can be pronounced as either /she:k/ ('shayk') or /shi:k/ ('sheek') in Modern English. And we also have the word spelled G-E-I-S-H-A from Japanese, and at least in American English, it can be pronounced as either /ge:sha/ ('gaysha') or /gi:sha/ ('geesha'). So there's still a little bit of fluctuation between those sounds today.

Now let's look a little closer at the impact of this change on English spelling. As we've seen, the sound began as /e:/ ('ay') before it shifted to /i:/ ('ee'). And scribes used the letter E to represent that original /e:/ ('ay') sound like in *café* and *resume*. But it was also common for Middle English scribes to distinguish the short /e:/ ('ay') sound from the long /e:/ ('ay') sound. They often did that by doubling the letter for the long sound. As I discussed in an earlier episode of the podcast, this was a common technique used by scribes. Just double the vowel letter for a long vowel sound. It made perfect sense. So it was common for many of these words with the long /e:/ ('ay') sound to be spelled with double E's.

And when the sound shifted up /i:/ ('ee'), the spellings remained the same. So those double E's were now found in lots of words that were pronounced with an /i:/ ('ee') sound. And that explains why many of these words are spelled with a double E today – like *tree*, *see*, *feet*, *meet*, *beet*, *sweet*, *week*, *seem*, *cheese*, *needle*, and so on. All of that seems pretty straight-forward.

But scribes also had a different way to represent that original long /e:/ sound. Rather than using those double E's, they sometimes adopted the French practice of spelling that sound with IE. Again, that was a common Anglo-Norman spelling used in French loanwords. And when the vowel sound in those words shifted up to /i:/ ('ee'), that IE spelling was retained. So it now represented the /i:/ ('ee') sound. And that explains the spellings of words like *brief*, *chief*, *grief*,

*relief, achieve, retrieve, niece, siege, pierce* and *piece* – P-I-E-C-E. Those are all French loanwords with the French spelling IE, and they were all borrowed into English before the Great Vowel Shift, so they all experienced this vowel change from /e:/ (‘ay’) to /i:/ (‘ee’), and they are all pronounced with the /i:/ (ee’) vowel sound today.

After the vowel shift was completed, scribes and printers started to extend that French spelling to native English words as well. So in some cases, the IE spelling replaced a more traditional E or EE spelling. As a result, native words like *thief, fiend, belief, field, yield, shield* and *wield* all received their modern IE spellings.

Now I should mention that this spelling sometimes competed with an alternate EI spelling with the letters reversed. In fact, a lot of the words I mentioned could be spelled both ways in the period immediately after the Great Vowel Shift, but the IE spelling was preferred and won out over time. In fact, it was so common that it eventually gave birth to the rule that we know today as “I before E except after C.” There was a small group of words borrowed from French that ended in ‘-ceipt’ or ‘-ceive,’ and they tended to use the alternate spelling. Specifically, those words were *receipt, receive, deceit, deceive, conceit, conceive*, and *perceive*. Those were the exceptions that gave birth to the “except after C” part. The spelling of the word *ceiling* was later revised, apparently to mirror these other exceptions. So those were the only eight exceptions that gave birth to the “except after C” part. But as I discussed in an earlier episode, this rule only works if we’re talking about words where those spellings represent the /i:/ (‘ee’) sound. When those spellings are applied to other sounds, the rule completely breaks down. But it works pretty well for these /i:/-sounding words that emerged after the Great Vowel Shift. It shows that English prefers the ‘I before E’ spelling for the /i:/ (‘ee’) sound, and that preference probably stems from the fact that IE was a common spelling for the sound both before and after the Great Vowel Shift. That’s why we generally represent the long /i:/ (‘ee’) sound today with either EE or IE. The first is a native English spelling, the second is a borrowed French spelling. But they both survived the Great Vowel Shift.

So we’ve now covered two of the vowel shifts that took place very early on in the Great Vowel Shift, and both were probably completed by the late 1400s. /e:/ (‘ay’) moved up to /i:/ (‘ee’), and /i:/ (‘ee’) moved out of the way and eventually became /ai/ (‘eye’).

I noted earlier that a few centuries after the Great Vowel Shift occurred, there was another more limited vowel shift that took place in and around London, and that later London shift helped to define the local Cockney accent. That London vowel shift featured the same vowel sounds that we’ve explored in this episode. As we saw earlier, /i:/ (‘ee’) became the diphthong /θi/ (‘uhee’), which mirrored the Great Vowel Shift a few centuries earlier.

And the slightly the lower /e:/ (‘ay’) sound also shifted to a new position. But unlike in the Great Vowel Shift where it moved up to fill the gap left by /i:/ (‘ee’), in this later London shift, it actually shifted to a diphthong somewhere between /æi/ to /ai/. And I mention this other London vowel shift because it explains one of the most distinctive features of the modern Cockney accent.

It explains why Cockney speakers sometimes pronounce *day* as something like ‘die,’ and *train* as ‘trine,’ and *Spain* as ‘spine.’ This particular aspect of Cockney speech was famously featured in the film ‘My Fair Lady’ based on George Bernard Shaw’s stage play called Pygmalion. The phonetics professor Henry Higgins tries to teach Eliza Doolittle to lose her Cockney accent and speak in a more standard way. And he takes aim at this particular vowel shift from /i:/ (‘ee’) to /ai/ (‘eye’) which was such a prominent feature of the Cockney accent.

[CLIP: <https://www.youtube.com/watch?v=uKxd30lQ1f0>]

Well that was a little harsh. Of course, Audrey Hepburn who played Eliza Doolittle didn’t actually speak with a Cockney accent. She just used one for the part. So let me play a sample from an actual native speaker to get a sense for this sound. This is a clip from a dialect collection featured in the book ‘English Accents and Dialects’ by Arthur Hughes, Peter Trudgill and Dominic Watt. This clip features a native speaker who is apparently talking about the aftermath of a surgical procedure and the dressings associated with it. You should be able to hear words like *lay*, *paper*, *anyway* and *day* pronounced more like ‘lie,’ ‘pie-peh,’ ‘any-why,’ and ‘die.’

[CLIP]

Now as I noted earlier, there was a significant migration from the London area to Australia in the 1800s, and this working class London dialect proved to be a heavy influence on the early Australian dialect. So once again, we find this same feature among some Australian speakers. It’s more typical among those who speak with a broad Australian accent.

Of course, you’ll hear it in the well-known Australian greeting ‘g-die’ for ‘good day.’ And sometimes you’ll hear this type of broad Australian accent referred to as ‘strine,’ which is a slurred pronunciation of the word *Australian*.

Now I received a lot of voice samples from Australia, but very few of the speakers had this type of broad accent, so I wasn’t able to capture this sound very well in those samples. However, there was a very well-known person who had that type of accent. It was Steve Irwin, also known as the Crocodile Hunter. Of course, we have lots of surviving audio from him, and his speech routinely featured these types of pronunciations. Here’s a short clip from him where you’ll hear the word *age* pronounced as ‘eye-j’ and *male* – as in the gender male – pronounced as ‘mile.’

[CLIP – <https://www.youtube.com/watch?v=WcXZBfUdDAc>]

So in clips like that we hear a more recent vowel shift that took place in London and then expanded with migration to Australia.

Admittedly, those more recent developments are a bit of a digression. But I wanted to mention them here because they involve the same two vowel sounds that we explored as part of this episode about the Great Vowel Shift, and they point to the fact that the changes associated with the vowel shift were not a one-time occurrence. Vowels have continued to shift ever since, and very often, the more recent changes either mirror or closely resemble the changes that took place

five or six centuries ago. They just tend to be on a smaller scale, limited to a few specific vowel sounds. But all of this provides a lot of evidence for those who argue that the Great Vowel Shift was a natural development within the language, and it points to a tendency for vowels to either raise higher or turn into diphthongs over time.

So we'll stop there for now. We've covered the early developments that took place high in the front part of the mouth. Next time, we'll continue our look at the Great Vowel Shift by focusing on what happened with the lower vowels in the front of the mouth. That part of the story is fascinating because it actually features the merger of some of these shifting vowel sounds as they crashed together. And it helps to explain why words like M-E-E-T and M-E-A-T are pronounced the same way, but spelled differently. And it also explains why S-P-E-A-K is pronounced /spi:k/ ('speak'), but S-T-E-A-K is pronounced /steik/ ('steak'). This part of the story is probably the most complicated part of the Great Vowel Shift, but it's an extremely important part of the story. So next time, we'll explore those changes, and we'll see how those changes are reflected in other accents of Modern English.

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

## EPISODE 142: THE GREAT VOWEL SHIFT - PART 2

Welcome to the History of English Podcast – a podcast about the history of the English language. This is Episode 142: The Great Vowel Shift (Part 2). In this episode, we’re going to continue our look at the Great Vowel Shift. And we’re going to do that by shifting our focus to the lower front part of the mouth. There are several vowel sounds produced in that part of the mouth, and they were all affected by the Great Vowel Shift. These developments are fascinating, and unfortunately, a bit complicated. We’ll begin with the specific changes associated with the vowel shift in the 1400s and 1500s, but the changes didn’t stop there. These vowels kept moving over the following centuries, well into the Modern English period. And as they continued to be raised, they eventually crashed into the other vowel sounds at the top of the mouth. The result was the merger of several different vowel sounds. So there’s a lot to keep track of in this episode, but these developments are very important to the development of Modern English.

Before we begin, let me remind you that the website for the podcast is [historyofenglishpodcast.com](http://historyofenglishpodcast.com). And you can sign up to support the podcast and get bonus episodes and transcripts at [Patreon.com/historyofenglish](https://Patreon.com/historyofenglish).

Now this is part two of our three-part look at the Great Vowel Shift, and my goal over the course of these three episodes is to walk you through the specific changes associated with the vowel shift. But I also want to expand the discussion and show you how these changes not only affected the way words were pronounced, but also the way they were spelled. A good understanding of the Great Vowel Shift actually helps to explain a lot of the craziness associated with English spelling, especially the way the vowels are spelled.

But before we delve into these vowel shifts and changes, let me make a quick note about the vowel sounds that I’m going to be discussing this episode. We’re going to continue our focus vowel sounds pronounced in the front part of the mouth – what linguists call the ‘front vowels.’ In descending order, from highest to lowest, they are /i:/, /e:/, /ɛ:/, /æ/ and /a:/ – and /a:/ is really a low central vowel. A couple of episodes back, I gave you a little mnemonic device to help you keep track of that vowel order. It was ‘Eat aged eggs at Ollie’s.’ The first sound in each of those words represents each of those front vowel sounds from highest to lowest. Last time, we focused on the two highest vowels /i:/ and /e:/, and this time, we’re going to shift our attention down to those lower vowels.

But as it turns out, we don’t really need to spend much time with the /æ/ vowel. That’s the vowel sound we hear in words like *hat* and *map*. We usually spell that sound with letter <A> today, so we sometimes call it the ‘short A’ sound. But that sound didn’t really play much of a role in the Great Vowel Shift. The Great Vowel Shift affected the long vowel sounds, and the /æ/ sound wasn’t commonly pronounced as a long vowel when the Great Vowel Shift got underway. So that vowel sound didn’t play much of a role in what happened. In fact, a lot of discussions about the vowel shift tend to ignore that sound altogether. And that’s what I’m going to do here. Just to keep this discussion as simple as I can, I’m going to reduce those five front vowels down to four – /i:/, /e:/, /ɛ:/, and /a:/. Those are really the key vowel sounds that we need to focus on.

Now as it turns out, linguists call each of those four vowel sounds ‘cardinal vowels,’ and they often assign a specific number to each one. And those numbers are 1, 2, 3 and 4 in that same order. So that high /i:/ sound is sometimes called cardinal vowel number 1. And the next lowest vowel sound /e:/ is sometimes called cardinal vowel number 2. And so on. And the reason why I’m telling you all of that is because I’m going to adopt that same numbering system in this episode. As we go through this episode, there is going to be a lot to keep track of. Some vowels moved up one step to the next highest vowel sound, while others kept moving and ended up with an even higher vowel sound. So the vowels didn’t always limit their movement to just one step. In order to keep track of those changes, I think it will be helpful if I refer to a vowel with both its sound and its cardinal number. That way you can hear the sound and also visualize its position in the mouth relative to the other vowels. So if I say that the /a:/ sound moved up to the /e:/ sound, that might be hard to follow and visualize. But if I say that the /a:/ sound at position number 4 was raised up to the /e:/ sound at position number 2, then that will help you visualize that the change consisted of two steps.

So with that terminology in place, let’s return to the story of the Great Vowel Shift. Last time, we looked at what happened to those two highest front vowels /i:/ and /e:/ – cardinal vowel 1 and 2. We saw that those two vowels came to be pronounced differently in the transition from Middle to Modern English. The /i:/ vowel sound (vowel number 1) shifted inward and began its journey towards our modern diphthong /ai/, and the /e:/ vowel sound (cardinal vowel 2) followed along behind the first vowel and it occupied the open position that was left behind. So words with the /e:/ sound started to be pronounced as /i:/. Again, in terms of numbers, vowel 1 moved out of the way, and vowel 2 slid in behind it and filled the gap.

So what happened then? What happened when words pronounced with the /e:/ sound shifted up to /i:/ – when /tre:/ became *tree*, and /swe:t/ became *sweet*? Well, that movement allowed other vowel sounds to shift in and fill the gap that was left behind when the /e:/ sound moved up. But this is where the story starts to get a bit complicated because it wasn’t just one sound that shifted into that vacant position and came to be pronounced as /e:/. It was actually several different vowel sounds.

Unlike the orderly process that occurred when the higher front vowels shifted, the story of the lower front vowels is different. Those lower vowels shifted and kept moving. And they crashed into each other along the way. So here, we have several examples where different vowel sounds merged together. And that explains why we have so many different ways to spell some of these higher vowel sounds.

That explains why the highest /i:/ sound can be spelled with its traditional letter <I> as in *elite* and *police*, or with an <E> or <EE> as in *be* and *tree*, or with an <EA> as in *heat* or *speak*. Those spellings represent different sounds that merged together at the top of the mouth.

Similarly, this process also explains why the second highest front vowel /e:/ can also be spelled several different ways. It can be spelled with its traditional letter <E> as in *café* and *resume*, or with the letter <A> as in *tape* and *cake*, or with an <EA> as in *break* and *great*, or with an <AY> or <AI> as in *day* and *wait*, or with an <EY> or <EI> as in *they* and the number *eight*.

All those spellings may seem completely random today, but they actually reveal the phonetic history of those words. And they tell us that many different vowel sounds have merged together since the late Middle English period.

Some people compare these vowel changes to a game of musical chairs where a group of people move in a circle around a group of chairs, and try to grab a seat when the music stops. Well, if we think of the movement of these front vowels as a game of musical chairs, we had a situation where everybody initially moved over one seat, but then a couple of people got up and moved over one more seat and sat in the lap of the person beside them. So a couple of the players ended up sharing chairs with other players. And that's what happened with these lower front vowels during and after the Great Vowel Shift. They were initially raised up one step, but then they were raised for a second time and crashed into the vowels at the top of the mouth. That created a lot of confusion and a lot of vowel mergers.

Since this topic can be a dry and technical, I'm going to break the discussion down into three parts. That will allow us to deal with each of the specific vowel sounds that shifted through this process and shaped the language we have today.

[MUSIC BREAK]

Now I'm going to plow forward with the analogy of the Great Vowel Shift to a game of musical chairs gone wrong. We basically have four seats to keep track of. In other words, we have the four vowel sounds pronounced in the front part of the mouth that I described earlier – /i:/, /e:/, /ɛ:/, and /a:/.

We now know that the two highest sounds – vowel number 1 and number 2 – moved out of the way very early on, leaving the number 2 chair empty. In linguistic terms, that's the /e:/ sound. So the /e:/ sound was left vacant. Well in a game of musical chairs, the next player in line would move over to that vacant seat, and initially that's what happened here with the Great Vowel Shift. The next vowel sound underneath the /e:/ sound is the /ɛ:/ sound (cardinal vowel number 3). Remember 'eat aged eggs' in descending order. And that /ɛ:/ sound simply slid up and filled that vacant spot above it.

So Middle English /grɛ:t/ became Modern English *great*. And Middle English /brɛ:k/ became Modern English *break*. And Middle English /stɛ:k/ became Modern English *steak*. Once again, we see an orderly process at work. As each vowel sound shifted upward one step, the next lowest vowel moved up to fill the gap that was left behind. That's why this process is sometimes called a chain shift. A series of vowels moved together in unison. As we'll see in a moment, that orderly process was about to become very disorderly, but before we go there, let's focus on this /ɛ:/ sound that shifted up to /e:/ in the early stages of the Great Vowel Shift.

Again, this /ɛ:/ sound is Cardinal Vowel number 3, the sound that we hear today in words like *egg, bet, set, dress, wedge, neck, mess, head, ready*, and so on. So it's a very common vowel sound in Modern English, but there's something very important about the way that sound is used today. In Modern English, that /ɛ:/ sound is almost always pronounced short and quickly. In fact,

we normally refer to that sound as the ‘short E’ sound because it’s the short sound of letter E. And that’s why we use letter E to spell words like *egg*, *bet*, *set*, *dress*, and so on.

But in Middle English, this /ɛ:/ vowel sound could be pronounced as either a short vowel or a long vowel, so as either /ɛ/ or /ɛ:/. But since we don’t generally use that long sound today, what happened to it? Well, remember that the Great Vowel Shift only affected the long vowel sounds, not the short vowel sounds. So the short version of this sound remained in place and didn’t really change. It’s still there just like it was in Middle English. But the long version of the sound moved up from /ɛ:/ to /e:/ – from position 3 up to position 2. And when that /ɛ:/ sound shifted up to /e:/, that meant that the original long /ɛ:/ sound was no longer being used. As we’ll see a little later in the episode, some other vowels sounds did move into that vacant position for a while, but then they kept moving. And when all was said and done, that long /ɛ:/ sound was left vacant all the way up to today. And that’s why we have very few, if any, words that are pronounced with that long sound today in most standard dialects .

But if we were to go back to the time of Chaucer, we would have heard that long /ɛ:/ sound a lot. And it was typically spelled with letter <E> or <EE>. You may recall from the last episode that the same letter <E> or <EE> was also used to spell words that were pronounced with that slightly higher sound /e:/. Those two vowel sounds are cardinal vowels 2 and 3 – /e:/ and /ɛ:/, respectively. And again, they were often spelled the same way. That was probably because scribes just considered them to be slight variations of the same vowel sound. One was pronounced a little higher, and one was pronounced a little lower.

But in the 1400s and 1500s, scribes and printers started to represent this lower /ɛ:/ sound (vowel number 3) with the letter combination <EA>. It isn’t entirely clear why they chose <EA> for this sound, but it may have been because the vowel sound above it was traditionally spelled with an E, and the vowel sound below it (/a:/) was traditionally spelled with an A. So for this in-between sound, they just put those two letters together. Visually, that suggested a sound in between those other two sounds. And thanks to that innovation, it became common to spell this long /ɛ:/ sound with <EA>.

Now I noted a moment ago that this long /ɛ:/ sound shifted up to /e:/ during the 1400s and 1500s as part of the Great Vowel Shift. So it moved up one position from cardinal vowel 3 to cardinal 2. But that change didn’t apply to every word with this /ɛ:/ sound. There was actually a split. The vowel was raised in some of them as part of the Great Vowel Shift, but in others, the vowel did something a little different. It actually remained in the same position, but it was shortened. So it went from a long vowel to a short vowel in those words. So long /ɛ:/ became short /ɛ/. And those words continued to be spelled with the letters <EA>. That’s what happened with words like *breath*, *death*, *head*, *bread*, *dead*, *spread*, *deaf*, *sweat* and *threat*. Notice that all of those words are still spelled with <EA>, and notice that they all still have that /ɛ:/ sound, but the sound is pronounced short today. Again, that’s the same ‘short E’ sound that we have in words like *bed* and *set* and *pet*. So this so-called ‘short E’ sound can be spelled both ways today. We can use the simple letter E or the letter combination <EA>. We have the verb *bred* (‘b-r-e-d.’) – the past tense of *breed*, and we have the noun *bread* (‘b-r-e-a-d.’). Again, at one time, the length of those vowels would have been different – /brɛd/ and /brɛ:d/, respectively. But today, they both have the

same short vowel sound, even though they have different spellings which reflect their older pronunciations.

So again, in some of these words, the long /ɛ:/ sound was shortened and preserved. But in all the other words where the vowel continued to be pronounced long, the vowel shifted up during the Great Vowel Shift from /ɛ:/ to /e:/ – from vowel position 3 to 2. Again the Great Vowel Shift only affected the long vowel sounds. So Middle English /grɛ:t/ became Modern English *great*. And Middle English /brɛ:k/ became Modern English *break*. And Middle English /stɛ:k/ became Modern English *steak*. And that's why the <EA> spelling is still sometimes used for that /e:/ sound.

But this is where our orderly game of musical chairs started to break down because even though this /ɛ:/ vowel sound shifted up one step from 3 to 2, it wasn't done shifting. For some reason, and it isn't entirely clear why, the vowel sound shifted up again a couple of centuries later from position 2 up to position 1. So the sound went from /ɛ:/ to /e:/ during the Great Vowel Shift, and then it went from /e:/ up to /i:/ in the 1600s and 1700s. Using our musical chairs analogy, this sound moved over and sat in the empty chair next to it for a while, but for some reason it wasn't happy with that chair, so it moved over again and sat in the lap of the next person over. So it moved two steps instead of one.

As a result, when these <EA> words took that second step up to the /i:/ sound (cardinal vowel number 1), these words crashed into and merged with the words that were already being pronounced with that same /i:/ sound. And that's why most of the words spelled with <EA> today are pronounced with that highest /i:/ sound in the first position. That includes words like *leaf, east, seat, read, heat, wreath, meal, speak, clean*, and so on. All of those were originally pronounced with /ɛ:/, that then shifted up to /e:/, and then shifted again up to /i:/.

That also explains why we have a lot of homonyms that share this sound. One version is spelled with <EE> and represents the first set of words to adopt that sound during the Great Vowel Shift. And the other version is spelled with <EA> and represents this second set of words that moved up into that position a couple of centuries after the Great Vowel Shift.

So we have homonyms like *meet* and *meat* ('m-e-e-t' and 'm-e-a-t'), and *week* and *weak* ('w-e-e-k' and 'w-e-a-k'), and *beet* and *beat* ('b-e-e-t' and 'b-e-a-t'), and *see* and *sea* ('s-e-e' and 's-e-a'), and *tee* and *tea* ('t-e-e' and 't-e-a'). These word pairs were once pronounced differently, but the vowels crashed together and merged through the process I just described.

So let me give you an example to illustrate how this process affected the pronunciation of words over time. Prior to the Great Vowel Shift, a period of seven days was called a /wɛ:k/ using cardinal vowel 2. And the opposite of *strong* was /wɛ:k/ using cardinal vowel number 3. Geoffrey Chaucer lived before the vowel shift. So if Chaucer had been feeling sickly and frail for seven days, he might have said that he felt 'wɛ:k/ all wɛ:k/.' He would have used the vowels in position 3 and 2. But then those two vowels each shifted up one step during the Great Vowel Shift to positions 2 and 1. And by the early 1600s, William Shakespeare would have used those newer pronunciations. He would have said that he felt 'wɛ:k/ all *week*.' But then, shortly after

the death of Shakespeare, that lower vowel shifted up again from position 2 to 1, and that meant that those two distinct vowel sounds merged together. And as a result, today we would say that we felt ‘*weak* all *week*.’ The spellings are still distinct, but the sounds have merged. And if you followed that example, you can see hear how the vowels remained distinct even as they shifted around. That’s the way a chain shift works. But eventually, due to that later vowel change, the pronunciation of those words did actually crash together. And that’s how we ended up with those homonyms *week* and *weak*, *meet* and *meat*, *see* and *sea*, and so on.

Now I should note that the merger of those sounds occurred in southern England where standard English emerged, and from there, it spread to North America and most of the English-speaking world. But scholars who study regional accents will note that those sounds didn’t fully merge in some places, like in some parts of the north of England. They will note that some speakers still pronounce words like ‘m-e-e-t’ and ‘m-e-a-t’ with slightly different vowel sounds. To other speakers, the vowels may sound the same, but scholars do detect some slight differences in some speakers. But again, those regional differences have eroded over time and will probably continue to do so.

So just to summarize where we are so you can keep track of these changes, that lower long /ɛ:/ sound (cardinal vowel 3) came to be spelled <EA> in late Middle English. In some of those words, the vowel was shortened, as in *bread*, and *head*, and *sweat*. But in most of those words, the vowel remained long and was raised up to /e:/ during the Great Vowel Shift, and then a couple of centuries later, it shifted up again to /i:/. Thus, we went from /wɛ:k/ to /we:k/ to *weak* (‘w-e-a-k’). Again, the <EA> spelling in those words generally indicates that those words experienced that change.

But, there were a handful of exceptions to the process I just described. For some reason, and again it isn’t entirely clear why, there were a few words that experienced the first shift, but got stuck there, and did not experience the second shift. In other words, they shifted from /ɛ:/ to /e:/ during the Great Vowel Shift, and they did not shift up again from /e:/ to /i:/. And I actually mentioned most of those exceptions earlier in the episode. They were the words *great*, *break*, *steak* and *yea* (‘y-e-a’). Again, they all have the <EA> spelling, and they all experienced that first sound shift. /grɛ:t/ became *great*. /brɛ:k/ became *break*. /stɛ:k/ became *steak*. /yɛ:/ became *yea*. But they didn’t move up to /i:/ when those other words shifted up. So *great* never became /gri:t/, and *break* never became /bri:k/, and so on. And that’s why we sometimes use that <EA> spelling for this other vowel sound /e:/. It mainly occurs in this small handful of words that got stuck in that middle vowel position and never moved up with the others.

Now you may be wondering why scholars are so sure that the vowels changed in the way I just described. Well, part of the answer is that writers during the 1600s and 1700s actually wrote about the pronunciation of words at the time, and that evidence allows scholars to trace these changes. The vowel sound in some of those <EA> words was still in flux at the time, and some writers commented about that pronunciation. For example, in the late 1700s, the great writer and dictionary-maker Samuel Johnson wrote that the word *great* was in flux between those highest two vowel sounds. He wrote that the word could be pronounced with either the lower /e:/ sound or the higher /i:/ sound. So his comment suggests that some speakers had raised that vowel sound

up from /gre:t/ to /gri:t/, but for some reason, that higher pronunciation never stuck. In the passage where he made that comment, he referenced the man who was considered to be the best speaker in the House of Lords – Lord Chesterfield – and the man who was considered to be the best speaker in the House of Commons – Sir William Yonge. They apparently disagreed on the proper pronunciation of the word. Johnson’s biographer attributes the following quote to Johnson:

“When I published the Plan for my Dictionary, Lord Chesterfield told me that the word ‘great’ should be pronounced so as to rhyme to ‘state;’ and Sir William Yonge sent me word that it should be pronounced as to rhyme to ‘seat,’ and that none but an Irishman would pronounce it ‘grait.’ Now here were two men of the highest rank, the one, the best speaker in the House of Lords, the other, the best speaker in the House of Commons, differing entirely.” [SOURCE: ‘A History of English Phonology,’ Charles Jones, p. 286]

So even as recently as the late 1700s, there was still some disagreement as to whether *great* should join all of those other words where the vowel had been raised up to /i:/, or whether it should retain its older /e:/ sound which it had acquired during the Great Vowel Shift. Of course, it was one of those small handful of words, along with *break*, *steak* and *yea*, that retained the older pronunciation.

One of the interesting things about that quote is that Johnson says “none but an Irishman would pronounce it ‘grait’.” So what was that all about? Well, in Ireland, almost all of these <EA> words retained that older /e:/ sound. They didn’t experience that second shift up to /i:/. So words like *heat*, *tea* and *leaf* were pronounced as /he:t/, /te:/ and /le:f/. And that’s why Johnson said that the pronunciation of ‘g-r-e-a-t’ as *great* sounded like an Irish pronunciation.

Now I should note that in most modern Irish accents, the vowel sound in those words has since shifted up to the /i:/ sound, but it is still possible to hear that older pronunciation in some places in Ireland, especially in some rural dialects. But I make that note about that older Irish pronunciation because there are several common Irish names that have that <EA> spelling, and are still pronounced with that older /e:/ sound. So these names are also exceptions where the <EA> spelling is still pronounced as /e:/. These Irish names include *Shea* (‘s-h-e-a’), *Beatty* (‘b-e-a-t-t-y’), *Yeats* (‘y-e-a-t-s’), *Seamus* (‘s-e-a-m-u-s’) and *Reagan* (r-e-a-g-a-n). There are probably a few others, but those are some of the most common ones. Since those names were common in Ireland, and since they were pronounced with that /e:/ sound in Ireland for many centuries after the Great Vowel Shift, they have tended to retain their older pronunciations.

Interestingly, if you are old enough to remember the Ronald Reagan administration back in the 1980s, you might remember that Donald Regan was his Treasury Secretary and then later Chief of Staff. It was very easy to confuse those two names – Ronald Reagan and Donald Regan. *Reagan* and *Regan* are actually variations of the same Irish surname. *Reagan* reflects an older, more traditional pronunciation with the vowel in position number 2 – like in *break* and *steak*, and *Regan* reflects a more modern pronunciation with the vowel shifted up to position number 1 – as in *seat* and *leaf*. The pronunciation of those two names reflects the evolution of this vowel sound over time.

OK, so I just traced out the history of the /ɛ:/ sound (cardinal vowel number 3). When that long vowel sound shifted upward, it left that long /ɛ:/ sound vacant down in position number 3. So now let's look at what happened to that vacant sound. We might assume that the vowel sound underneath it at position number 4 would have then moved up and filled the gap that was left behind. And that is indeed what happened. So that's the next major vowel change which we'll explore in the next part of the episode.

[MUSIC BREAK]

So far, over the course of these last two episodes, we've examined the movement of the three highest front vowels – /i:/, /e:/, and /ɛ:/. Those are cardinal vowels 1, 2 and 3. We now need to turn our attention to cardinal vowel number 4 – the /a:/ sound. This sound is the lowest vowel we've looked at so far. Technically speaking, it isn't really a front vowel. It's more of a low central vowel. And as I've noted before, there are actually a few different versions of the low /a:/ sound. Some are pronounced a little more forward, and some are pronounced a little more toward the back of the mouth. Those distinctions are important to scholars who study vowels in detail, and to actors and actresses who try to master a particular accent for a role. But those differences are not really important to a discussion about the Great Vowel Shift, so I'm not going to focus on them here.

As I've noted in earlier episodes, the /a:/ sound was traditionally spelled with letter <A>. And we still have words in English where the letter <A> represents that sound – words like *father*, and *what*, and *swan*, and *watch*. It's still the normal sound of letter <A> in continental Europe, so we also use the letter <A> for that /a:/ sound in some recent loanwords, like *waffle*, *taco*, *avocado*, *regatta*, *bazaar*, and some pronunciations of *pasta* and *garage*. So that's the traditional sound of letter <A>. But in Modern English, it's much more common to use the letter <A> for the /e:/ sound – in words like *age*, *late*, *trade*, *page*, *taste* and so on. That's the so-called 'long' sound of letter <A> today. And it's also why we call that letter 'A' – and not 'ah.'

So how did the letter <A> come to represent that /e:/ sound within English? Well, of course, the answer is the Great Vowel Shift. But notice that the original sound /a:/ is cardinal vowel number 4 in the bottom part of the mouth. But the modern sound /e:/ is cardinal vowel number 2 in the upper part of the mouth. So this sound didn't just move up one step, it actually moved up two steps. And in doing so, it mimicked and followed the vowel change that we looked at previously. There was an initial move during the Great Vowel Shift, and then there was a second move a couple of centuries later.

So let's look at how that vowel changed, and let's begin with the initial change that occurred during the Great Vowel Shift. Initially, the vowel was raised from /a:/ up one step to /ɛ:/, so from vowel position number 4 up to position number 3. This happened presumably to fill the gap that was left behind when the /ɛ:/ sound moved up as I described in the previous section. So this was the standard chain shift that we expect to see when we're looking at the Great Vowel Shift. To illustrate this change, let's consider the word *name*. In Middle English, it was pronounced /na:m/. But during the 1500s, the vowel shifted up one step and became /nɛ:m/. And

similarly, the word *take* began as /ta:k/, but again, during this first stage, the pronunciation shifted up to /tɛ:k/.

All of that is exactly what we would expect to happen during the Great Vowel Shift. The vowel above it moved up, and then this vowel shifted up to fill the gap that was left behind.

But as we saw in the prior section, that vowel above it kept moving. It shifted again a couple of centuries later. That vowel moved from position 3 to 2 to 1 – from /ɛ:/ to /e:/ to /i:/. Those were the words typically spelled <EA>. Well, this lower vowel moved right behind the higher vowel. It moved from position 4 to 3 to 2 – from /a:/ to /ɛ:/ to /e:/. Again, it tracked right behind the vowel above of it.

So /na:m/ was raised to /nɛ:m/ during the Great Vowel Shift, and then a couple of centuries later, it was raised again to *name*. And similarly, /ta:k/ moved up to /tɛ:k/ during the Great Vowel Shift, and then later, it moved up to *take*. And that's how Middle English /a:/ became Modern English /e:/. And that's also why the letter A is used for the /e:/ sound in English, whereas it tends to be used for its original /a:/ sound in other languages.

This process also helps to explain why we have some words in English that are pronounced with both the older /a:/ sound and the modern /e:/ sound. Sometimes the difference varies by region, sometimes not.

Consider the common religious term *amen* (/a:men/) or *amen* (/e:men/). It was a word borrowed into English during the Old English period. It was originally /a:men/, but it went through the Great Vowel Shift, and became /e:men/. But it continued to be pronounced as (/a:men/) in many church services, hymns and other religious songs where the language tended to be a bit more conservative. So the old pronunciation as /a:men/ never completely disappeared. And today, both pronunciations can be found in English.

It also appears that some words experienced the vowel shift from /a:/ to /e:/, but then in some places, the vowel shifted back down to /a:/. Maybe the original pronunciation never completely disappeared, and it gradually regained favor. That may have been what happened with the word *vase* (/ve:s/) or *vase* (/va:z/). The word was borrowed from French in the 1500s, presumably as /va:s/. The vowel was eventually raised to /ve:s/, which is confirmed by its use in poetry where it was used to rhyme with words like *face*, *grace*, *chase* and *case*. That pronunciation was largely retained in American English, but in Britain, the vowel tended to shift back down to /a:/ so that /va:z/ became common there. That pronunciation also filtered into North America, and it can also be found in the US and Canada today. But for some reason, the vowel in that word has never completely settled down.

That reversion back to /a:/ has also occurred in some other words. For example, believe it or not, the word *armada* was once pronounced /ar-MAY-da/. It was borrowed from the Romance languages in the early 1500s, and it experienced the gradual shift from /ar-MAH-da/ to /ar-MAY-da/. That pronunciation was still listed as the accepted pronunciation in dictionaries as recently as the late 1800s. It was around that time that some dictionaries started to list /ar-MAH-da/ as an

alternate pronunciation. And by the mid-1900s, /ar-MAH-da/ had become the standard pronunciation again. So that's another word where the vowel reverted back to its original sound.

So does that process explain the differing pronunciations of *tomato* (/to-MAY-to/) and *tomato* (/to-MAH-to/)? Well, apparently not. I've actually come across differing explanations for the evolution of that word. The fruit itself is native to the Americas, and its name is ultimately derived from a Native American word. That word was borrowed into Spanish, and then passed into English in the late 1600s. According to the Oxford English Dictionary, the word came in too late to be affected by the Great Vowel Shift, so it was pronounced /to-MAH-to/ early on. But during the 1700s and early 1800s, the vowel began to shift upward to /e:/, mimicking the change that occurred earlier during the Great Vowel Shift. The pronunciation as /to-MAY-to/ is recorded alongside /to-MAH-to/ in dictionaries in both Britain and the United States. But over time, the older pronunciation as /to-MAH-to/ was largely retained in Britain, while the newer pronunciation as /to-MAY-to/ became more common in the US. But whichever way you pronounce it, we can see that there is a close historical connection between the /a:/ and /e:/ sounds in English.

Now when the /a:/ vowel shifted up to /e:/ in the 1600s and 1700s, it gave English a lot of new words pronounced with the /e:/ sound. Again, it gave us the modern long sound of letter A. But English also had that sound in that small handful of words spelled with <EA> – *great, steak, break* and *yea*. Those were the <EA> words that got stuck on that /e:/ sound when the other <EA> words shifted up to /i:/.

So for this /e:/ sound, we have that small group of words spelled with <EA> – *great, steak, break* and *yea*, and now we can add in this second group of words spelled with letter A – like *late, age, make, same*, and so on. That means that we now had two different ways of spelling that sound – <EA> and <A>.

And we're now ready to add in a third group of words with that same sound. These words crashed the party because they also experienced a vowel shift which caused them to be pronounced as /e:/. And these new additions gave English even more ways to spell and represent that sound in English. So in the last part of this episode, we'll explore this final development that affected the front vowels in standard English.

[MUSIC BREAK]

Now so far, we've examined the specific vowel changes that occurred in the front part of the mouth during the Great Vowel Shift. I've compared those changes to a game of musical chairs where each player moved to the next seat over or in the next seat up. But then, the bottom two players got up out of their seat and moved over again and sat in the lap of the player next to them. So that left two players with someone sitting in their lap. And again, that's what happened with these vowels. We now have two different sets of words sharing the high vowel sound /i:/, and two different sets of words sharing the slightly lower vowel sound /e:/.

But there was one more set of words that was about to crash the party – or crash the game of musical chairs. This set of words was a new player in the game, and it just came in and sat in a seat already occupied by two other players. These words had a completely different vowel sound at one time, but now the vowel in these words shifted to the /e:/ sound. That’s our cardinal vowel number 2.

We’ve already seen that this sound was used in those words spelled with <A> like *name* and *take*, and in that handful of words spelled with <EA> like *great* and *steak*. And now, a completely different set of words adopted that same sound. These were words that were normally spelled with <AI> or <AY> or <EI> or <EY>.

As those spellings suggest, these words didn’t have a pure vowel sound. They had a diphthong – two different vowels pushed together. And despite the various spellings, they were all probably pronounced something like /æi/.

We’ve actually examined this sound – and these words – before. A few episodes back, we looked at the poem *Sir Gawain and the Green Knight*, and I noted that the name *Gawain* has several different pronunciations in Modern English. But in late Middle English, it is thought that the <AI> spelling generally represented this /æi/ sound.

In that episode, I noted that Old English had the spellings <AI> and <EI>. It is thought that the <AI> spelling represented the /ai/ sound, and the <EI> spelling represented the /ei/ sound. But by the time of Chaucer, words with those distinct spellings were routinely being rhymed with each other. So it is thought that the two vowel sounds merged and met in the middle – as something like /æi/. Also, by that time, the old sound differences between letters I and Y had largely disappeared. So <AI> and <AY> and <EI> and <EY> were all being used to represent this same sound – /æi/.

But then, in the 1500s and 1600s, at the very end of the main phase of the Great Vowel Shift, this separate group of words started to be pronounced differently. The vowel sound fell in line right behind the vowel sound that we looked at in the previous section. So just as /a:/ moved up to /ɛ:/ and then to /e:/, these other words also came to be pronounced /ɛ:/ and then /e:/. So the vowels in these separate sets of words merged together. And that’s how these words spelled either <AY> or <AI>, or <EY> or <EI>, came to be pronounced with the /e:/ sound. That includes <AY> words like *day* and *way*, and <AI> words like *wait* and *faith*, and <EY> words like *they* and *obey*, and <EI> words like *weigh* (‘w-e-i-g-h’) and the number *eight*.

All of those words acquired the same vowel sound as those words spelled with letter <A> like *name* and *make* and *case*. And also the same vowel sound as that handful of words spelled with <EA> like *great* and *steak*. All of those words now shared the same /e:/ sound.

This process created a lot of new homonyms in English – words that sounded alike – like *tale* and *tail* (‘t-a-l-e’ and ‘t-a-i-l’), and *vane* and *vain* (‘v-a-n-e’ and ‘v-a-i-n’), and *wave* and *waive* (‘w-a-v-e’ and ‘w-a-i-v-e’), and *made* and *maid* (‘m-a-d-e’ and ‘m-a-i-d’).

So between those developments where all of those words acquired the same /e:/ sound, and the developments we looked at earlier where two separate sets of words acquired the /i:/ sound, we ended up with this log jam in the upper front part of the mouth in Modern English. We have lots of words sharing the same two vowel sounds today. Or in terms of musical chairs, we have a lot of people sitting in each other's laps in the same two chairs.

And I think that's the important thing to take from this episode. What began as a somewhat orderly chain shift in the 1400s and 1500s eventually turned into a bottleneck as the lower vowel sounds kept moving and crashed into each other in the top part of the mouth.

And that explains why we have so many different words today that share these two highest front vowels – /i:/ and /e:/. Those words are spelled in a variety of different ways, and those spellings help us to trace the phonetic history of those words.

Of course, we should keep in mind that a particular spelling doesn't necessarily prove anything. These general rules don't apply to every word. Spellings were still variable until the 1600s and 1700s, and some words acquired new spellings over time. But it is also true that our modern spellings aren't as random as they might seem. They generally reflect the way words were pronounced before the Great Vowel Shift. So those spellings contain a lot of hidden information.

Next time, we'll conclude our look at the Great Vowel Shift by moving our focus to the back vowels. As we'll see, there were some parallels between the developments in the back of the mouth and those in the front of the mouth, but there were also some important differences. So we'll trace out those changes, and once again, we'll explore how those changes impacted the way those words are spelled today.

So until next time, thanks for listening to the History of English Podcast.

## EPISODE 143: THE GREAT VOWEL SHIFT (PART 3)

Welcome to the History of English Podcast – a podcast about the history of the English language. This is Episode 143: The Great Vowel Shift (Part 3). In this episode, we’re going to conclude our look at the Great Vowel Shift. We’ll do that by focusing our attention on the vowels pronounced in the back part of the mouth. The vowel changes that we know today as the ‘Great Vowel Shift’ affected all of the long vowel sounds, including the back vowels. Those vowels also experienced a chain shift whereby a series of vowel sounds moved in unison. Those changes caused many words to be pronounced in new ways, but the spellings tended to stay the same. As a result, this process contributed to the modern disconnect between the way words are pronounced and the way they are spelled. So this time, we’ll explore the impact of the Great Vowel Shift on the vowels pronounced in the back part of the mouth, and we’ll see how those changes shaped the way many words are spelled today.

Before we begin, let me remind you that the website for the podcast is [historyofenglishpodcast.com](http://historyofenglishpodcast.com). And you can sign up to support the podcast and get bonus episodes and transcripts at [Patreon.com/historyofenglish](https://Patreon.com/historyofenglish).

Now let’s turn our attention to the vowels pronounced in the back part of the mouth. As we’ve seen before, the various vowel sounds are produced by slightly altering the way the tongue is shaped in the open cavity of the mouth when we speak. Those various shapes are what linguists use to distinguish the different vowel sounds, and sometimes, to group those sounds together. One way that linguists distinguish vowel sounds is to differentiate between those produced in the front of the mouth – the so-called front vowels – and those produced in the back part of the mouth – the so-called back vowels.

A few episodes back, I gave you a mnemonic to help you keep track of where those vowel sounds are pronounced in the mouth. The order followed a circular motion, beginning with the highest front vowel, then working its way downward to the bottom part of the mouth, and then working its way back upward in the back part of the mouth. That mnemonic was ‘Eat Aged Eggs At Ollie’s Awesome Old Uber.’ The first sound in each of those words represents each of the major long vowel sounds used in English in the order I just described. Over the prior two episodes, we focused on those first few vowels – the front vowels. Now, we’re going to focus on the last few vowels in that mnemonic – those pronounced in the back of the mouth. Those are the sounds represented by the phrase ‘Ollie’s Awesome Old Uber’ – /a:/ - /ɔ:/ – /o:/ and /u:/. If you pronounce those four sounds in that order, you’ll feel the movement from /a:/ in the lower part of the mouth up to /u:/ in the highest back part of the mouth. During the Great Vowel Shift, these four vowel sounds in the back of the mouth were raised in a way that mirrored what happened in the front part of the mouth.

Now as I’ve noted before, there is no universal agreement about the order in which the vowels shifted around – either in the front or the back of the mouth. Many linguists think the highest vowel sounds moved out of the way first, and that allowed the vowel sounds underneath to move up and fill the gaps left behind. That’s the view I presented in the prior episodes, and since the back vowels moved in a parallel manner, that’s the view I’ll present here as well.

As we go through these changes, there are really three major developments to keep track of – the shift of the high /u:/ sound, the shift of the slightly lower /o:/ sound, and the shift of lowest /ɔ:/ and /a:/ sounds. So just like last time, I’m going to divide this episode into three parts, and we’ll deal with each of those developments separately.

We’ll begin with the changes that affected the highest long vowel sound produced in the back of the mouth – the /u:/ sound.

[MUSIC BREAK]

As we’ve explored the Great Vowel Shift, there has been one recurring theme – the raising of the various vowel sounds over time. Generally speaking, the vowel sounds pronounced in the front and back of the mouth were raised up one step during the 1400s and 1500s, and some of them were raised another step in the following centuries. That’s why the changes in the front and back of the mouth were parallel developments, rather than a larger circular movement involving all of the vowels.

And I think that is a common misunderstanding about the Great Vowel Shift, and it may be where the analogy to a game of musical chairs creates some confusion. Some people mistakenly think that all of the vowel sounds in the mouth shifted around together in a clockwise or counter-clockwise motion, so as the front vowels moved up, the back vowels must have moved down to fill the gaps as part of a larger circular motion. But again, that’s not what happened. There were actually two separate, but parallel movements. The front vowels moved up in a chain shift, and the back vowels also moved up in a separate chain shift. Even though they were distinct from each other, the two sets of changes were very similar since they happened in basically the same order at roughly the same time. And that’s why they are thought to be part of the same larger process that affected all of the long vowels.

When we looked at the changes that affected the front vowels, we saw that the highest front vowel apparently moved first. And the same thing happened in the back of the mouth. Again, there isn’t universal agreement about that, but there is a lot of evidence to support that view. That highest front vowel was pronounced /i:/. You can’t really make a higher vowel sound in the front of the mouth. So it couldn’t shift up any higher. Instead, that sound fundamentally changed. It became a diphthong. What happened is that it started to acquire a slight /ə/ sound at the front. So instead of /i:/, people started to say /ə-i/. That /ə/ sound is the sound known as ‘schwa,’ and it’s pronounced in the central part of the mouth. So this change really represented a movement of the vowel sound from the top front part of the mouth to the central part of the mouth. This change happened very early on the 1400s, if not before. Then over time, that initial sound shifted even lower in the mouth from /ə/ to /a/. So the vowel shifted from /əi/ to /ai/, and that gave us our modern /ai/ sound.

Well, the exact same thing happened to the high /u:/ sound in the back of the mouth. Again, it was a parallel development. So at the same time that highest front vowel acquired a slight /ə/ sound at the front, the highest back vowel also acquired the same sound at the front. And when

the diphthong was lowered in the front, the same thing happened in the back. So let me illustrate that change for you.

Again, that highest back vowel is the /u:/ sound. In the 1400s, if not earlier, the /u:/ sound started to be pronounced with that same /ə/ sound at the front. So it shifted from /u:/ to /ə-u/ – or /əu/ when pronounced quickly. So words that had previously been pronounced with the /u:/ sound in Middle English started to be pronounced with an /əu/ sound in early Modern English around the time of Shakespeare. But again, just like with the front vowel, there was an additional change a couple of centuries later. That initial sound in the diphthong dropped even lower. It went from /ə/ to /a/, and the diphthong shifted from /əu/ to /a-u/ – or /au/ when pronounced quickly. So again, the evolution of this highest back vowel over time was /u:/ to /əu/ to /au/. And this development is almost identical to what happened with highest front vowel. The sound went from a high pure vowel, to a centralized diphthong, to a lower diphthong.

This type of parallel development is what allowed early linguists like Otto Jespersen to conclude that the changes to the front and back vowels were part of the same general process that impacted all of the long vowel sounds. When all of those pieces were put together, it became apparent that all of these seemingly independent vowel changes were actually part of a larger connected process. And that's why Jespersen called all of these various changes the 'Great Vowel Shift.'

One of the interesting things about the evolution of this /u:/ sound over time is the way it impacted English spelling. So let's consider how this sound was traditionally spelled before the Great Vowel Shift. This /u:/ sound is considered a long sound of the letter <U> today. And traditionally, the letter U was used to represent that sound. In Old English, the word *house* was *hus* – spelled 'h-u-s.' And the word *mouse* was *mus* – spelled 'm-u-s.' Those pronunciations continued into the Middle English period before the Great Vowel Shift took place. So Geoffrey Chaucer would have pronounced those words the same way with that same /u:/ vowel sound. But the spelling of those words had started to change by that time. Instead of spelling that sound with the traditional letter <U>, many writers were spelling it a new way with the letter combination <OU>. So in the Canterbury Tales, we find the word *house* spelled 'h-o-u-s' and the word *mouse* spelled 'm-o-u-s.' There was no 'E' at the end like today, but otherwise, those words had acquired much of their modern spelling by that time. So where did that <OU> spelling come from?

Well, it actually came from French. French often spelled the /u:/ sound with the letters <OU>. And it still does that today. Think about the French word *vous* which means 'you.' It's spelled 'v-o-u-s.' And the French word *nous* means 'we.' It's spelled 'n-o-u-s.' As we know, Middle English scribes were heavily influenced by French, so they adopted that French spelling as well. But why did they borrow that spelling, and why did French use that spelling in the first place?

Well, the answer to those questions has to do with certain problems associated with the letter <U> in the Middle Ages. I've actually touched on some of these issues in prior episodes. First of all, in the common handwriting script of the Middle Ages, letters were written in a flowing style where one letter flowed into the next much like modern cursive writing. That created a problem for certain letters like the letter <U>. That letter tended get lost in that handwriting style, and it

made the words difficult to read. The letter <U> consisted of two up-and-down strokes. But when the letter <U> appeared beside an <I>, or another <U>, or a <W>, or an <M>, or <N> or <L>, what you ended up with was a series of up-and-down strokes, and it was difficult to determine where one letter ended and another letter began. So in those situations, scribes looked for ways to make the letter <U> stand out. But that wasn't the only problem associated with letter <U>.

Another problem was the fact that the letters <U>, <V> and <W> had not become distinct letters yet. The same symbol was used to represent all of the sounds we associate with those letters today. And that tended to create further confusion.

Another related problem had to do with the way scribes often indicated a long vowel sound. They would simply double the vowel letter like the way we often double the letter <E> for the /i:/ sound today. But you couldn't really do that with a <U> because some scribes were already using a 'double U' to represent the /w/ sound. And of course, that spelling eventually gave us the distinct letter that we call <W> ('double U') today. So a literal 'double U' – U-U – only created more confusion. It wasn't clear if it represented the long /u:/ sound or the /w/ sound.

These problems affected scribes throughout western Europe, not just in England. Most all of them were using similar scripts. And they all struggled with the best way to represent this /u:/ sound in a way that was clear and not confusing. French scribes eventually came up with a solution. They just adopted the spelling <OU> for that sound. English scribes then adopted that same practice from French. So by the time of late Middle English, we have words like *hus* and *mus* being spelled with an <OU> rather than their more traditional single letter <U>.

But then, in the 1400s, if not before, the /u:/ sound started to shift as part of the Great Vowel Shift. As I described earlier, it became a diphthong pronounced as /əu/. So *hus* became /həus/, and *mus* became /məus/. And then, a couple of centuries after that, the vowel shifted again. The sound shifted from /əu/ to /au/. Thus, /həus/ became *house*, and /məus/ became *mouse*. Those words also acquired a silent E at the end when they were spelled, and that gave us the modern spelling of *house* and *mouse*. Other words also experienced that same evolution like *mouth*, *spouse*, *south*, *thou*, *pound*, *bound*, *foul*, *out*, and so on.

Sometimes, scribes modified that spelling from <OU> to <OW>. Again, the <U>, <V> and <W> were still somewhat interchangeable, and the <OU> spelling may have been confused in certain situations with <OV>. So it may have looked like it was representing the /ov/ sound. At any rate, in some words, the <OU> was replaced with <OW>. And we see that spelling in words like *cow*, *how*, *now*, *brown*, *down*, and the American spelling of *plow* ('p-l-o-w').

Now I should note that there are quite a few words in modern standard English where the letter combination <OU> is still used for its original /u:/ sound. That includes words like *through*, *wound*, *youth*, *group*, *soup*, and so on. So what's the deal with those words? Why aren't they pronounced with the /au/ sound like those other words? Why do we say *youth* and not /yauth/? And *soup* and not /saup/? Well, there are actually two different answers to that question.

First, some of those words with the /u:/ sound were borrowed from French after the Great Vowel Shift. So they came into English with their French /u:/ sound and their French <OU> spelling, and neither the sound nor the spelling changed within English because the Great Vowel Shift was already over by that point. That's what happened with words like *group*, *soup*, *acoustic*, *souvenir* and *bouquet*. And that's why they are still pronounced with their original /u:/ sound.

And I can add another interesting word to that list – the word *mousse* ('m-o-u-s-s-e'). Again, it's a French loanword for a type of creamy dessert or a similar type of creamy substance like hair mousse. It was borrowed in the 1800s, so it came into English well after the Great Vowel Shift. But notice that Old English also had a word pronounced as /mu:s/ – spelled 'm-u-s.' It was the word for a small rodent. And as we saw, that Old English word for a rodent acquired its <OU> spelling in Middle English, then the vowel shifted from /mu:s/ to /məus/ during the Great Vowel Shift, and then it shifted again from /məus/ to /maus/ in the 1600s and 1700s. So when we compare Old English *mouse* to French *mousse*, we can see and hear how the Great Vowel Shift affected the former, but not the latter.

So we still have the <OU> spelling for the /u:/ sound in words borrowed from French after the Great Vowel Shift. But there is also another group of words where we still use that <OU> spelling for the /u:/ sound. And those words are native English words. They just happen to be words where the vowel sound was stubborn. The vowel never shifted in those words during the Great Vowel Shift. That includes words like *through*, *wound* and *youth*. So we have a few native words, as well as a handful of loanwords, where the /u:/ sound is still spelled <OU>, the same as it was during the time of Chaucer.

I should also note that there are a few other words where the pronunciation varies – where some people pronounce the word with the older vowel sound and some people use the modern vowel sound. For example, think about the pronunciation of the word spelled 'r-o-u-t-e.' Some people use the original pronunciation – /ru:t/. And some people use the newer pronunciation altered by the Great Vowel Shift – /raut/. As recently as the 1700s, both pronunciations were common in Britain and North America. But in the 1800s, the pronunciation as /raut/ largely fell out of use in Britain. So in Britain, *route* /ru:t/ has fallen in line with words like *through*, *wound* and *youth* where the original vowel sound had been retained. So that's a case where the vowel started to shift to /au/, but then it was pulled back to /u:/. But in the US, both pronunciations of that word can be found today. So in American English, the vowel in that word has partially shifted, but it remains in a bit of flux.

I should also mention the pronunciation of the name spelled 'H-o-u-s-t-o-n.' For the city in Texas, it's pronounced /hyu:ston/. For the street in New York City, it's pronounced /hau-ston/. The city and the street are actually named after two different people who pronounced their last names differently, and that's why the city and the street have different pronunciations today. But the difference in the pronunciation of those surnames was caused by this vowel shift that began in the 1400 and 1500s.

Now this vowel sound not only varies in a handful of words, it also varies from region to region. And this particular vowel shift explains some very common differences among regional accents. Again, the traditional view of this vowel shift is that it shifted twice – from /u:/ to /əu/ and then from /əu/ to /au/. But it's important to note that those changes took place in southern Britain and then were extended to the early American colonies. So that /au/ sound is part of the 'standard' forms of English spoken in England and the US. But in some places outside of southern Britain, the vowel didn't evolve in the same way. In some places, the vowel never shifted at all, and in other places, the vowel experienced the first shift, but not the second shift. So in those places, this vowel is still pronounced as /u:/ or /əu/. And before we move on to the next section, let me illustrate some of these regional variations because it helps to explain why English speakers pronounce many of these words differently.

As I've noted before, the impact of the Great Vowel Shift was much more limited in the north of England and in Scotland. So even to this day, you're much more likely to find words pronounced with their original or older vowel sounds in those regions. And in some of those places, speakers still pronounce words like *house* and *mouse* with their original Old English vowels— as /hu:s/ and /mu:s/.

Now, over the past few years, I've invited listeners to leave a voice sample at the website for the podcast. And I've provided some sample sentences there to try to pick up on some of these regional variations. One of the sentences I provided was "The mouse moved about the house. He snuck down the stairs and crawled around the outside of the towel closet." That sentence includes this particular vowel sound in words like *mouse*, *house*, *around* and *outside*.

Here's a dialect sample from Malcolm who is from the Newcastle region in the far north of England. You'll notice that he pronounces these words with their original /u:/ sound:

[AUDIO CLIP]

Now let's move a little further northward into Scotland, and let's listen to a sample for Calum. You'll notice that his accent shows the effects of the early stages of the Great Vowel Shift. He pronounces those words with the /əu/ sound which emerged in early Modern English, but he also points out that other speakers in Scotland use the older pronunciation:

[AUDIO CLIP]

Now that /əu/ pronunciation is very common throughout Scotland, northern England, Wales and Ireland. Remember that this was the vowel sound that emerged during the Great Vowel Shift in the 1400s and 1500s when the sound evolved from /u:/ to /əu/. So this was the vowel that Shakespeare probably used. Again, in many of these regions, that early Modern English vowel is still used, even though it often exists side-by-side with the modern /au/ sound as well. Some speakers will use one pronunciation while other speakers will use the other.

Here's a sample from Kerin who is from Wales, and you'll notice that she also uses that early Modern English vowel:

[AUDIO CLIP]

Now let's move over to Ireland and listen to Nora Anne who uses the same basic pronunciation:

[AUDIO CLIP]

And here's an interesting anecdote from Daniel who is from Northern Ireland. He talks about teaching English in France and the challenge of teaching in an accent that is considered non-standard. Notice that Daniel also uses the early Modern English vowel sound:

[AUDIO CLIP]

Now let's move 'across the pond' – as they say – to North America. As I noted earlier, the vowel shift from /əu/ to /au/ took place in southern Britain in the 1600s and 1700s – a couple of centuries after the Great Vowel Shift. And since that included places like London where 'standard' English emerged, that pronunciation became the accepted standard for many speakers. And it was carried to North America by immigrants in the 1600s and 1700s. So that /au/ sound became the accepted norm in North America as well. And today, most Americans pronounce words like *house* and *mouse* with that more recent /au/ sound. But there is a little pocket of English speakers that still use the older early Modern English vowel – the /əu/ sound that was still common when their ancestors arrived in North America in the 1600s. Those are the speakers who live along the Outer Banks of North Carolina and into the Tidewater region of Virginia. I've mentioned the very unique dialect of the Outer Banks before because it is somewhat of an anomaly. Settlers arrived there in the 1600s, and their descendants remained isolated along the barrier islands until the past century or so. As a result, their dialect retains a lot of the older vowel sounds, and it doesn't show as much general American influence.

Let me play you a few examples of this dialect. The first part of this clip comes from a documentary about the dialect that is narrated by Professor Walt Wolfram who is one of the leading experts on American accents and dialects, and he also happens to be one of my professors from way back. And I've also added a couple of clips at the end to further illustrate the pronunciation of this older /əu/ vowel sound in words like /sound/, /downtown/, /around/ and /house/.

Now as that last speaker noted, the use of that older /əu/ vowel sound seems strange to most Americans because it's very rare in American English. But if we move into some of the northernmost parts of the US, and especially as we move into Canada, we start to find this same pronunciation. In fact, this is a convenient way for Americans to identify a Canadian accent. For the most part, a standard American accent and a standard Canadian accent are so similar that it can be difficult to distinguish the two, but this particular vowel sound is a quick giveaway. It's very common for Canadian speakers to use the older /əu/ vowel. Let me give you a couple of examples.

First we have Margaret who is from northern Quebec and Ontario:

[AUDIO CLIP]

And here's Dave from Alberta:

[AUDIO CLIP]

Now this type of pronunciation is sometimes referred to as Canadian Raising. It's a tendency of many Canadian speakers to pronounce diphthongs like /au/ and /ai/ by starting the vowel sound a little bit higher in the mouth – closer to the older pronunciations found in early Modern English. But interestingly, it isn't entirely clear if this particular Canadian pronunciation is a holdover from early Modern English or if it is a more recent development. These features aren't really documented until the mid-1900s. Some linguists think it represents a more recent vowel shift within Canadian English, while others think it developed from the older pronunciation which was preserved in certain pockets of Canada and gradually expanded outward over time. But regardless of the source, it is a prominent feature of Canadian English.

Many Americans tend to hear this /əu/ sound as an odd diphthong, and they often misrepresent this sound when they repeat it. It's common to hear Americans mimic a Canadian accent by saying 'aboot' rather than /abəut/. So Americans will tend to shift the vowel all the back to its original /u:/ sound, but again, the Canadian vowel is actually somewhere between the Old English vowel and the modern American vowel. It's closer to the early Modern English vowel.

Here's a voice sample from Erik in Edmonton who discusses this pronunciation and the way it is often perceived by Americans.

[AUDIO CLIP]

So I hope you found that interesting. All of those regional variations stem from the evolution of the high /u:/ vowel sound in the back of the mouth from the 1400s until today. I think I've thoroughly covered the evolution of that vowel sound, so let's move on to the next vowel. As we know, the Great Vowel Shift was a chain shift, so when one vowel sound moved, the vowel sound underneath it moved up and filled the gap that was left behind. So now, let's turn our attention to the vowel sound pronounced one step lower than the /u:/ sound, and that's the /o:/ sound.

[MUSIC BREAK]

Earlier, I mentioned the mnemonic device to help you keep track of the vowel sounds that are pronounced in the back part of the mouth, or more specifically, produced by the placement and movement of the tongue in the back part of the mouth. The final part of that mnemonic was 'Ollie's Awesome Old Uber,' which represents the sounds /a:/ - /ɔ:/ - /o:/ - /u:/. So those final two sounds are /o:/ and /u:/. When the /u:/ sound became a diphthong and moved in the way I described in the prior section, the /o:/ sound moved up and filled the gap that was left behind. To

put it a different way, words that were pronounced with the /o:/ sound before the Great Vowel Shift came to be pronounced with the /u:/ sound after the Great Vowel Shift. Middle English /foad/, /spooan/, /loas/ and /toath/ became Modern English *food*, *spoon*, *loose* and *tooth*.

We still have some lingering evidence of that sound change in a few words. To a certain extent we can hear it in the difference between *tone* and *tune*. Both words are derived from the same Latin root – *tonus*. Those words pre-date the Great Vowel Shift and have a complicated phonetic history, but *tone* retains much of the original Latin vowel sound, whereas *tune* shows the effects of the vowel shift.

Another example is the word *gold* and the surname *Gould*. They're ultimately the same word. The name *Gould* actually began as *Gold*, and again, the vowel sound was raised during the Great Vowel Shift from *Gold* to *Gould*. And believe or not, the word *gold* for the expensive metal was also pronounced /gu:ld/ in early Modern English. So Shakespeare would have referred to a /gu:lden/ ring – not a 'golden' ring. But the pronunciation of the shiny metal shifted back to /go:ld/ in the 1700s and 1800s. That left us with the name *Gould* and the metal *gold*.

By the way, the name of the city of Rome worked the same way. The pronunciation shifted from *Rome* to /r:um/ during the Great Vowel Shift, but then in the 1700s and 1800s, it shifted back down to *Rome* again. We know that from surviving documents from the period where people wrote about the pronunciation of words, and we also see evidence of it in the Shakespeare's plays. He lived immediately after the Great Vowel Shift, and he famously used the words *Rome* ('R-o-m-e') and *room* ('r-o-o-m') as puns. In *Romeo and Juliet*, he included the line, "Now is it Rome indeed, and room enough, When there is in it but one only man." Today, that line loses some of its meaning. But if we change the pronunciation of the city back to the way he would have pronounced it, the lines read, "Now is it /Ru:m/ indeed, and room enough, When there is in it but one only man." So Shakespeare was saying 'Is it really /ru:m/ when there's only room enough for one man?' But the pun gets lost on a modern audience since we have shifted the pronunciation of Rome back to its original pronunciation.

So far, we've seen and heard how this /o:/ sound shifted up to the /u:/ sound. Now let's consider how that change impacted English spelling, and specifically, how it impacted the way we use the letter <O>. We use the letter <O> for a lot of different sounds today, and the Great Vowel Shift is partially responsible for that.

Traditionally, the long /o:/ sound was spelled with the letter <O>. That shouldn't come as a surprise because we still consider that to be the long sound of the letter <O>. And as I mentioned earlier, scribes often indicated a long vowel sound by doubling the vowel letter. So it was common for scribes to spell the long /o:/ sound with <OO>. And those spellings were retained even after the sound was raised from /o:/ up to /u:/. And that's why we still use <OO> to spell words like *food*, *mood*, *boot*, *tooth*, *soon*, *moon* and so on. That <OO> spelling has become a somewhat standard way of representing the /u:/ sound.

But let's think about that <OO> spelling a bit more. We also find it in words like *look*, *book*, *foot*, *good*, *cook*, and so on. So what's going on there?

Well the sound in those words is considered a ‘short’ vowel sound, specifically, the ‘short U’ sound. Now since this is a short vowel sound, the development of this vowel is not really part of the Great Vowel Shift. Remember that the Great Vowel Shift only affected the long vowel sounds. But the Great Vowel Shift does help to explain why we use the letter O for the ‘short U’ sound in words like *look*, *book*, and *good*.

Traditionally, this ‘short U’ sound was spelled with letter U. We still find that spelling in many words today, like *bush*, *bull*, *push*, *pull*, *put*, *full*, *butcher*, and so on.

So if the letter <U> was traditionally used for that short /u/ sound, how did the letter <O> come into the picture? Well as I noted a few moments ago, the letter <O> was used for the long /o:/ sound in Middle English. And that sound was raised up to /u:/ during the Great Vowel Shift. And that led to the use of the letter <O> – or <OO> – for the /u:/ sound in words like *food*, *mood*, *boot*, and so on. But then, that long /u:/ sound was shortened in some of those words from long /u:/ to short /u/.

And when that happened, the vowel sound in those words crashed into and merged with the existing words which already had that ‘short U’ sound. And that gave us two sets of words with that sound. One set were the words that traditionally had that ‘short U’ sound and were spelled with a letter <U> like *bull* and *bush* and *put*. The other set were the words that were raised from /o:/ to /u:/ and then shortened to /u/. Those words are typically spelled with a <OO> to reflect their original /o:/ vowel sound. That includes words like *book*, *look*, *took*, *foot*, *good*, *wood*, *cook* and *stood*. So again, just to trace that sound change for you, *book* began as /boak/ during the time of Chaucer. The vowel was then raised up to /bu:k/ during the Great Vowel Shift, and then in the 1600s, the vowel was shortened to *book*. So it was, /boak/ – /bu:k/ – /buk/.

All of that explains why that ‘short U’ sound is sometimes spelled with a <U> and is sometimes spelled with a <OO>. The former are older words that still have their traditional <U>, and the latter are newer words with a sound that evolved from /o:/ and are spelled with <OO> to reflect that history.

Now so far, we’ve explored the changes that affected the two highest back vowels – /u:/ and /o:/. Now let’s turn our attention to the two lowest back vowels – /a:/ and /ɔ:/. In the next section of this episode, we’ll look at those two vowel sounds together because their history is fundamentally connected.

[MUSIC BREAK]

In the prior section, we explored how the /o:/ sound was raised to /u:/ during the Great Vowel Shift. As with the other vowel changes we have explored, when the /o:/ sound moved up, it left a gap, and that gap was soon filled when the next lowest vowel sound moved up and occupied that space. In this case, that next lowest vowel was the /ɔ:/ sound. So the /ɔ:/ sound shifted up to the /o:/ sound during the 1400s and 1500s. But there’s a lot more to this part of the story. And those other details concern where that /ɔ:/ sound came from.

And this is where we need to refer back to an earlier episode. Way back in Episode 96 called ‘From Alpha to Omega,’ I explored a specific vowel shift that took place in the early Middle English period. And that vowel shift was really the source of this particular vowel sound. So let’s revisit that discussion for a moment.

As I noted earlier, the two lowest back vowels are /a:/ and /ɔ:/. Well, in the early Middle English period, shortly after the Norman Conquest, words that had that lowest /a:/ sound started to be pronounced with the slightly higher /ɔ:/ sound. So the vowel shifted up one step. And then, three or four centuries later, that vowel sound shifted up again during the Great Vowel Shift from /ɔ:/ to /o:/. Remember the order of those back vowels: ‘Ollie’s Awesome Old Uber’ – /a:/ - /ɔ:/ - /o:/ - /u:/. So this vowel sound followed that same order – /a:/ - /ɔ:/ - /o:/. /ha:m/-/hɔ:m/- **home**. /ba:n/-/bɔ:n/- **bone**. /sta:n/-/stɔ:n/- **stone**. /ba:t/-/bɔ:t/- **boat**. The first pronunciation was the Old English pronunciation. The second was the Middle English pronunciation. And the third pronunciation is the Modern English pronunciation after the second vowel shift.

Now again, that first vowel change happened about three or four centuries before the Great Vowel Shift, so it isn’t normally considered to be a part of the Great Vowel Shift itself. But if we step back and take a broader view of what happened, we can think of those two shifts as part of a larger, more extended process that converted the Old English vowel system into the Modern English vowel system.

Now the fact that these two lowest back vowels moved up over the course of the Middle English period does raise an interesting question. Since those were the lowest vowel sounds, and since we still have those vowel sounds in English today, where did the modern versions of those vowels come from?

Well, there’s not single answer to that question. The fact is that vowel sounds are constantly shifting around in English. And over the past few centuries, there have been many changes that aren’t considered part of the Great Vowel Shift itself. Many of those changes have taken place since then, or they involve a separate process. And many words that had other vowel sounds have moved in and filled the gaps left behind when the /a:/ and /ɔ:/ sounds moved up to /o:/. I’m not going to trace all of the changes here because, again, they’re not really considered to be part of the Great Vowel Shift. But I just want to explain why we still have words with those lowest back vowels even though those vowel sounds were raised upward in the 1400s and 1500s during the Great Vowel Shift.

Now having looked at how these low back vowels changed, let’s consider the impact of those changes on the way words are spelled. The first thing we should do is think back to the previous section where we looked at how the /o:/ sound shifted up to /u:/. We saw at that point, that many of the words affected by that change were spelled with a <OO>, and that spelling was retained when the vowel sound shifted up to /u:/. And that’s why so many words with the /u:/ sound today are spelled with <OO> like **room**, and **spoon**, and **moon**.

But notice that the letter <O> didn't become restricted to that high /u:/ sound. We still use the letter <O> for its traditional /o:/ sound in words like *home*, and *stone*, and *bone*. These are words where the vowel sound shifted upward in the way I described earlier in this section from /a:/ to /ɔ:/ to /o:/. /ha:m/ to /hɔ:m/ to *home*. So why do we use the letter O to spell those words? Why didn't they retain their original A's? It seems to contradict the general rule that words retained their older spellings even after their vowels shifted around.

Well, the answer to that question has to do with the fact that there wasn't a specific letter to represent that lower /ɔ:/ sound. So when the vowel in those words shifted up to /ɔ:/ in early Middle English, scribes had to figure out how to represent that sound in writing. And some of them decided to use the letter for <O> for that sound. So when the vowel sound moved up again from /ɔ:/ to /o:/ during the Great Vowel Shift, those words just retained the letter <O> that they already had. So let me break that down for you so you can see how that spelling evolved.

Let's begin with the Old English version of words like *home* and *boat*. The Anglo-Saxons would have said *ham* and *bat*, and those words were typically spelled 'h-a-m' and 'b-a-t'. Then, around the time of the Norman Conquest in the early Middle English period, the vowel was raised up one step to /ɔ:/. So someone like Geoffrey Chaucer would have said /hɔ:m/ and /bɔ:t/. But that was clearly a different vowel sound, so Middle English scribes had to decide how to spell it.

Now this /ɔ:/ sound was articulated somewhere between the low /a:/ sound represented with letter <A> and the slightly higher /o:/ sound represented with letter <O>. So those were the two best options. They could either continue to spell those words with an <A> or they could shift the spelling to <O>, even though neither of those letters really reflected the current pronunciation. As I noted, many of those scribes decided to use the letter <O> for this in-between /ɔ:/ sound. But that meant the letter <O> was being used for both the /ɔ:/ sound and the slightly higher /o:/ sound. So the letter <O> was being asked to do a lot of work. And it wasn't always clear which sound the letter <O> was representing.

Because of that potential confusion, some scribes looked for a different way to represent that /ɔ:/ sound. Again, that sound was pronounced in between /a:/ and /o:/ – the traditional sounds of letter <A> and letter <O>. So some scribes decided to represent that in-between sound by putting those two letters together. That gave us the letter combination <OA>. That seemed to be a good way to indicate that this /ɔ:/ sound was pronounced somewhere in between the traditional sounds of letters <O> and <A>.

And that gave scribes two different ways of representing this /ɔ:/ sound – either the single letter <O> or the letters <O> and <A> put together. And then, when this /ɔ:/ sound shifted up to /o:/ during the Great Vowel Shift, those two spellings were retained. And we still use both of those spellings today for the words that experienced this evolution. We use the letter <O> in words like *home*, *stone*, *bone*, *holy*, *ghost*, and so on. And we use the letter combination <OA> in words like *boat*, *goat*, *road*, *loaf*, *soap* and so on. Again, all of those words have the same phonetic history, and they have the same vowel sound today, but the difference in spelling reflects the different ways of representing that /ɔ:/ vowel sound in late Middle English before the vowel shifted up to its modern pronunciation.

Now before we move on, I should probably account for another group of words with that /o:/ sound. Those are words that are typically spelled with <OW>, like *show*, *low*, *grow*, *blow*, and *bowl*. Those words have a slightly different phonetic history. That had a different vowel sound at the time of the Great Vowel Shift. It was a specific diphthong that shifted to this /o:/ sound at a later date in the 1500s and 1600s. So the vowel sound in those words crashed into and merged with those other words that acquired the /o:/ sound about a century earlier during the Great Vowel Shift.

All of that gave us three common ways of representing the /o:/ sound today – <O>, <OA>, and <OW>. Remember that Middle English scribes also used a <OO> spelling for that sound, and that spelling was retained in the words that shifted up to /u:/ during the vowel shift in words like *food* and *goose* and *spoon*. That's why we don't generally use the <OO> spelling for the /o:/ sound anymore. That spelling is usually reserved for the long and short 'U' sounds today as I discussed in the previous section.

Now before I conclude, let's consider the how the /o:/ sound has evolved within Modern English. As I noted a few episodes back, the /o:/ sound that was used in early Modern English was more of a pure vowel sound. So it was more like /o:/. So a word like boat was pronounced /bo:t/. That type of pronunciation can still be heard in parts of the British Isles. The sound later evolved into the modern pronunciation as /ou/, which is actually a diphthong. The modern sound is really the /o:/ sound followed by a slight /u:/ sound – /ou/. That happened in the 1700s. And then, in early 1900s, English speakers in southern Britain modified that sound a little bit more to /əu/, which is a similar diphthong, but it begins a little bit higher in the mouth.

Now that brings us to the end of the long vowel sounds in English. So we've covered all of the major vowel changes that are known today as the Great Vowel Shift. These changes affected all of the long vowels in English, and as I've outlined over these past three episodes, the changes didn't necessarily end with the Great Vowel Shift itself. Many of these vowels continued to shift and evolve over the course of the following centuries. There were also additional vowel shifts that took place at a later date, and were often limited to certain regions. Those changes contributed to the various regional accents that we have today. I'll try to trace out those changes and developments as we move forward into the Modern English period.

And speaking of Modern English, we can now start to turn our attention to that period. We'll begin next time with the rise of Tudors, and the discovery of the Americas by Christopher Columbus. These developments will set the stage for the eventual expansion of English well beyond the shores of Britain.

So next time, we'll pick back up with our overall historical narrative. Until then, thanks for listening to the History of English Podcast.

## **EPISODE 144: A MURDER OF CROWS AND PRINCES**

Welcome to the History of English Podcast – a podcast about the history of the English language. This is Episode 144: A Murder of Crows and Princes. In this episode, we’re going to look at an interesting phenomenon that was emerging in the English language in the mid-1400s. It was a fad for coining new terms for collective nouns like a school or fish, and a gaggle of geese, and a murder of crows. It was also a time of transition in England. The Plantagenet era was coming to an end. The last Plantagenet king was Richard III – one of the most controversial kings in English history. Much of that controversy surrounds the fate of his two nephews who disappeared in the Tower of London. According to popular tradition, he had them murdered in order to secure the throne for himself. That verdict is still a matter of debate, but it points to a different kind of murder – a murder of princes. So this time, we’ll explore those historical and linguistic developments.

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

Now this time, we’re going to resume our overall historical narrative. Over the past few episodes, we’ve explored the Great Vowel Shift, so for those of you who listen in real time, it’s been several months since we considered what was happening on the ground in the late 1400s as Middle English evolved into early Modern English. Since it’s been a while, I thought it might be a good idea to remind you where we were in our overall story before our digression into the vowel shift.

As you might recall, the first major phase of the Wars of the Roses came to an end when the first Yorkist king Edward IV defeated his Lancastrian cousin Henry VI. Edward had been the king for several years before being briefly deposed. And the victory over Henry allowed him to recover the throne and continue the reign of the House of York. The victory also saw the defeat and death of the main line of Lancastrian kings – those who were directly descended from John of Gaunt and his first wife Blanche. The Lancastrian story wasn’t over yet, but the defeat was devastating for the Lancastrian cause, and it allowed Edward and the Yorkists to rule England for more than a decade in relative peace.

At the time, Edward had an infant son also named Edward, and a short time later, he and his wife had a second son. So Edward had not only re-secured the throne for himself, he also secured his eventual succession with sons who could inherit the throne when he died. Edward also had a younger brother named Richard. At the time, Richard was held in high regard and was seen as a loyal supporter of his brother. But that perception would change over time.

A short time after Edward IV defeated the Lancastrians and re-secured his position as king, William Caxton arrived in England with the printing press. It was the first printing press to be placed into operation in the country, and we looked at that development back in Episode 139.

The main benefit of the printing press was the ability mass produce books. I discussed all of the benefits of the printing press in that earlier episode, but there were also some drawbacks. It was very easy for the type setter to make a mistake, and that meant the mistake occurred in every copy of the book. Of course, that wasn't an entirely new problem. Scribes sometimes did the same thing when they copied a text by hand. And if another scribe came along and made a copy of that copy, then the mistake could be repeated over and over in each subsequent copy. So it was common to find mistakes in these publications, and to see those mistakes repeated over and over again.

That was the context for a figure of speech that appeared in writing for the first time in the mid-1400s. It's the phrase 'without rhyme or reason.'

If something happens 'without rhyme or reason,' there's no logical explanation for it. Now it makes sense that something unexplainable might happen without reason, but why do we say that it happens without 'rhyme' or reason? What does 'rhyme' have to do with it? Well, the answer has to do with the original context of the phrase.

In the mid-1400s, a writer name John Russell wrote an extended poem called 'Boke of Nurture.' Russell worked for a prominent Lancastrian noble, and the poem was intended as a handbook of manners and household management. The poem outlined the duties of a butler, and described the proper way to prepare and serve a meal, to organize a wardrobe, and to prepare a bath for the members of the noble family. At the very end of the poem, Russell included the following lines:

"As for ryme or resoñ, þe forewryter was not to blame  
For as he founde hit aforne hym, so wrote he þe same"

In Modern English, it reads:

'As for rhyme or reason, the fore-writer was not to blame,  
For as he found it before him, so wrote he the same.'

In other words, if you're reading this poem and see a mistake, don't blame the scribe who simply copied the original text word for word. The mistake was made by the author himself. *Rhyme* referred to the poetic form of the work – the way the words and text were presented. And *reason* referred to the actual content and substance of the work – the basic ideas expressed in it. So whether the mistake the one of 'rhyme or reason' – in other words, one of form or substance – the mistake belonged to the original author, not the scribe.

Again, these types of mistakes were not unusual, whether caused by the original author, a careless scribe, or a sloppy printer. When readers encountered them, they probably had to pause to make sense out of what they were reading. Between occasional printing mistakes, spellings that were yet to be standardized, and documents composed in regional dialects, early books could pose quite a challenge to readers. Without a standard form of English, some readers may have wondered if they were reading English at all.

And given that, maybe it isn't surprising that the word *gibberish* entered English for the first time during this period. During the mid to late 1400s (the exact date is uncertain), a manuscript called 'The Mirroure of the Worlde' was produced. It was an English translation of an earlier French work. One passage in the text warns against muttering prayers casually or lazily. The passage reads:

“And whoosoo prayeth to Godde withoute deuocion of herte, hee speketh giberisse to Godde, as hee that speketh halfe Ynglisse and halfe Frenshe.”

In Modern English, it reads:

‘And whoso prays to God without devotion of heart, he speaks gibberish to God, as he that speaks half English and half French.’

That's the first known use of the word *gibberish* meaning 'nonsense or incomprehensible speech.' It appears to be based on the word *gibber* which is found in later documents. So where did those words come from? Were they borrowed from French or Latin? Well, no. Words like *gibber*, *gibberish*, *chatter*, *jabber*, *blabber*, and *babble* all appear to be a type of onomatopoeia. So the word is based on the actual sound of the thing it's describing, like the word *buzz* for the sound of a bee, or *moo* for the sound of a cow, or *meow* for the sound of a cat. Words like *gibberish* were coined because people who spoke gibberish sounded like they were saying 'gibber, gibber, gibber.'

Linguists sometimes describe these types of words as imitative or echoic. Again, the sound of the word mimics the sound of the thing it describes. We have another interesting example of this process at work in certain song lyrics that survive from this period in the 1400s. The songs were sung to babies and infants to help them fall asleep. Many of these songs contain words like *lullay*, *lullow*, *lully*, or other variations. Those words were often repeated in the songs, and scholars think those words were common because the 'luh' sound tends to soothe and comfort babies. So the words didn't really have a specific meaning. They were just used for the sounds they made.

Many linguists think that words like *lullay* and *lully* were derived from the word *lull* as in 'to lull someone to sleep,' but the word *lull* itself is also apparently derived from the same soothing 'luh' sound. And as you may have guessed by now, those soothing sounds that 'lull' babies to sleep gave us the word *lullaby*, which appeared in the following century.

Now this type of word forming process was certainly not new in the 1400s. It's probably as old as speech itself, and it's especially common when people are talking about the sounds that animals make. The best way to describe the sound of an animal is to imitate it. Again, that's how we got words like *buzz*, *moo*, *meow*, *purr*, *bow wow*, and so on. And it's also how we got most of our words related to bird sounds.

When people live close to nature, they tend to pay more attention to the different sounds that various birds make. As people mimicked those sounds, new words were coined. Through this process, English has acquired a lot of words based on the sounds of birds. And many of those

words appeared for the first time in the periods of Middle and early Modern English. From the early Middle English period, we find the word *hoot* for the sound of an owl and *cackle* for the sound of a hen. We also find the words *chitter* and *chatter* which are probably related, and originally referred to the sounds made by birds like magpies and starlings. Of course, over time, *chatter* has been extended to sounds made by people as well.

We also find the word *gaggle* for the sound of a goose. And if you're a fan of social media, you'll probably be delighted to find out that the word *twitter* appeared in Middle English for the sound of a bird. The related word *tweet* was used for the sound of a small bird and appeared a couple of centuries later in the 1500s.

We also find words like *chirp* and *peep*. The word *croak* appeared near the end of the Middle English period. Today, we tend to associate the word *croak* with frogs, but it originally represented the sound of a raven. In the Modern English period, we find words for bird sounds like *quack* for the sound of a duck, *caw* for the sound of a crow or raven, *coo* for the sound of a dove or pigeon, *gobble* for the sound of a Turkey, and *cock-a-doodle-doo* for the sound of a rooster. The fact that we have all of those unique words shows how attuned people were to those various bird sounds. And again, linguists think that all of those words were imitative. They were based on the sounds that people heard when birds made those noises.

And in fact, we can take this one step further. Many common bird names are actually based on the sound that the bird makes. For example, it appears that the original Indo-Europeans had a word for the sound that a goose makes. It was something like *\*ghans*, and that's the original version of the word *goose*. The name of the *raven* and a related bird called a *rook* are both thought to be derived from another Indo-European root word that mimicked the sound of those types of birds.

The original Indo-Europeans apparently thought the sound made by an owl was something like *\*ul*, and that's the source of the English word *owl*, as well as the word *howl*. They also apparently thought the sound of a duck was something like *\*pad*. We don't have any English words from that root, but it is the root of several words in other Indo-European languages. So whereas we might describe the sound of a duck as 'quack quack,' the original Indo-Europeans probably would have said something like 'pad pad.'

The early Germanic tribes apparently noticed the sound of certain birds and described it with a word that became *caw* in Modern English. Well, it appears that the same sound also produced the word *crow*. That's not to say that the words are necessarily cognate. It's just that they are both derived from similar bird sounds.

One of the best examples of a bird named after the sound it makes is the *cuckoo*. In addition, the words *chick*, *cock*, *finch*, *quail*, *heron* and *egret* are all thought to be derived from root words that originally mimicked the sound that various birds make.

The word *pigeon* is thought to be cognate with the word *peep*, as well as *pipe* and *piper* in the sense of a small wind instrument and the person who plays it. They are all thought to be derived from the Latin word *pipire* which meant ‘to make a peeping or chirping noise’ and was based on that type of sound.

The main point here is that we usually think of language as this very abstract, symbolic way of describing the world around us. But sometimes, a word began as a literal representation of a particular sound, and that was especially true for animals, and even more so for the sounds made by birds. These examples cover the entire period of spoken English, but some of them like *buzz*, *peep*, *chirp*, and *croak* are recorded for the first time around the current point in our story in the 1400s. And as such, they confirm that people were still using that traditional naming technique to coin new words during the transition from Middle English to Modern English.

We also have a modern word that links birds sounds and words like gibberish and chatter. It’s the word *gobbledygook*. It means nonsense, gibberish or overly technical jargon, but its formed from the sounds made by birds. Of course, *gobble* is the sound a turkey makes, and the Oxford English Dictionary says that *gook* is also imitative of a clucking bird. So *gobbledygook* apparently combines two different bird sounds to form a word meaning gibberish or nonsense.

And speaking of funny-sounding nonsense words, we also have another example from mid to late 1470s that illustrates the way people were playing around with words and coining new terms during that period. In 1473, shortly after Edward IV re-secured his position as king of England, we find a new turn of phrase in one of the Paston letters. I discussed the letters written by the Paston family a few episodes back. At that time, I mostly focused on the first couple of generations of the Pastons, but the letters continued to be written by subsequent generations. One of those letters includes a line where the writer can’t recall a person’s name. And he refers to the person as “whatcalle-ye-hym,” literally ‘what call you him,’ which was an early version of ‘what d’ye call’em’ or ‘what d’ye call it’ or ‘whatcha ma call it.’ This is one of the first recorded uses of those types of playful nonsense words to refer to someone or something that can’t be named.

What we see in all of these examples are cases where people were playing around with words and coming up with new terms. They weren’t using those words with formality or precision. They were just using them for the sounds they made or using them where there wasn’t really a better word available. Again, this was part of a long linguistic tradition, but with the expansion of literacy and books, we can see some of these terms being coined during this period in the 1400s.

Of course, the new words formed in this way were added to all of the loanwords that had been borrowed over the prior few centuries. It’s estimated that the overall vocabulary of English had doubled since the Norman Conquest from around 50,000 words in Old English to around 100,000 words in the mid-1400s. [SOURCE: *Spell It Out*, David Crystal, p. 41] Most of those new words came from Latin, Greek and French, with French being the main source. By the mid 1400s, somewhere between one-quarter and one-third of the English vocabulary could be traced back to French. [SOURCE: *The Stories of English*, David Crystal, p. 154].

That expanded vocabulary gave English lots of different ways of expressing the same or similar ideas. And that expanded vocabulary was another factor that allowed English speakers to play around with words. They no longer had to rely on a small handful of words to express an idea. They could pull from an extensive vocabulary with different words having different shades of meaning. And we can start to see that playfulness in writing.

For example, rather than referring to a group of things with a generic word like *group*, or *collection*, or *bunch*, writers started to come up with other terms – specific terms for specific groups of things like a ‘school of fish’ or a ‘gaggle of geese.’ This naming trend apparently began with animals that were commonly hunted. So it started as a type of hunting jargon, but this naming trend became such a popular fad that it was soon extended to people as well.

There is some evidence that French speakers did the same thing, and some of those French terms were adopted into English. And there are a few occasional uses of such terms in earlier Middle English documents. But now, in the mid-1400s, we start to come across manuscripts with long lists of these types of words. A lot of these collective nouns appear to be newly coined terms, and many of them were based on a type of word play.

One of the first documents to contain such a list was a handwritten text called the Egerton Manuscript which was composed around the year 1450. Then, when Caxton set up his printing press in England, he published a long extended poem called ‘The Horse, the Goose, and the Sheep.’ The poem had been composed a few decades earlier by John Lydgate, who was a prominent poet who lived shortly after the time of Chaucer.

The poem included a passage with a long list of these collective terms – one for almost every kind of animal and for different types of people as well. The list is almost comical in its terminology, and it shows how exaggerated this naming fad had become.

A few of the terms are still in common use today. For example, we find a pride of lions (‘a Pryde of Lyons’), a flock of sheep (‘a Flock of shepe’), a school of fish (‘Scole of fysshe’), and a swarm of bees (‘a Swarme of bees’). We also find collective terms for other things like a cluster of grapes and a host of men (‘an Hoost of men’).

Some of those terms had been around for a while. For example, *flock*, *swarm* and *cluster* were used in similar ways even in Old English. But *pride* in reference to lions and *school* in reference to fish were brand new to English. The term *pride* in reference to lions may have been borrowed from French and was apparently based on the perception of lions as powerful and proud creatures. The word *school* in reference to fish is based on an older Germanic term that referred to a group of fish or other animals. A version of the word existed in Old English, but it fell out of use after the Norman Conquest. The modern word *school* used in this way was borrowed from Dutch around the current point in our story. Of course, we have a ‘school’ of fish and a ‘school’ where students go to learn. So are those words related? Well, the answer is not entirely clear. The former is a Germanic word and the latter is a Latin word, but some scholars think they are ultimately cognate and related in sense of a collection or group of things – either a group of fish or a group of students. Again, the ultimate history is unclear.

In addition to some of the familiar terms I just mentioned, this poem published by Caxton also contains other collective terms that are a bit more obscure like a business of flies ('a Besynes of flyes'), a trip of hares ('a Trippe of hares'), a skulk of foxes ('Skulke of foxes'), a drift of tame swine ('a Drifte of tame swyn') and a sounder of wild swine ('a Sondre of wilde swyn').

There are also a lot of terms for people. We find a bevy of ladies ('a Beuye of ladyes'), a fellowship of yeomen ('a Felouship of yomen'), a raffle of knaves ('a Rafull of knaues'), a lordship of monks ('a Lordship of monkes'), a state of princes ('a State of princes'), a fighting of beggars, a glorifying of liars ('a Glorifyeng of lyers'), a skulk of thieves ('a Skulke of theues'), and a hastiness of cooks ('a Hastynes of cookes'). We also find a lying of pardoners ('a Lyeng of pardoners'), which is clearly a commentary on the way people viewed the church officials who sold pardons from sin.

One interesting thing about the list is the large number of terms for birds. Almost every grouping of birds is given a specific name. We find a herd of swans ('an Herde of swannys'), a nye of pheasants ('a Neye of fesantes'), a bevy of larks ('a Beuye of larkes'), a siege of herons ('a Siege of heyrons'), a sord of mallards ('a Sourd of malardes'), a muster of peacocks ('a Muster of pecoks'), a charm of finches ('a Chyrme of fynches'), a host of sparrows ('an Hoost of sparowes'), a gaggle of geese ('a Gagyll of ghees'), an exaltation of larks ('a Exaltacion of larkes'), a flight of doves ('a Flight of douues'), a descent of woodpeckers ('a discecion of wodewalis'), and a covey of partridges ('a Coueye of partrichs').

But two of the most interesting terms for birds are reserved for two related black birds that are often associated with bad luck, loss and even death. Those are the raven and the crow.

The poem tells us that a collection of those birds should be referred to as an unkindness of ravens ('an vnkindnes of rauons') and a murder of crows ('a Murther of crowes'). That's quite a contrast to a charm of finches. It appears that people found finches to be charming and adorable, thus a charm of finches. But they perceived ravens and crows to be threatening or unlucky. So they were referred to with terms like *unkindness* and *murder*.

Of course, not everyone considered ravens and crows to be bad luck. And in fact, there's an interesting anecdote about England's reliance on ravens to this very day. For the past few centuries, perhaps dating as far back as the 1600s, a small flock or 'unkindness' of ravens has been maintained in the Tower of London. The Tower even has a Ravenmaster whose job is to take care of the ravens there and to make sure that they are fed and maintained. So why are ravens kept in the Tower of London? Well, in part due to a legend that say if ravens ever leave the Tower, England will fall and disaster will visit the kingdom. So if one chooses to believe the legend, England's very survival depends on the presence of ravens in the Tower of London. It's a superstition that links the Tower with ravens. But the Tower is also associated with murder. Not necessarily a murder of crows, but the murder of political figures. And it's also associated with the apparent murder of the two young sons of our current king Edward IV. So let's turn our attention back to our historical narrative and the tragic story of the two boys known the Princes in the Tower.

The story of the Princes in the Tower is one of the great mysteries of English royal history. And it began with the death of their father Edward IV. After over 20 years of a briefly interrupted reign, Edward died of natural causes in April of 1483. He was survived by five daughters and those two young sons. The eldest son Edward was 12 years old and the heir to the throne. He is officially known to history as Edward V, though he was never crowned and was merely a pawn in the political maneuvering that took place in the weeks following his father's death. His younger brother was 9 years old and was the next in line to the throne if something should happen to the new boy king Edward. Together, they ensured that the House of York would continue to rule England for the foreseeable future. The only problem is that they were both young boys – and England had a rough history with boy kings.

Without an adult on the throne, there was an immediate split within the Yorkist faction that controlled the government. The boy's mother Elizabeth Woodville wanted to maintain her family's influence at court. I mentioned Elizabeth in an earlier episode. You might remember that her marriage to the king was controversial at the time. She was a commoner, and her marriage to Edward IV was conducted in secrecy. It was only revealed when plans were being made for Edward to marry the French king's sister. He had to shoot down the arranged marriage and admit that he was already married to a commoner – Elizabeth Woodville. That secret marriage stunned many of the nobles at court, and then Edward had compounded the problem by giving his wife's family many prominent positions throughout the country. The fallout caused a split with the Yorkist faction that never completely healed. Now that split was about to play out again.

The queen mother's family – the Woodvilles – wanted to maintain control over the court, and they hoped that the new boy king would be able to do that. As the boy's mother, Elizabeth could serve as his regent and protect the interests of her family, but her recently deceased husband had other plans. Before he died, her husband Edward IV had designated his brother to serve as the boy's guardian and Protector. His brother was Richard, also known as Richard of Gloucester, and he had been a loyal supporter of his older brother. Richard also resented the Woodvilles, so the stage was set for a confrontation between the two factions.

The queen mother – Elizabeth Woodville – decided to undercut Richard's position by having her son immediately crowned as king even though he was only 12 years old. Once he was crowned, there was legally no role for Richard as guardian or Protector. The coronation was scheduled to take place a few days later on May 4, but Richard soon received news of the plan. He was in the north of England, and he quickly headed south to intercept the royal entourage on its way to London with the boy. Richard was able to take position of the young boy since Richard was his legal guardian. Together, Richard and his nephew continued the trip to London. But once they were there, the coronation was postponed, and the young boy was placed in the royal apartments located in the Tower of London. Richard soon took possession of the boy's brother and placed him in the Tower as well. [*SOURCE: The Last Plantagenets, Thomas B. Costain, p. 384-5.*]

At this point, nothing really seemed all that sinister or unusual. Richard was the guardian of boys and Protector of the Realm. He had taken possession of the boys to protect them until young Edward's coronation, but that coronation never took place.

Richard soon put forth a priest who claimed that the marriage between his brother (the recently deceased Edward IV) and the queen mother (Elizabeth Woodville) was illegal and invalid. The priest claimed that Edward was already married to another woman when he married Elizabeth. The details of the accusation are somewhat obscured by history, but supposedly Edward had either married or entered into a contract to marry a noblewoman named Lady Eleanor Talbot before his marriage to Elizabeth. It might have seemed like a crazy accusation, but Edward's actual marriage to Elizabeth had been conducted in secrecy, so maybe that was his thing. It was certainly 'possible' that he had more than one secret marriage. At any rate, Edward's brother Richard seized upon the accusation. If Edward was already married when he married Elizabeth, then that meant the second marriage was bigamous and illegal. And it also meant that any children born to that marriage were illegitimate and had no right to serve as king. Richard now saw his path to the throne. The accusations were put before Parliament, and Parliament accepted them. Without a legitimate child to inherit the throne, Richard then claimed the throne for himself as the surviving brother. He thereupon became Richard III – one of the most controversial kings in English history. [SOURCE: *The Last Plantagenets*, Thomas B. Costain, p. 390.]

As Richard maneuvered to claim the throne, his two young nephews remained in the Tower. And after a few weeks, they were never seen again.

Historians still debate what happened to the so-called 'Princes in the Tower.' The general consensus for many centuries was that Richard had them murdered to secure his claim to the throne. That was the general view of the chroniclers, and it was the view of William Shakespeare in his famous play about Richard III. Shakespeare cemented Richard's reputation as a scheming monster who murdered his young nephews in order to seize the throne for himself.

After Richard's death, a member of his retinue named James Tyrell came forward and confessed to the murders. He claimed that he had been directed to kill the boys, and that they had been buried at the bottom of a stairwell, and then later moved to an unknown location. [SOURCE: *The Story of Britain*, Rebecca Fraser, p. 237-8.] Many years later, two skeletons were actually discovered at the bottom of a stairwell in the Tower. DNA evidence didn't exist at the time, but it was determined that the bones were in fact the remains of the two princes.

Now to be fair, there has been a movement in recent history to revisit Richard's reputation. His defenders point out that the Tudors eventually defeated Richard and took the throne for themselves. So they and their chroniclers had every reason to discredit Richard and paint him as a monster. And Shakespeare was very much a product of that age. They also point out that there is little or no hard evidence to prove Richard's culpability. The later confession by James Tyrell may have been forced or fabricated. And with respect to the remains that were found, Tyrell said the remains had been removed from the stairwell, so why were they still there? And Richard's defenders point out that so many people died in the Tower over the years that there's no way to know for certain that the discovered bones actually belonged to the young princes. The bones were never DNA tested, so the identification has never been confirmed. So for those who choose to defend Richard's reputation, the ultimate fate of the princes remains a mystery.

The fact is that Richard did have a motive to eliminate his nephews, and he certainly had the ability and opportunity to do so. And regardless of his actual guilt, the disappearance of the young princes led to rumors that they had been murdered. And Richard never presented them to the public to prove otherwise.

Richard also didn't hesitate to execute many other nobles during this period who were accused of treason or otherwise opposing his rule. One of those nobles was named William Hastings – a nobleman who had been loyal to both Richard and his elder brother Edward. But Richard turned on him and accused him of treason. He was promptly executed. This development is covered by Shakespeare in his version of the story, and Shakespeare's version features the first known use of a very common term – the phrase 'short shrift.'

A *shrift* was a confession to a priest, including the type of confession that one might give before being executed. It could also refer to the absolution obtained in exchange for the confession and penance. In the play, Hastings is about to be executed, and he is told that Richard is eager for his dinner, so there is only time for a 'short shrift' or a quick confession. The line is:

“...the duke would be at dinner:  
Make a short shrift; he longs to see your head.”

Of course, today if we give something 'short shrift,' we handle it quickly and give it very little attention, but that line from Shakespeare about one of Richard's executions is the first known use of that phrase in the English language. By the way, the sense of the word *shrift* as a confession can still be found in name of the Christian holiday known as 'Shrove Tuesday' – *shrove* being a version of *shrift*. It was traditionally a day when many Christians went to confession to be 'shriven' or absolved from sin. Of course, Shrove Tuesday is known as Mardi Gras in French, and is often referred to as Pancake Day in the UK. But 'Shrove Tuesday' is the traditional English name which first appeared around this same time period in the 1400s.

Now even though Richard's reign was short and controversial, it did have a notable impact on the English language. At the time, many of the laws and statutes were still written in French and Latin. Apparently, Richard directed many of the laws to be translated into English so the common people could understand them. Another law adopted during his short reign was designed to restrict the trading activities of foreigners in England, but the law contained a broad exemption for foreigners involved in the printing and sale of books. So as the people of England began to have access to relatively cheap books thanks to the new printing press, Richard protected foreigners involved in the book trade, and that ensured that people could get access to books printed on the continent as well as those being printed by the new printing presses in England.

Richard's defenders also note that he adopted other legal reforms during his reign. For example, he helped to initiate the modern bail system whereby people charged with minor crimes could post bail in order to avoid jail while they were awaiting their trial. He also limited the ability of the government to confiscate a person's property before a conviction had been obtained in court.

Some modern scholars suggest that these laws were an attempt by Richard to shore up his support among the common people who might have seen him as a usurper, and perhaps even a murderer.

Whatever the motivation, it does appear that there was a significant amount of opposition to Richard's reign. A short time after he was crowned, revolts began to break out around the country. The revolts reflected the entrenched divisions in the country that had existed for decades. The Wars of the Roses had been dormant for a while, but now the conflict started to flare up again.

And much of the opposition to Richard's reign came to be centered around a rival claimant to the throne – a distant heir of John of Gaunt who continued to pursue what remained of the Lancastrian claim to the throne.

The rival claimant was Henry Tudor, and it's at this point that we can finally introduce the Tudors to our overall story. So who was Henry Tudor, and why did he have a claim to the throne? Well, as with pretty much everything else associated with the Wars of the Roses, it goes back to Edward III. All the claimants to the throne traced their lineage and their claims back to him. He was the king who launched the Hundred Years War, won the Battle of Crecy, and ruled for 50 years in the middle of the 1300s.

Edward's eldest child was known as the Black Prince, and there were no living descendants from that line. The next oldest child was Lionel, and the Yorkists – like the current king Richard III – all traced their lineage back to him. The third child was John of Gaunt, and the Lancastrians all traced their lineage back to him. The Tudors also traced their lineage back to Gaunt. So in that regard, they were holding on to what remained of the Lancastrian claim to the throne. So let's look a little closer at John of Gaunt to determine how the Tudors fit into the picture.

Gaunt was married three times and had children from each marriage. The main line of Lancastrian kings – Henry IV, Henry V and Henry VI – were all descended from Gaunt and his first wife Blanche. But as I noted earlier, that line basically came to end when the last of those kings, Henry VI, died in the Tower of London after his supporters were defeated in battle. So for a while, it looked like the Lancastrians had been vanquished, but it wasn't that simple.

Gaunt also had other descendants that are important to our story. First, he had a daughter from that first marriage to Blanche. Her name was Phillipa and she married the King of Portugal. Her descendants became kings of Portugal. After Blanche died, Gaunt married Constance of Castile – a princess from modern-day Spain. The descendants from that marriage went on to become kings and queens of Castile and Spain. I mentioned all of that in an earlier episode, and those descendants are going to play an important role in our next episode because they were busy launching the age of exploration and discovery. But again, they were down in Portugal and Spain, and not really a factor in English politics.

Now during the time when Gaunt was married to Constance of Castile, he was actually carrying on an open affair with his mistress, Katherine Swinford. You might remember that Katherine's sister was married to Geoffrey Chaucer. Well, during that second marriage to Constance, Gaunt had four illegitimate children with Katherine. So they had no right to the throne, and in fact, they were legally barred from inheriting the throne at one point. But after his second wife Constance died, he decided to marry Katherine in part to legitimize those children. And that's where the Tudors came from. The male descendants from this third marriage were known as the Beauforts, and one of those descendants was a great-granddaughter named Margaret Beaufort. She married a Welsh nobleman named Edmund Tudor. And together, they had a son named Henry Tudor. Even though he was a Tudor, he was technically part of the House of Lancaster being a direct descendant of John of Gaunt. And he emerged as the main rival of the Yorkist king Richard III.

Now I'm not sure if you followed all of that genealogy, but the important thing to take from all of that is that Tudor claim to the throne wasn't really all that great. The claim basically relied on the old Lancastrian claim, which was a bit tenuous to begin with since it based on descent from John of Gaunt who was a younger brother and represented a junior branch of the family. Also, the Tudor line was originally an illegitimate line which had been barred by law from inheriting the throne. The line had been made legitimate when Gaunt married Katherine, but it still wasn't clear if the descendants were barred from claiming the throne. The Tudor claim also suffered from another weakness. It wasn't based on a direct male lineage. The strongest part of the traditional Lancastrian claim was that it was based on direct male descent from Edward III, whereas the Yorkist claims went through female ancestors. Well, the Tudors couldn't even justify their claims based on direct male descent since Henry Tudor claimed the throne through his mother, Margaret. And in fact, his father was not a Plantagenet at all. So any way you look at it, the Tudor claim was weak compared to the Yorkist claim.

But by this point in history, precise royal lineage wasn't as important as it had once been. It's one thing for two princes to argue over their father's throne, but by this point, the claims were being disputed by distant cousins. They based their claims on long, complicated and remote genealogies that were difficult to follow. Most people probably couldn't trace those lines back to Edward III if their life depended on it. But in order to secure the throne, you didn't really need the best line of descent, you needed something much more practical. You needed the support of the nobles and parliament, you needed broad support among the common people, and you needed a strong army to back up your claims. And Henry Tudor was quickly amassing all of those things.

As a rival claimant, Henry had been living in safety in Brittany. And a specific plan was put in place to enable Henry to take the throne and reunify the fractured kingdom. Henry was essentially the heir of the House of Lancaster, and the plan was for him to marry the heir of the House of York. As we know Richard was the Yorkist king, but he didn't have any living sons to inherit the throne from him. His two young nephews were the Princes in the Tower, so they could have theoretically continued the House of York, but no one had seen those princes in over a year, and they were already rumored to be dead by that point. But those two young princes had an older sister named Elizabeth – known to history as Elizabeth of York. So she was Richard's niece, and she was basically the heir to the House of York. Since Elizabeth was the heir to the House of York, and Henry Tudor was the heir to the House of Lancaster, the plan was that Elizabeth and

Henry would marry each other, thereby reunifying the houses of York and Lancaster within the House of Tudor. [*SOURCE: The Story of Britain, Rebecca Fraser, p. 239-40.*] The marriage was actually arranged by the couple's respective mothers, Elizabeth Woodville and Margaret Beaufort.

The marriage was planned, but it wasn't scheduled to take place until Henry had returned to England and pressed his claim to the throne. In August of 1485, he sailed back to England and began to gather forces to challenge Richard. Many of the nobles and commoners flocked to Henry's side, and Henry and Richard's respective armies met at Bosworth Field outside the Town of Leicester in the center of the country. The Battle of Bosworth Field is one of the most well-known battles in English history because it brought a final end to the Wars of the Roses.

During the battle, the Yorkist king Richard III was thrown from his horse. In Shakespeare's version of the story, he has Richard utter the famous line, "A horse! A horse! My kingdom for a horse." But Henry's soldiers were able to get to Richard, and after a great deal of fighting, Richard was killed and the battle soon came to an end. Richard's body was taken to the nearby town of Leicester and buried in a poorly marked grave in a churchyard.

Henry Tudor had emerged victorious, and he soon returned to London where he was crowned as Henry VII – the first Tudor monarch. Since his father was a Tudor, not a Plantagenet, his victory brought an end to the Plantagenet dynasty. As the 1400s gave way to the 1500s, the Plantagenet era gave way to the Tudor era.

As planned, Henry soon married Elizabeth of York, thereby unifying the Houses of York and Lancaster, and bringing a permanent end to the Wars of the Roses. As I noted in an earlier episode, the House of Lancaster was represented with a red rose and the House of York was represented with a white rose. The new House of Tudor came to be symbolized with a new rose design called the Tudor rose. It was a white rose superimposed on top of a larger red rose. Henry Tudor incorporated that Tudor rose into the uniform design of the bodyguards at the Tower of London. Those bodyguards are known today as the Beefeaters, and they still wear that Tudor rose on their uniforms. [*SOURCE: The Story of Britain, Rebecca Fraser, p. 242.*]

That's the same uniform worn by the ravenmaster at the Tower – the person responsible for maintaining those ravens in the Tower to this very day. As I noted earlier, ravens are closely related to and often confused with crows. Both are associated with death and foreboding, just like the Tower itself. But using the terminology that appeared in the 1400s, the Tower is only home to an unkindness of ravens, not a murder of crows.

And speaking of those old terms for collective nouns, it was still very much a fad to coin those types of terms when Henry Tudor became king in 1485. The following year a book was published by a brand new printing press that had been established at the monastery of St. Albans north of London. This particular book is known as the Book of St. Albans, and it contains what is considered to be a somewhat definitive list of these types of terms for groupings of animals and people. The list was apparently compiled from a variety of other sources and seems to contain

most of the terms that were in use at the time, including those that we looked at earlier in that poem published by William Caxton.

This second book is mainly a treatise on hawking, hunting and heraldry. It's attributed to Dame Juliana Barnes, but virtually nothing is known about her. It's not even clear if she was a real person or just a pen name used by someone else. The book proved to be very popular and was reprinted many times over the course of the 1500s. One chapter of the book is called "the compaynys of beestys and fowlys" – 'the company of beasts and fowls' – and it contains over 160 terms for various collections of animals, people and other things. It appears that the popularity of the book helped to perpetuate many of these terms and allowed these terms to pass into general use over time.

In addition to some of the terms I mentioned earlier, we find terms like a sleuth of bears ('a Slewthe of beerys'), also sometimes rendered as a sloth of bears. We find a leap of leopards ('a Lepe of leberdes'), a business of ferrets ('a Besynesse of ferettes'), a kindle of young cats or kittens ('a Kyndyll of yonge cattys'), a rag of colts ('a Ragge of coltys'), and a barren of mules ('a Baren of malys'). For groups of people, we find terms like a prudence of vicars ('a Prudence of vycaryes'), an observance of hermits ('an Obseruans of heremytes'), and a school of clerks ('a Scol of clerkes'). Many of these terms are clearly a play on words which was so popular at the time like a doctrine of doctors ('a Doctryne of doctours'), a converting of preachers ('a Conuertynge of prechers'), an eloquence of lawyers ('an Eloquens of laweyers'), a sentence of judges ('a Sentence of Iuges'), and a damning of jurors ('a Dampnyng of Iuryours'). Some are just a humorous commentary on certain groups of people like a drunkenness of cobblers ('a Dronkenshyps of Coblers') and an abominable sight of monks ('a bomynable syght of monkis').

But as I noted, the chapter is titled 'the company of beasts and fowls,' so it also contains a list of terms for groups of birds. It contains many of the same terms mentioned in that earlier book published by Caxton, but it also contains a few new terms not found in that earlier text. For example, we find a general term birds of all kinds – a dissimulation of birds ('a Dyssymulacon of byrdes'). We also find new terms for specific kinds of birds like a bevy of quails ('a Beuy of quayles'), a watch of nightingales ('a wache of nyghtyngalys'), a walk of snipes ('a walke of snytes'), and a murmuration of starlings ('a Murmuracon of stares'). The text also repeats the common term for a group of ravens – an unkindness of ravens ('an Vnkyndnes of rauens'). And it also contains a term for a group of choughs, which is a bird in the crow family. The term is a chattering of choughs ('a Claterynge of choughes').

But interestingly, there is no specific term for crows. A 'murder of crows' doesn't appear in this manuscript. And it's a curious omission. Perhaps it was a simple oversight. But for a collection that appears to be a definitive list pulling from earlier works, and for a collection that includes most of the other terms used in those other works, it seems strange that crows would be omitted, especially with the inclusion of ravens and choughs which are related to crows. Perhaps the author objected to the term 'murder of crows' sensing that it seemed out of place among other all of the humorous and playful words.

In fact, the term a ‘murder of crows’ almost completely disappeared from English from this point on for several centuries. The Oxford English Dictionary doesn’t cite a single case of the term’s use between the 1470s and the 1900s when the term was finally revived within English.

So that old term *murder* for a bunch of crows reappeared in the 1900s. And something else also reappeared in recent years. Or maybe I should say ‘someone’ else reappeared in recent years. That someone was Richard III. The presumed ‘murderer of princes’ disappeared around the same time that the term ‘murder of crows’ disappeared. Both were lost to history for several centuries. I noted earlier that when Richard was killed at the Battle of Bosworth Field, his body was taken to Leicester and buried in a poorly marked grave in a churchyard. The church was torn down a few years later, and the specific location of the grave was lost. The churchyard was paved over in recent years as development occurred throughout the city. It was assumed that Richard’s remains were still out there in the ground somewhere, but nobody knew where. But in 2012, an effort was made to research the location of the churchyard and the grave. It turned out to be located beneath a car park or parking lot. The researchers excavated the area and found a skeleton. DNA testing soon confirmed that the remains were indeed those of the last Plantagenet king – Richard III.

The examination of the bones also revealed something else very interesting about Richard. The bone evidence allowed researchers to determine his diet. Different bones regenerate over time at different rates. By examining those bones, researchers can not only determine certain aspects of a person’s diet, they can also see how the diet changed and evolved over the course of person’s life. By examining Richard’s bones, researchers determined that late in his life, while he was king, he consumed a lot of alcohol. It appears that he was drinking about a bottle of wine everyday.

And the DNA also revealed something else very interesting about his diet. While he was king, he apparently loved to eat wild birds. The evidence indicates that his diet included a very large proportion of expensive and luxurious fowl. In order to satisfy his tastes, his cooks apparently had to maintain a herd of swans, a siege of herons, a congregation of egrets, a muster of peacocks, and a herd of cranes. But apparently not a murder of crows.

So we’ve now taken the story up to the mid-1480s and the beginning of Tudor England. This is a period associated with early modern England and early Modern English. This is the period of the Renaissance, the Reformation, and the exploration and discovery of the New World. And speaking of that period of exploration and discovery, we’ll turn our attention to those very important developments in the next episode. We’ll look at the race to find a new way to the Indies, Christopher Columbus’s voyage to the New World, and the often overlooked English expeditions in North America. These developments had profound consequences for the people of Europe, Africa and the Americas. And it set the stage for the export of English to a new continent.

So until next time, thanks for listening to the History of English Podcast.

## **EPISODE 145: A SEA CHANGE FOR EUROPE**

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](http://historyofenglishpodcast.com). And you can sign up to support the podcast and get bonus episodes and transcripts at [Patreon.com/historyofenglish](https://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 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 middlemen 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 through 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 makynge” – ‘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 about makynge 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 *mop* 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 thoroughly 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 lewant" – '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 call 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 had 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 far-away 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 Portuguese.

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 Portuguese 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 stars 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 had 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 America 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 had 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 away than 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.