

**THE HISTORY OF ENGLISH PODCAST  
TRANSCRIPTS**

**EPISODES 86 - 90**

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## EPISODE 86: FAMILY OF REBELS

Welcome to the History of English Podcast – a podcast about the history of the English language. This is Episode 86: Family of Rebels. In this episode, we’re going to conclude our look at Henry II’s reign as ruler of England and western France. The final years of Henry’s reign were consumed with putting down rebellions, but the rebels weren’t simply restless nobles. They were also Henry’s own children – and his wife. So it was a family of rebels. The end of Henry’s reign also marked the gradual re-emergence of English writing. So we’ll also look at the first major document composed in Middle English since the end of the Peterborough Chronicle.

But before we begin, let me remind you that the website for the podcast is [historyofenglishpodcast.com](http://historyofenglishpodcast.com). You can always reach me directly by email at [kevin@historyofenglishpodcast.com](mailto:kevin@historyofenglishpodcast.com). And I’m also on twitter at [englishhistpod](https://twitter.com/englishhistpod).

Also, one quick note about Patreon. As you probably know by now, you can sign up to support the podcast at [Patreon.com](https://www.patreon.com/historyofenglishpodcast). Just go to [historyofenglishpodcast.com](http://historyofenglishpodcast.com) and link from there. The Patreon site includes bonus mini-episodes, and now it also includes a transcript of each new episode as soon as it is released. I continue to work on the transcripts of old episodes, and I hope to have an update on that in the near future. But for now, transcripts of the new episodes will be available at Patreon.

So with that, let’s turn to this episode. I’m going to begin by moving the historical narrative forward up to the death of Henry II. Then in the second half, I’m going to switch gears and look at a very important document that appeared around that time called the Ormulum.

But let’s begin with Henry II as ruler of England and much of western France. Over the last couple of episodes, we’ve seen how Henry pieced together a massive realm. It was so large that later historians called it an empire. It made Henry rich and powerful, and it gave him access to vast resources. It also left him with many enemies along his extensive borders. That included Louis VII – the King of France – who was concerned about Henry’s power and influence. But Henry’s greatest threat came from within. As his sons grew older, they grew impatient. And they started to demand their own pieces of Henry’s empire. And when they didn’t get what they wanted, they were eager to rebel. So Henry had to manage all of these threats – both foreign and domestic.

To trace these developments we should probably start with the marriage of Henry and his wife, Eleanor of Aquitaine. The marriage had always been a political union. But it also produced eight children – five sons and three daughters. The eldest son, named William, died as a small child. So that left four sons – Henry, Richard, Geoffrey and John.

Henry and Eleanor’s marriage may have had a fairy tale beginning, but it didn’t have a happy ending. It was more like a Greek tragedy. The marriage ended in jealousy, separation, warfare, and imprisonment. If Henry and Eleanor ever loved each other, it appears that that affection came to an end by the time Eleanor gave birth to their youngest child named John. Shortly after John was born in 1166, Eleanor left Henry and returned to Aquitaine.

The historical sources don't give a specific reason for the separation. But the most popular theory is that Eleanor was furious with Henry because he was having an open affair with a woman named Rosamund Clifford. The affair is well documented, and by all accounts, Henry had a strong affection for his young mistress.

The name Rosamund was an old Germanic name. It combined Germanic root words meaning 'horse' and 'protector.' But Henry gave the name a new Latin spin. He called Rosamund – "Rosa Mundi" – which in Latin meant the 'rose of the world.'

Again, it isn't clear if the affair was the actual cause of the separation. But shortly after the affair began, Eleanor headed to Aquitaine. Now as we know, Eleanor was feisty and headstrong. She had already married and divorced the King of France. And now she had married and separated from Henry, the King of England. Despite a troubled history with her husbands, she remained very close to her children – especially her son Richard – later to be known as Richard the Lionheart. Richard also took up residence in Aquitaine. And he helped his mother administer the duchy with expectations that he would one day inherit the region.

The year that Eleanor left Henry was the same year that Henry invaded Brittany in northwestern France. And that turned out to be good news for another one of the middle sons of Henry and Eleanor. After that invasion, Henry soon arranged a marriage between his son Geoffrey and the heiress to Brittany. This arrangement set up Geoffrey as the future Duke of Brittany.

So from this point on, the ultimate division of Henry's empire began to take shape. The two middle sons would each have their own region. Richard would one day receive Aquitaine in the south of France. And Geoffrey would one day inherit Brittany in the northwest. But most of the empire would pass to the eldest son named Henry. Of course, that included the northern regions of Normandy and Anjou – and it also included England. So the younger Henry was destined to become the next King of England. Since the king and his son were both named Henry, I'll refer to the son as "Young Henry" to try to keep them separate.

So Henry's empire was to be divided between his three oldest sons. But I mentioned earlier that there was a fourth son named John. It appears that John was originally destined for a life in the Church, so no specific land was earmarked for him – at least not at this point. John later became known as John Lackland. And that name "Lackland" came from the fact that he lacked any specific land or territory in his father's realm. But by all accounts, John was Henry's favorite son. So he will play a big role in our story going forward.

These general plans for Henry's succession were finally formalized a couple of years later in the year 1168. In that year, Henry tried to come to terms with the Louis VII – the King of France. Now, as you might remember, both men had been married to Eleanor of Aquitaine. So there was probably some personal jealousy between them. But beyond that, Henry's empire had eclipsed Louis's kingdom in size and power. So Louis was always looking for ways to destabilize Henry's realm, usually by supporting Henry's enemies.

So in the year 1168, the two kings tried to settle their differences. They negotiated a peace treaty – which ultimately fell apart. But that treaty is important because it outlined the ultimate division of Henry’s empire between his sons. And the agreement did that because Henry’s lands in France were technically held as a vassal of the French king. So Henry needed Louis to agree to the division.

The agreement stipulated that eldest son, Henry – aka “Young Henry” – would receive Normandy, Anjou and Maine, and he would hold those regions as Louis’s vassal. Young Henry would also get Brittany, but he would then turn around give it to his brother Geoffrey who would hold it as a vassal. The agreement also stipulated that Richard would one day receive Aquitaine, and he would hold it as Louis’s vassal.

So that pretty much took care of the future division of Henry’s lands in France. But it didn’t address the matter of England, because England was held as a separate kingdom. And as I noted, England was also destined to go to the eldest son, Young Henry. So a couple of years later, in 1170, two important ceremonies were held.

Down in Aquitaine, Richard was formally declared the Duke of Aquitaine. And up in England, Young Henry was formally proclaimed as the King of England. I actually mentioned this ceremony a couple of episodes back in the context of the discussion about Thomas Becket. Becket was the Archbishop of Canterbury at the time, but he was in exile in France. So Henry had to get some other church officials to preside over the coronation.

The important thing to understand about these developments is that Young Henry was given a title, but he wasn’t really given any power. This was a customary practice back in France. These coronations were designed to create an orderly succession, but they weren’t intended as a grant of actual power. They were mostly ceremonial. So Young Henry now had the title of ‘King,’ but he was really just a king in waiting.

A couple of year later, Young Henry married the daughter of the French king, Louis VII. The marriage had been arranged since they were small children, but it was finally formalized at this point. So Young Henry now had two separate connections to the French king. Louis was his wife’s father and his mother’s ex-husband. (Yes, these relationships did tend to get incestuous.) And that relationship between Young Henry and Louis the French king will become very important as we move forward.

So let’s focus on Young Henry for a moment. He was now technically the king, but ‘king’ in name only. Even though he didn’t have the power and resources of the king, he tried to live like a king. He kept a large retinue of supporters, including many young nobles and knights. His court was lavish, and he lived well beyond his means. He was known for his *largess*, and that’s kind of an important term.

The term *largess* refers to a person’s generosity and willingness to make lavish gifts, and it sometimes refers to the actual gifts that are made. *Largess* is a noun, but it first appeared in English in its adjective form – as the word *large*. And that word *large* first appeared around the current point

in our story. The original meaning of the word *large* was ‘generous, bountiful, and liberal in giving.’ So again, it was the adjective form of the word *largess*.

These words came from French, and they were important because they were a fundamental part of the emerging code of conduct which came to be known as chivalry. That code of conduct required the knight to defend the weak, show compassion and courtesy, and be generous with his supporters by making gifts. In the terminology of the day, he was to provide a *largess*. The Latin root of *largess* and *large* meant ‘abundant.’ And it came to mean abundant gift-giving. And again, the adjective form *large* meant ‘generous and bountiful.’ Of course, the word *large* evolved over time – acquiring a much more general sense as something great in size or scope.

I mentioned that the word *large* entered English around this time. So you may be wondering how we know that given that English writing was so rare during this period. Well, around this time, a series of old homilies – or sermons – were written down in English. These are called the Lambeth Homilies, and they were copied sometime in the 1170s. Since they were copied from earlier Old English documents, the language is primarily Old English – not Middle English. The scribes did update the language in places – re-phrasing some passages and incorporating a few new words here and there. For example, the text is the oldest surviving English document to use the words *fruit*, *oil*, *prove* and *juggler* – all from French. You might remember that the word *juggler* originally referred to a minstrel or all-around entertainer. The text also contains the first known use of Norse words like *skill*, *wing*, and *thrust*. And since this was a collection of sermons, it isn’t surprising to find the first known use of certain Latin or French terms associated with Christianity. Those include words like *mercy*, *paradise*, *passion* and *sacrament*.

And as I noted earlier, the text includes the first known use of the word *large* in the English language – in that original sense of ‘abundant or generous.’ And that word *large* is important because King Henry’s son, Young Henry, was very *large* – in the original sense of the word. He was generous and provided his supporters with a *largess*. But there was one major problem with that. Young Henry had the title of King, but he didn’t have the income and resources that typically flowed to the king. So he started to run out of money. And he couldn’t maintain a largess with empty coffers.

By early 1173, Young Henry was in heavy debt. He became frustrated, and he started to demand some of his inheritance so that he could get access to the income and revenue. But his father refused to relinquish any control. Young Henry’s frustrations were fed by his father-in-law – the French king Louis. Louis was trying sow the seeds of distrust and rebellion. He wanted Young Henry to stand up to his father. He hoped that in-fighting and rebellion would ultimately lead to the break-up of the Angevin Empire.

Young Henry’s frustrations reached a fever pitch when his father tried to arrange a marriage for the youngest son John. The arrangement included a wedding gift of three castles lying between Anjou and Maine. John was to receive those castles, but Young Henry considered those castles to be part of his inheritance.

Young Henry was furious, and within a few days of the castles being granted, he slipped away from Henry's court and rode to Paris. He met with his father-in-law Louis. And together, they plotted a massive rebellion.

Young Henry then got the support of his mother Eleanor. And she encouraged her other sons, Richard and Geoffrey, to join the rebellion as well. The two brothers soon rode to Paris to join Young Henry. So all of that meant that King Henry's three eldest sons and his wife were now united against him. And they were allied with his arch-enemy, Louis VII, his wife's ex-husband.

As if that wasn't bad enough, many of Henry's other enemies along his borders soon joined in. That included the counts of Flanders, Boulogne, and Blois. It eventually included the King of the Scots as well. His name was William the Lion. And he was still upset that Scotland had been forced to return the northern English counties of Northumberland and Cumberland after the Anarchy. So he saw the rebellion as an opportunity to reclaim those lands for Scotland.

For King Henry, it probably looked like the entire world had allied against him. And his chances of victory looked slim. The war began when the rebels invaded Normandy in July of 1173. The conflict soon spread into Brittany and then to England. In November, a few months after the revolt began, Eleanor headed from Aquitaine to Paris to join her sons and her ex-husband. But along the way, she was intercepted and captured by Henry's men. She was immediately thrown in prison.

But Eleanor's confinement didn't stop the rebellion. Battles raged on both sides of the Channel. In England, most of the important nobles didn't join the rebellion. They had too much to lose in another Anarchy. So that allowed Henry to secure his position there. As I noted last time, Henry had settled his disputes with most of the Welsh nobles prior to his invasion of Ireland. So they never joined the rebellion either.

In 1174, the rebels tried to take control of England. William the Lion invaded from Scotland. And then the Count of Flanders announced his intention to invade from across the Channel. He sent an advance force into East Anglia, but Henry confronted the rebels and managed a decisive victory. Henry's supporters then defeated the Scots and captured their king – William the Lion. The other rebels in England soon surrendered. Henry then headed back across the channel to Normandy and defeated the remaining rebels there.

In October, after a year and a half of rebellion, Henry worked out peace agreements with his three sons and with Louis. Henry allowed his sons to have their lands and possessions back. But he wasn't as forgiving with his wife.

Henry felt that Eleanor had stirred the sons to rebellion and she had worked against him in alliance with her ex-husband. So Eleanor was kept under house arrest in various castles in southern England for the remainder of Henry's reign. Henry also dealt a harsh blow to William the Lion of Scotland. He forced William to sign a treaty that subjugated the Scottish nobles to the English Crown and the Scottish clergy to the English Church. William was also forced to surrender the strongest castles in Scotland. As a result of this treaty, Henry now had broad and sweeping rights over Scotland and its

Church. Before the failed rebellion, Scotland had been largely independent. Now it came under direct English control. It remained squarely under Henry's thumb for the rest of his reign.

No other ruler had ever had so much control over the British Isles. Scotland and most of Ireland had been added to his realm. And most of the Welsh princes had recognized Henry as their overlord. This period immediately after Henry's victory over the rebels was the highpoint of his reign. None of his neighbors could challenge him. And Henry was widely viewed as the greatest ruler in Europe.

A couple of years later, in the year 1177, Henry decided to give his youngest son John some territory as well. John was the favorite son. He was also the son who did not join the earlier rebellion. So at a council of barons in Oxford, Henry named John as the Lord of Ireland. John was only 9 years old at the time, but he now had his own inheritance.

Henry's plans for succession may have seemed settled, but they were about to be upset by a series of deaths. First of all, in 1180, Louis VII died in France. He was succeeded by his son, Phillip Augustus – known to history as Phillip II of France. The young king was a far more ruthless and skillful king than his father Louis. And it's really under Phillip's reign that the balance of power started to shift back to the French kings.

Three years later, in the year 1183, another major player in our story died. King Henry's son – Young Henry – died of dysentery. With Young Henry's death, all of his father's succession plans fell apart. Henry had to find a new successor, so he looked to his next oldest child, Richard. He called all three of his sons to a meeting and announced his new plans. All of Young Henry's lands would now go to Richard. That included England, Normandy and Anjou. But in exchange, Henry wanted Richard to give up Aquitaine in favor of the youngest son, John. It seemed like a good deal, but Richard balked at the idea of giving up his beloved Aquitaine. He had been raised there and fully expected to inherit the region when his father died. And on top of that, he didn't really trust his father. Richard knew that young John was the favorite son, and he suspected that Henry would ultimately name John as his heir. And he saw this demand to give up Aquitaine in favor of John as the first step in that ultimate outcome. So Richard stormed out of the meeting. And that left the matter unresolved.

This meeting was soon followed by another death. In the year 1186, Henry's middle son Geoffrey died in a jousting tournament. That left just two sons, Richard and John. Richard was the eldest child and the presumed heir to most of Henry's empire. But he had quarreled with his father for most of his life. John was clearly the favorite son. And Richard grew even more suspicious that John would eventually be designated as the heir. Increasingly, Richard made friends with the new young French king, Phillip. And Phillip fed Richard's suspicions that John was destined to take his rightful inheritance.

In the year 1188, conflict once again broke out between the Angevins and the French. Henry attacked Phillip's lands, and Phillip attacked Henry's lands in Normandy. In November, the parties held a peace conference to resolve the conflict. Henry, Phillip and Richard all attended the meeting. During the meeting, Phillip couldn't help but acknowledge the elephant in the room. He asked Henry

to confirm Richard as the lawful heir to Henry's empire. But Henry refused. And that was the ultimate breaking point between father and son.

Richard and Phillip then joined forces and attacked Henry in northern France. It was at this point that everything started to fall apart for Henry. He didn't have enough English troops with him in France at the time. So he was overwhelmed militarily. He had to rely on mercenaries, but he soon ran out of money to pay them, and they deserted him. And on top of that, Henry had become very ill.

In June of 1189, Henry's forces were defeated at Le Mans – in northwestern France. Henry then sent the bulk of his men to Normandy, but he was too sick to accompany them. So he retreated to a castle in Anjou. And he lay in bed for the next two weeks – sick and drained.

On July 3, Henry managed to get out of bed to meet the young French king Philip to discuss peace terms. At the meeting, Philip reeled off a long list of demands which amounted to Henry's complete surrender. Phillip also demanded that Henry recognize Richard as his heir on both sides of the Channel. During the meeting, Henry was so sick that had to be held upright on his horse by his attendants. Having been defeated on the battlefield, and being gravely ill at the time, Henry had little choice but to give in and agree to the demands.

Henry returned to the castle and was placed in bed. And he immediately sent for a list of all his supporters who had gone over to Richard's side. The first name on the list was his young son John. Henry's favorite son had abandoned him at his weakest and most vulnerable moment. The grief and shock was too much to bear. And Henry died three days later on July 6. He probably succumbed to his illness, but historians like to say that he died of a broken heart.

With Henry's death, the massive empire passed to Richard. He became the new Duke of Normandy. And then he headed straight to London to be crowned as the new King of England. As I noted earlier, Richard became known to history as Richard the Lionheart. And his arrival in England coincided with the gradual return of English as a written language. So we'll leave Richard's story there for now. And we'll turn our focus back to the history of English.

It was around this time, when Richard came to power, that we find the next major text composed in English. This document is known as the *Ormulum*, and it is one of the oldest surviving documents composed in Middle English.

Many scholars consider the final entries of the *Peterborough Chronicle* to be the oldest Middle English document. Now, about 30 or 40 years later, we have the next text. The exact date of the text is unknown, but it is generally dated to the last couple of decades of the 1100s.

Since this is one of the few surviving documents from that transitional period between Old and Middle English, it is extremely important to English scholars because it is one of the few documents to capture the changes that were taking place at the time.

The Ormulum is ultimately a religious document composed by a monk in the East Midlands of England. It is a collection of homilies – or sermons – in some respects similar to the Lambeth Homilies that I mentioned earlier in the episode. But this particular collection is not a copy of earlier homilies. It is the unique creation of the author named Orm.

You may be wondering how we know the name of the writer – and the name of the text. Well, the author tells us. He says that his name is Orm and the book is called Ormulum: He writes:

This book is named Ormulum because Orm it wrought . . .  
þiss boc iss nemmed Ormulum forrþi þat Orm itt wrohhte . . .

Now, the text isn't really considered to be a great work of literature. It's written in verse, but Orm didn't use conventional poetic styles. He didn't use rhyming or alliteration. And the text tends to be very repetitive in parts. But the Ormulum isn't important as a work of poetry or literature. It's important because it captures many of the changes that were taking place in English in the late 1100s.

Orm begins the book with a dedication to his brother. I thought it might be interesting to go through the opening lines of that dedication to get a feel for the language. In the dedication, Orm tells us that he has a brother named Walter. And Walter is his brother in three ways. They have the same parents so they are natural brothers. They are also Christian brothers in faith. And third, they are both monks, so they're brothers in the monastery where they have taken vows to follow the monastic rule. Orm then says that Walter asked him to translate part of the Gospels into English so that the common people of England could better understand them. Orm says that he has attempted to translate those teachings as best he could with the little wit and intelligence that the Lord has granted him.

As we go through these lines, I'm going to give you a literal translation first so you can get a sense of the grammar and syntax. And then I'll give you the original Middle English version as Orm wrote it.

Now brother Walter, my brother after the fleshly kind (which meant 'my brother in flesh')  
Nu broþerr Wallterr, broþerr min affterr þe flæshess kinde,

and my brother in Christendom through baptism, and through truth (which meant 'thru faith')  
annd broþerr min i Crisstenndom þurh fulluhht, annd þurh trowwþe,

and my brother in God's house yet in the third way  
annd broþerr min i Godess hus 3et o þe þridde wise,

through that with which we have taken both a rule-book to follow  
þurh þatt witt hafenn takenn ba an re3hell-boc to foll3henn

under the canons' order and life, just as Saint Augustine sette  
unnderr kanunn-kess had annd lif, swa summ Sannt Awwstin sette

I have done as you asked and performed your will)  
Icc hafe don swa-summ þu badd, annd forþedd te þin wille

I have wound (or turned) into English the Gospel's holy lore  
Icc hafe wennd inntill Ennglissh goddspelless hall3he lare

After that little wit that me my Lord has lent  
affterr þatt little witt þatt me min Drihhtin hafeþþ lenedd

So from those passages, we can hear a much more familiar form of English. The majority of the words have survived into Modern English even though the meanings may have changed over time. The word order is also closer to Modern English. It is still evolving, but it is getting closer to a structure we can recognize.

There are also other signs of a language in transition. Orm uses the modern pronoun *I*, but he mixes it in with the older form *icc*. His verb forms are also variable. Take the past participle of the verb *show* – as in “I have shown.” Orm uses both *shæwenn* and *shæwedd* – literally *shown* and *showed*. So that shows that some of the verb forms weren't completely settled at the time.

Orm also shows some brand new English constructions. He added the word *over* to words like *lord* and *king*. And that produced the first known usage of the terms *overlord* and *overking*.

He is also gives us a preview of another compound word which you may not have even realized was a compound word. That's the word *alone*. At first glance, *alone* looks like a variation of the word *lone* or *lonely* – but it's not. Words like *lone* and *lonely* and *lonesome* all came later – as a variation of the word *alone*.

*Alone* itself is actually a compound word. It combines the words *all* and *one*. So it meant ‘all by oneself.’ Orm is the first known English writer to use the phrase *all one* with that meaning. He does it in a translation of part of the Book of Matthew – the part where it says “man shall not live by bread alone.” He writes that man shall not ‘Bi bræd all ane libbenn’ – literally ‘by bread all one live.’ So he still uses two distinct words – *all* and *ane* (which was *all* and *one*). He probably didn't invent that construction, but this appears to be the first usage in an English document. And *all one* was eventually shortened into a single word *alone*. But over time, the pronunciation of that ‘L’ in the middle shifted from the first syllable to the second syllable, and it went from /all-own/ to /a-lone/. And from there, *alone* was shortened to just *lone*. And based on that new root, we got words like *lonely* and *lonesome*.

Orm was also the first English writer to use the word *right* as an adverb to mean ‘very’ – as in “He's a right good man.” Orm talks of leading a life “rihht wel wiþþ Godess hellpe” – “right well with God's help.” This usage still survives today, but it tends to be very colloquial and is usually associated with an old-fashioned style of speech.

So I said that the Ormulum was composed in the East Midlands – in the east central part of England. But many scholars have analyzed the text to narrow it down to a more specific location. Based on

a variety of factors, including Orms' spellings, his vocabulary and some of his unique dialect forms, most modern scholars think he lived somewhere in southern Lincolnshire. And that location is interesting because it is just north of Peterborough. So the Peterborough Chronicle and the Ormulum both appear to have been composed in the same vicinity within a few years of each other. And given that close proximity, you might expect the language of the Ormulum to be very similar to that of the Peterborough Chronicle. But it isn't. The language of the Ormulum is actually quite different.

For one thing, it has a lot of spelling innovations. And that was probably because Orm intended for the text to be read aloud. So he wanted to make sure that the words were pronounced properly. And in fact, he specifically says that in the document. I'm going to focus on Orm's spelling innovations in the next episode, because they reveal a lot about the evolving pronunciation of English at the time – at least in the East Midlands. But for the remainder of this episode, I want to focus on the words that he chose to use.

I said that the language of the Ormulum was very different from the Peterborough Chronicle. And that is partly because the Ormulum shows a lot more Norse influence than the Peterborough Chronicle. In fact, many Norse words are recorded in English for the first time in the Ormulum.

It shouldn't really be surprising that the document contains a lot of Norse words – because Orm himself was probably of Scandinavian descent. Remember that the East Midlands had once been part of the Danelaw where Viking settlement was extensive. And *Orm* is a Norse name. It meant 'serpent' or 'snake' in Old Norse. In fact, *Orm* and *worm* are cognate. *Orm* is the Norse word and *worm* is the Old English word. Old Norse tended to drop the 'w' sound before a vowel. That's why the Scandinavians had the god *Odin* where the Anglo-Saxons had *Wodan*. And they had *Orm* where the Anglo-Saxons had *worm*.

Anyway, Orm may have been a descendant of those earlier Viking settlers, not only because of his name, but also because his English is heavily peppered with Norse words. Most notably, Orm is the first English writer to use the Norse pronoun forms *they* and *their*. And he was one of the first to use the word *them* as well. As we know from prior episodes of the podcast, the 'TH' pronoun forms – *they*, *them* and *their* – came from the Vikings. The Anglo-Saxons used *hey*, *hem* and *here*, respectively.

Over time the Norse 'TH' forms pushed out the Old English 'H' forms. And that shows how great the Norse influence was – especially in the Old Danelaw region like the East Midlands. And Modern English evolved out of those East Midland dialects. So some of that Norse influence seeped into Modern English. And that included some of those Norse pronouns.

Again, Orm uses all three of those pronoun forms – *they*, *them* and *their*. And with the exception of a late Old English document that uses a form of the word *them*, the Ormulum is oldest surviving document to use those modern Norse pronouns.

I should also note that the text sometimes used the Old English forms as well. Orm sometimes uses both forms in the same phrase – like *þe33 hemm self* – which is literally "they themselves."

So that suggests that both pronoun forms were mixed together at the time in the East Midlands. People must have used them somewhat interchangeably. But over time, the ‘TH’ forms won out. The ‘TH’ forms gradually spread southward, and the Old English ‘H’ forms were essentially gone by the late 1400s.

So Orm gives us some new pronouns from Old Norse. But he also gives us a lot of other new words from Scandinavia. And some of those words survived into Modern English, and in fact are very common words today. For example, Orm is the first English writer to use the words *same* and *seem* – both of those words coming from Old Norse. And believe it or not, *same* and *seem* are cognate. They come from the same Indo-European root word. And the Old English word *some* also comes from that root. So *same*, *seem* and *some* are all related. So let’s see how those words are connected.

The ultimate Indo-European root was *\*sem*, and it meant ‘one’ or ‘as one.’ That root produced a lot of words in English. Via Latin, it gave us words like *single*, *simple* and *similar*. So from those words, we can see a direct connection to the Norse word *same*. I think we instinctively assume that the words *similar* and *same* are related – and they are – but it is actually a very distant relationship. *Similar* comes in via Latin and *same* comes in via Scandinavia.

As I noted, Orm uses the word *same* for the first time in the English language. Old English used *gelic* which was an early form of the word *alike*. But now the word *same* came in.

So it may not be surprising that words like *same*, *similar* and *single* are related. But how are those words related to the Norse word *seem*? Well, the connection is kind of hard to follow. We have to go back to the original sense of the word *seem* in Old Norse. Remember that the Indo-European root word meant ‘one’ or ‘as one.’ And in Old Norse, it produced an early version of the word *seem* which meant to fit together as one. So if you imagine a puzzle, you put together a lot of individual pieces to make one complete puzzle. So those pieces fit together. They’re compatible and suitable. So if we extend that concept to a set of ideas – specifically two or more ideas that fit together – we start to get the original sense of the word *seem*. If I have an idea that fits into some larger world view, it may appear – or *seem* – to be true. So if my boss drives a fancy car and lives in a huge mansion, his lifestyle is the *same* as other rich men. So he *seems* to be rich too. So that’s the ultimate connection between *same* and *seem*. But anyway, both words come from Old Norse and both words were first used in the Ormulum.

I noted earlier that the Norse words *same* and *seem* are also cognate with the Old English word *some*. Again, that word *some* has also undergone some changes over the centuries.

The original sense of the word *some* was ‘one part of a larger whole.’ So earlier, I gave the analogy of the puzzle. Well in Old English, one piece of that puzzle might be called *some*. And we still have that sense when we refer to *something*. *Something* is one thing selected out of a larger collection. Well over time, that sense of ‘one part of a larger whole’ was extended to apply to ‘several small pieces out of larger group.’ And that is the more modern sense of the word *some*.

Now I mention the word *some* because of its connection to *same* and *seem*. And I also mention it because Orm gives us the first known uses of two compound words using the word *some*. Orm is

the first English writer to use the terms *somewhere* (which he renders as *summwhær*) and *somewhat* (which he renders as *summwhatt*). Old English actually used a similar construction as *somewhat*. It used *hwæt litle* which was literally ‘little what.’ But now, Orm gives us *somewhat*.

So we’ve seen that Orm used Norse words like *they*, *them*, *their*, *same* and *seem*. Here are a few other Norse words that appear for the first time in the Ormulum. Orm gives us the first use of the words *want*, *anger*, *scare*, *thrive*, *raise*, *meek* and *bloom*. Again, all Norse words.

He also gives us the first known use of the Norse word *skin*. He uses it in the term *shepess skinn* (/shay-pess skin/) – which was ‘sheep’s skin.’ Old English used the word *hide*.

Orm also gives us the first use of the Norse word *ill*. He uses it in the sense of ‘wicked or depraved.’ So he speaks of *ill will* and someone whose heart is *ill*. It was used in place of the Old English word *evil*. By the way, *ill* and *evil* do not appear to be related.

Orm also gives us the first known use of the Norse word *blunt*. The Old English word was *unscarp* – or *unsharp*.

Orm is the first English writer to use the Norse word *clip* to mean ‘cut,’ and he is the first to use the Norse word *bait* to mean harrass or attack. So if you bait me into doing something I don’t really want to do, I’m using the word *bait* like Orm first used it.

Orm also gives us the Norse word *aloft*. Old English used *up-heah* – which was literally ‘up high.’

He gives us the Norse word *sly* for Old English *cræftig*. And he gives us the Norse word *wand* – as in a magic wand. Old English used the word *rod*.

Orm also was the first English writer to use the Norse word *scold*, but he didn’t use it in quite the way we use it today. A *skald* was a poet in Old Norse. And Orm refers to *scaldess* – which he apparently used to mean minstrels. Norse *skalds* or minstrels were known for their rough speech, and the word *skald* – or *scold* – came to mean a person who used abusive language. So it was originally a noun. But about a century later, it started to be used as a verb – to mean ‘to verbally abuse or chide.’ And that gave us the modern sense of the word *scold*.

Orm was also the first English writer to use the Norse word *bound*. It was used in the sense of ‘ready or prepared.’ This initial usage has largely died out. You might hear someone say that they are ‘ready and bound to go.’ This led to a sense of the word as the place of destination, as in *homeward bound*, *outward bound* or *upward bound*.

In one part of the Ormulum, Orm discusses the well-known passage from the Book of Matthew where Jesus goes into the temple and overthrows the tables of the money changes. Referring to this passage, Orm writes, “For that they turned God’s house into a huckster’s booth” – “Forr þatt te33 turrdenn Godess hus Inntill huccsteress boþe.”

Now this passage is interesting because Orm uses the phrase “huckster’s booth,” and this is first known use of both of those two words in the English language.

*Huckster* appears to be a borrowing from Dutch, and that would make it one of the first Dutch loanwords borrowed into English. And *booth* is another Norse word. Those words eventually replaced native English terms. The word *ceap* was an Old English word for a market. And a *huckster* was a *ceapman* in Old English. It was literally a ‘market man,’ and *ceapman* actually gave us the surname *Chapman*. And a *booth* was originally a *ceapsetl* which was literally a ‘cheap seat’ or a ‘market seat.’ In an earlier episode of the podcast, we saw that the word *ceap* came to mean a bargain, and that gave us the modern sense of the word *cheap* to mean low cost or low in price. But thanks to Orm, we know that by the 1200s a *ceapman* was sometimes called a *huckster*, and *ceapsetl* was sometimes called a *booth*.

I should note that Orm also used a lot of other Norse words, but many of them never really passed into standard English. However, some did pass into Northern English dialects where they still survive today. For example, Orm is the first known English writer to use the word *addle* to mean ‘earn or produce.’ And that word still lives on in parts of the north of England. So in the Yorkshire dialect, if you “earn some money,” you might “addle some money” – or in the local vernacular, you might “addle some brass.”

I noted in earlier episodes that Norse words had probably been around for quite a while in the old Danelaw region. They were probably there in the late Old English period, but those words aren’t generally found in Old English documents because those documents tended to be written in the standard dialect of Wessex. But now, with the loss of that written dialect, scribes tended to write as they spoke. And that’s why a writer like Orm – who was writing in the old Danelaw region – tended to use a lot of Norse words.

So we know that Orm used Norse words, but what about French words? Well, there are very few French loanwords in the Ormulum despite the pervasive influence of French at the time. The text itself is nearly 20,000 lines long, but it has less than a dozen loanwords from French, and most of those never entered standard English.

We do find the first use of the French word *scorn* in an English text. And it is a good example of why it can be hard to identify the ultimate source of some of these words. The word *scorn* is ultimately a Germanic word. That ‘SK’ sound at the beginning is a giveaway. The word eventually passed into Late Latin and early French. And Orm picked up the word for the first time in English as *skarn* and *skarnedd* – literally *scorn* and *scorned*.

Given the overall influence of French at the time, it is surprising that the Ormulum contains so few French words. Some scholars think that the omission was intentional – that Orm had an aversion to French words. He specifically says that he wants the text to be used as a preaching tool and read out loud to congregations. So maybe he felt that they were unfamiliar with those French words. But as we’ll see in upcoming episodes, some of the other Middle English documents composed just a few years later were filled with French words. So the lack of French influence in the Ormulum is a bit of a mystery.

It's even more of a mystery because Orm seems to be familiar with French. His writing style actually shows a lot of French influences. For example, he used a lot of French spellings. So he appears to have been trained in French spelling and writing.

But Orm did more than replace Anglo-Saxon letters with French letters. He actually created his own unique spelling conventions. He devised a technique to distinguish short vowels from long vowels. And that is important because it confirms that the pronunciation of English words was changing during the early Middle English period.

Next time, we'll look at how Orm and other Middle English scribes dealt with the changing sounds of English. Some of their innovations survived and some didn't. But they greatly influenced the way we spell words today. So next time, we'll explore the sound of Middle English and the application of the alphabet to those sounds.

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

## EPISODE 87: THE FIRST SPELLING REFORMERS

Welcome to the History of English Podcast – a podcast about the history of the English language. This is Episode 87: The First Spelling Reformers. In this episode, we’re going to look at the alphabet during the period of early Middle English. We’re also going to continue our look at the *Ormulum* – a 12<sup>th</sup> century text that marked a revival of English writing. As we saw last time, the text shows some important changes in the language – as English evolved from Old English into Middle English. Those changes included lots of new words – especially Norse words. But it also included several notable changes in English spelling. Some of those changes are documented for the first time in the *Ormulum*. Other changes appear a short time later. So this time, we’ll look at those spelling reforms – and we’ll see how many of our modern spelling conventions evolved during this period.

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 at [Patreon.com](https://www.patreon.com/historyofenglishpodcast). Just go to [historyofenglishpodcast.com](http://historyofenglishpodcast.com) and link from there.

Now this time, we’re going to explore the changing alphabet during the time of Middle English. The Anglo-Saxons had adopted the Latin alphabet and made some changes to it to make it work for Old English. But after the Norman Conquest, the French-educated scribes didn’t like what they saw in English documents. They looked at those documents and saw funny-looking letters – and they saw strange spellings for certain common sounds. So those scribes tried to ‘fix’ English spelling – and of course, I’m putting the word ‘fix’ in quotes. What they were really doing was imposing traditional French spelling rules on English.

We see the first evidence of these changes in the final entries of the *Peterborough Chronicle* – composed in the mid-1150s. And we see lots more of these changes in the *Ormulum* – probably composed in the 1180s. These are two of the earliest Middle English texts, and they both show several new spellings. But the *Ormulum* is notable because it is the first document to clearly distinguish the pronunciation of long vowels and short vowels. Orm made this distinction by doubling the consonant after a short vowel. This was a completely new innovation – and Orm was very proud of it. He even directed any scribes who copied his text to make sure that they maintained his spellings. He wanted his text to be read out loud to English-speaking congregations. And he wanted to make sure that the words were pronounced correctly. So his text is very helpful in showing how words were actually pronounced in the late 1100s – at least in the East Midlands of England.

In addition to his spelling innovations related to vowels, Orm is also the first scribe to use some common spelling conventions for certain consonant sounds. Most of these consonant changes were traditional spellings used in Latin and French documents. So they weren’t really unique to Orm. But Orm is the first known English writer to use many of these innovations.

Now I had intended to cover all of these changes in this episode. But there were so many changes that I won’t have time to cover all of them here.

So this time, I'm going to focus on the new spellings related to consonant sounds. And next time, I'll try to tackle the changes associated with the vowels. After these next couple of episodes, we'll have a much better idea why English words are spelled the way they are.

Let me begin by noting that I looked at the development of the Old English alphabet back in Episodes 34 through 36. So if you're really interested in this topic, I would recommend that you go back and listen to those episodes as well. And if you want an even more comprehensive version of the story, I recommend that you check out the History of the Alphabet audiobook that I did several years ago. The audiobook traces the story all the way back to the very first version of the alphabet. But this time, I'm only going to focus on the changes to the alphabet during the period of early Middle English. And as we'll see, most of those changes are still with us today.

Now back in those earlier episodes, I traced some sound changes that took place in early Old English. And I explained how the early Anglo-Saxon scribes adapted the Latin alphabet to those sounds. That required them to use some existing letters in new ways, and it also led them adopt some new letters that weren't even part of the Latin alphabet.

So I thought a good place to start was with those new letters used by the Anglo-Saxon scribes. Those are the letters known as thorn, eth, wynn and ash. They weren't used in Latin and French, and the French-educated scribes apparently hated them because they immediately replaced them with letters from the Latin alphabet. A few of those Anglo-Saxon letters lingered on for a few more centuries, but they gradually disappeared by the end of the Middle English period.

So let's start with those old Anglo-Saxon letters called thorn and eth. These were the two letters used for the 'th' sound. And actually, I should say 'sounds' – because there are actually two different 'th' sounds. There is the voiced sound found in words like *the* and *this*, and the voiceless version found in words like *thank* and *thing*. And we can hear that difference if we try to switch those sounds – if we try to pronounce 'thIS' as 'THiss' or 'THank' as 'thANK.'

Anyway, it appears that Old English had BOTH of these 'th' sounds, just like we do today. But Latin didn't have either one. So Latin didn't have a specific letter for this sound. That meant that the Anglo-Saxons had to figure out a way to spell those sounds in Old English. So they came up with two solutions, and they existed side-by-side in Old English.

One option was a runic letter called thorn (þ). This letter resembles a letter P with the loop in the middle of the stem rather than at the top. The other option was called eth (ð). It was probably derived from an Irish version of the letter D. It looks like a lower case 'd' with a curved stem – and the stem has a line through it.

So both of those letters were in common use prior to the Norman Conquest. But then the Normans arrived, and the French-educated scribes didn't like these funny-looking letters, so they decided to replace them with something more familiar. Their solution was our modern letter combination – 'TH.' And one of the first uses of this letter combination in English can be found in the Peterborough Chronicle. In fact, I mentioned this back when we went through the Chronicle. In the entry for the year 1132, the scribe wrote, "Was it noht suite lang, " which meant "Was it not very long." The

word *sui~~th~~e* meant ‘very.’ It had normally been spelled with a thorn or eth at the end, but the Peterborough scribe spelled it S-U-I-T-H-E. And the ‘TH’ spelling entered English.

Now I should note that the ‘TH’ letter combination was not a brand new innovation. It had actually been around for a long time in Latin. That was because the Romans had borrowed a lot of Greek words with that sound. And the Greeks had a specific letter for the sound called theta. But since Latin didn’t have that sound – or a letter for that sound – they just used the ‘TH’ letter combination to represent that sound in those words borrowed from Greek. And now that spelling was applied to English as well.

With the use of the ‘TH’ letter combination, there was no longer a need for those old Anglo-Saxon letters – thorn and eth. So those old letters gradually disappeared. Eth actually disappeared VERY quickly. It disappeared within a century. It was gone by the late 1200s. Thorn hung around a bit longer, but it was ultimately a victim of the printing press which was invented near the end of the Middle English period. Most of those new presses were constructed on the continent and used continental letters. And they didn’t have a thorn. So that forced the use of ‘TH,’ and thorn finally disappeared from English.

You might remember from an earlier episode, that the printers did try to come up with a way to print the thorn in English documents. Since they didn’t have a specific thorn letter, they sometimes used the letter Y because the shape of their Y resembled a thorn. And that technique gave us the spelling of ‘Y-E’ for *the* – as in ‘Ye Olde Tea Shoppe.’ But the first word was always pronounced /the/ – not /ye/. The letter Y was just used as a substitute for the thorn. Eventually that practice stopped because of the confusion it created. And the ‘TH’ letter combination became the standard spelling for the ‘th’ sounds in English.

I noted earlier that there are actually two distinct ‘th’ sounds in English – a voiced version and a voiceless version. And you may be wondering why Modern English does not distinguish these two sounds the way Modern Icelandic does. Well, the answer appears to be because the Norman scribes didn’t have either sound in French. So they either didn’t notice the difference or didn’t feel any need to distinguish the two sounds.

So that takes care of two of those Anglo-Saxon letters – thorn and eth. What about the other two – called ash and wynn? Well, the letter called ‘ash’ was actually a letter for a vowel sound. It represented the /æ/ sound in a word like *hat* or *bat*. Since it was a vowel letter, I’ll deal with it in the next episode.

So that leaves the final Anglo-Saxon letter called ‘wynn.’ This letter represented the ‘w’ sound. Now again, the Latin alphabet didn’t have a specific letter for the ‘w’ sound when the Anglo-Saxons borrowed the alphabet. The letter W didn’t exist at that time. So the Anglo-Saxons turned to the runes and borrowed the runic letter for that sound called ‘wynn.’ The letter actually resembles the letter P with a much bigger loop. And that largely solved the problem of how to represent the /w/ sound in Old English in a clear and consistent way.

Now again, when the Norman scribes arrived, they didn't like that funny looking Anglo-Saxon letter. So they got rid of it and imposed a new spelling which was an early version of our modern letter W. But in order to understand what happened here, we have to consider what the French scribes had to work with because the 'w' sound was complicated in Latin and French.

Earlier, I said that the Latin alphabet didn't have a specific letter for the 'w' sound, but that sound did exist in early Latin. So how did they spell it? Well, they used the letter U. The U represented both the vowel sound /oo/ – and this 'w' sound. And in fact, those two sounds are so closely related that linguists actually classify the 'w' sound as a semi-vowel. When the vowel sound /oo/ appears before another vowel, it tends to shift to the 'w' sound. A good example of this is the name *Louis* (/loo-ee/) in French. The spelling L-O-U-I-S is its original spelling, and it reflects the original pronunciation. But notice that we tend to pronounce it as /loo-wis/ – or /loo-wee/ in French. That 'w' sound is a natural development. And in fact, the spelling of the name was later Anglicized to L-E-W-I-S.

The important point here is that the Romans and the French tended to use the letter U for the /w/ sound because the /w/ sound was seen as a variation of the U sound. And there really wasn't much confusion, because context made it clear. When the letter U appeared before a consonant, it was usually pronounced as a vowel - /oo/. But when the letter U appeared before another vowel – like in *Louis* (/loo-wee/) – it was usually pronounced with that 'w' sound.

So the French-trained scribes tended to use the letter U for this /w/ sound. But they also had another technique that was really a variation of the U. As I noted, when a U appeared before another vowel, it typically had the 'w' sound. I have given the example of *Louis* (/loo-wee/), but another good example is the Latin word *equus*, which is a term for a class of animals including horses and zebras. It is spelled E-Q-U-U-S, but the first U is often pronounced as a /w/ – or a 'w' sound – so it is /ek-woos/.

Well this idea of putting two U's together in this manner became popular in Late Latin and early French. If you really wanted to make it clear that the sound you were writing was a /w/ sound and not an /oo/ sound, then you could just write two U's back-to-back. So French-trained scribes used both techniques – a single U before another vowel or the back-to-back U's if they really wanted to make it clear.

And after the Normans conquered England, these two techniques replaced the Old English letter for the 'w' sound called 'wynn.' In fact, this happened very quickly. In an earlier episode, we saw that the Peterborough scribe was already using back-to-back U's in place of the wynn in the mid-1100s. These back-to-back U's became so popular that they were soon compressed into a single letter – known as the double U. This was already starting to happen in the 1100s and 1200s. And once those two U's were physically attached to each other, that actually created a brand new letter for the /w/ sound. And this process also gave us the name of the letter – the 'double U.'

So the Old English letters thorn and eth were replaced with a new 'TH' letter combination. And the Old English letter wynn was replaced with a U or UU letter combination, which soon evolved into our modern letter W.

Now I mentioned that the letters U and W are closely related. The sounds they represent are closely related, and in fact the letter W evolved out of the letter U as I just described. But there is another letter that is closely-related to U and W, and you can probably guess which one it is. It is the one that comes in between those two letters in the modern alphabet. Of course, it's the letter V. And the letter V is also important to this part of the story.

Both Old English and Old French had the 'v' sound – /v/. But each language had a different letter for that sound. And neither of them used the letter V because the V didn't exist yet as a distinct letter.

So let's explore this development. The 'v' sound didn't exist in Classical Latin, and that's why there was no specific letter for that sound in the Latin alphabet. But that sound started to appear in the language during the Late Latin period as the original language fractured into the Romance languages – including French. The sound appeared when the Latin 'w' sound shifted to a 'v' sound in many words. So that had two important consequences for early French. It meant that Old French had a relatively new 'v' sound, but it didn't have a specific letter for that sound. Since it was considered a variation of the 'w' sound – which itself was a variation of the U sound – the scribes just used a letter U for all of those sounds because that's really all they had to work with.

Now over time, they invented ways to vary the letter U to distinguish those three sounds. As I noted earlier, they used back-to-back U's for the 'w' sound, and that eventually evolved into our modern letter W. And to distinguish the 'v' sound from the 'u' sound, they just used two different versions of the letter U.

The letter was sometimes written with one long curvy line – and it was sometimes written with two separate straight lines. And over the next few centuries, the curvy version was allocated to the vowel sound of U, and the 'v-shaped' version was allocated to the /v/ sound. And once this distinction became widely accepted and was consistently used, that meant that the 'v-shaped' version became its own distinct letter with its own sound. This process was completed until the end of the Middle English period around the 1500s. And the two shapes really became distinct in the hands of the printers and their brand new printing presses. But up until then, throughout the Middle English period, the U and V were considered the same letter. It could be written two different ways, and it could represent two different sounds, but it was the same letter. In fact, it could really represent three different sounds, because the letter was still sometimes used the 'w' sound. So this 'U/V' letter was doing a LOT of work in Middle English. And this confusion didn't get completely sorted out until the V and W were finally accepted as distinct letters a few centuries later.

So all of that meant that Old French had a 'v' sound represented by letter U – which was sometimes written in a way that resembled modern letter V. So it was early version of the modern letter V. And just to keep this discussion as simple as possible, I'll refer to this letter as 'V' going forward, but keep in mind that it wasn't considered to be a separate letter yet.

So after the Norman Conquest, the French-trained scribes encountered the English languages which also had a 'v' sound, but that sound was far less prominent in English. In English, the sound was

represented with the letter F because it was considered to be a variation of the ‘f’ sound. Now this may seem odd at first glance, but we’ve actually come across this issue in earlier episodes.

We’ve seen how the ‘f’ sound switched to a ‘v’ sound in certain words in Old English, and we still do that today. So we have one *leaf*, but two *leaves*. One *thief*, but two *thieves*. We explored this sound change before, so I won’t go back through it here. But you may remember that the ‘f’ sound and the ‘v’ sound are closely-related sounds. The only difference is that the ‘f’ sound is voiceless and the ‘v’ sound is voiced. And that sound became voiced in certain situations – like plural words. So in those cases, it switched from an ‘f’ sound to a ‘v’ sound. And that’s why the Anglo-Saxons just thought of the ‘v’ sound as a variation of the ‘f’ sound, and they spelled it with the letter F.

Well, the French scribes didn’t like that spelling. It looked weird and foreign. So they got rid of the F in situations where it represented the ‘v’ sound, and they replaced it with their own letter – their early version of the letter V. So when we spell words today with a V, that is ultimately an innovation brought by the French scribes. Had the Conquest never happened, we would probably still be spelling those words with an F just like the Anglo-Saxons did.

Now I should note that Orm still used the traditional Anglo-Saxon ‘F’ in the Ormulum. He hadn’t yet adopted the letter V. And we see that in his spelling of the word *verse*. *Verse* is a Latin word, and it was used in the Church, so it had actually been used during the Old English period. Orm used it in the Ormulum, but he spelled it F-E-R-R-S. So the French V hadn’t arrived yet.

I should also mention one other thing about the ‘v’ sound in Old English. As I noted, it wasn’t very common in Old English. It only occurred in words where it was surrounded by voiced sounds. So for example, it tended to pop up when words ending in F were made plural – so again, *leaf* and *leaves*, and *thief* and *thieves*. For this reason, it almost never appeared at the front of native Old English words. It only appeared at the front of words borrowed from other languages – usually French or Latin. So I just gave the example of *verse* which Orm used in the Ormulum. And after the Conquest, a LOT of French words with that initial sound started to come in – words like *very*, *village*, *visit*, *vote*, *vest*, *vigil*, and on and on. They’re all borrowed words. And they’re all spelled with that letter V.

So that means that virtually all of the words we have in Modern English that begin with a ‘v’ sound are loanwords from other languages. There are a few exceptions to this rule, but I’ll probably cover those exceptions in future episodes.

So we’ve seen how the unique Anglo-Saxon letters were discarded, and the use of the letter F for the V sound was also discarded in most cases. It still lives on in a few words – like the word *of* (O-F). But for the most part, the new scribes just used their early version of the letter V.

So that’s a lot of change. But those scribes weren’t done yet. They also made some more changes. For example, they introduced the letter Z (or zed) to English.

In English, the history of the ‘z’ sound is very similar to the history of the ‘v’ sound. They’re both the voiced version of another sound. So as we saw, the ‘v’ sound is the voiced version of the ‘f’

sound. And the Anglo-Saxons just used the letter F for both of those sounds. And the ‘z’ sound is the voiced version of the ‘s’ sound. So again, the Anglo-Saxons just used the letter S for both sounds.

Once again, we see this change at the end of plural words. So just as *leaf* becomes *leaves* with a ‘v’ sound, *house* becomes *houses* (/how-zez/) with a ‘z’ sound. Again the sound changed to a voiced sound when it was surrounded by other voiced sounds, which often happened with words were made plural.

So letter S represented the ‘z’ sound in Old English, but that /z/ sound was limited in Old English, and never really appeared at the front of words.

Then along came the Normans, and once again, they didn’t like the fact that the Anglo-Saxons spelled the ‘z’ sound with the letter S. So they introduced their own letter Z. But as I noted, that ‘z’ sound was limited in Old English, and never really occurred at the beginning of words. So almost every word we have in Modern English that begins with an initial ‘z’ sound came from somewhere else. They are almost all loanwords – like *zeal*, *zero*, *zebra*, *zoo*, *zone*, *zombie*. They all came in from other languages, and they’re all spelled with that letter Z rather than the Old English S.

So letters V and Z were introduced from French during the Middle English period. But the Middle English scribes were far less consistent – and far less diligent – in their use of the letter Z. In Modern English, the letter V almost always represents the ‘v’ sound with a few exceptions like the word *of* that I noted earlier. But when it comes to letter Z, its use is much more hit and miss. The ‘Z’ was never consistently applied to English words. So that’s part of the reason why we still use the letter S for the ‘z’ sound in many words today. We see that S at the end of words like *tease*, *bruise*, *surprise*, *advertise*, and many, many more. So we still let the S do all of the work in many words. So we have *close* with a ‘S’ sound, but we might *close* the door with a ‘z’ sound. Both words are spelled the same way. And we might live in a *house* with an ‘S’ sound, but a school might *house* its students in a dorm. Again, both words are spelled with an S. It may seem confusing and inconsistent, but when we use the S for the ‘z’ sound in that way, we’re using it the same way the Anglo-Saxons did. So the French scribes introduced the letter Z, but they were never able to make its use consistent.

I should also make quick note about the name of that letter. I’ve mentioned this before, but as many of you know, the letter is pronounced /zee/ in the United States and /zed/ in much of the rest of the English speaking-world. The letter actually originated in the Greek alphabet as the letter called *zeta*. During the Middle English period, it was called *zede* (/zeh-deh/) based on that original Greek name. But it was also sometimes shortened to just *ze* (/zay/). So both pronunciations were common in Middle English. And *zede* (/zeh-deh/) and *ze* (/zay/) ultimately gave us our modern /zed/ and /zee/. During the early Modern English period, Britain and most of its colonies settled on the first pronunciation – /zed/. In colonial America, both pronunciations were common. But after the American revolution, Noah Webster said that the proper pronunciation should be /zee/. And that really settled the debate in the United States. And it’s been /zee/ ever since.

So we've looked at the introduction of letters W, V and Z to Middle English. In those cases, the French-educated scribes had a specific letter for a sound they found in English, and they elected to use their own letter rather than letter used by the Anglo-Saxons. But there were several situations where the French scribes didn't have a specific letter to use. They had to come up with another way to represent that sound. And that usually meant that they had to combine two or more letters.

We've already seen that with the TH letter combination. The French scribes didn't like the Old English letters thorn and eth, so they just replaced those letters with a combination of T and H. Well, they did that in several other situations as well. And that produced some other letter combinations that we still use today like CH and SH and GH. So let's look at those developments.

I've explored the origin of the CH before – way back in Episode 5 about the history of the letter C. But let me do a quick recap. As you probably know by now, the letter C was used for the 'k' sound in Latin. And that's how Old English used it as well. But during the early Middle Ages, that 'k' sound shifted forward to new sounds before the front vowels – E and I. And in many cases, it also shifted at the end of a word. And that happened in both Old English and early French. But the new sound was different in each language.

In Old English, the 'k' sound shifted forward to become a 'CH' sound – /ch/. So the word *kirk* started to be pronounced as /chirch/. And that gave us the modern word *church*.

But in French, the 'k' sound shifted forward and became an 's' sound. So the Latin word *circus* (/keer-koos/) meant a ring. And in early French, that initial 'C' before the 'I' shifted forward to an 'S' sound. And (/keer-koos/) became *circus* – as in a 'three-ring circus.' And the related word *circulus* (/keer-koo-loos/), became *circle*. So yes, *circus* and *circle* are cognate, and they both reflect this basic sound change within French.

Now even though the sound of letter C changed in both Old English and early French, neither set of scribes felt the need to change the spelling of words to reflect those sound changes. And that's because context made the pronunciation clear. When a C appeared before a back vowel – A, O U – then it had its traditional pronunciation as the 'k' sound in both languages. So *cat*, *cot*, *cut*. But when it appeared before a front vowel – E or I – it had the new sound. In Old English, it was /ch/, and in French it was /s/. And as long as English and French were separate and distinct languages, there was no problem. The pronunciation was clear in each language. But after the Norman Conquest, French words started to pour into English. So the scribes couldn't rely on context anymore. Before the front vowels, the sound could now be either /ch/ or /s/. It all depended on whether the word came from Old English or French. So the French scribes had to pick one pronunciation as the new standard. Naturally, being French-trained – and many of them being French-speaking – they decided that the French rule was correct. So a C was retained for the S sound before an E or I. That was the French rule, and that's still the general rule in English today. So *circus*, *circle*, *cellar*, *cemetery*, and so on. And that means that we let context tell us the proper pronunciation just like the French did.

But that means that the scribes had to figure out a way to represent that Anglo-Saxon /ch/ sound in the same situation. And of course, there was no specific letter for that /ch/ sound. So they decided

to represent it with the ‘CH’ letter combination. And the spelling of the word *church* went from C-I-R-C-E to C-H-U-R-C-H.

The new CH is actually on display in the Ormulum. In Old English, the word *child* was spelled C-I-L-D. But Orm spelled it C-H-I-L-D just like we do today. And the word *bench* had traditionally been spelled B-E-N-C. But Orm spells it B-E-N-N-C-H-E. So those examples confirm that the new C-H spelling was underway in the late 1100s.

Now, as I’ve noted before, some Old English words retained the ‘k’ sound before and E and I. That included words like *king* and *kindred*. There were other sound changes at work here that were causing that ‘k’ sound to be retained. But that created a problem for the Norman scribes who needed to distinguish that lingering /k/ sound before E and I. As it turned out, the Latin alphabet had a letter K that wasn’t really being used very much. So the letter K was introduced to represent that lingering /k/ sound before the E and I. So words like *king* and *kindred* got their modern letter K during this period.

And again, Orm gives us some of these brand new spellings in the Ormulum. He spells the word *kinde* as K-I-N-D-E, instead of the older spelling C-Y-N-D. And in earlier episodes, we saw that the final Peterborough scribes spelled the word *king* as K-I-N-G, rather than the older C-Y-N-G.

So all of that meant that English acquired the CH letter combination and an expanded use of the letter K.

We’ve looked at the origin of TH and CH, but those French-trained scribes also gave us our modern SH. This was another sound that didn’t have a specific letter in Latin or French. So the French scribes represented that sound with either SH or SCH. There were also cases where they used a double S for that sound.

Anyway, when those scribes looked at English, they saw that Old English didn’t use those spellings. The Anglo-Saxon scribes spelled the /sh/ sound with the letter combination SC. And that may seem odd, but we have to remember where the /sh/ sound came from in English. It was the product of another sound change in early Old English. The ‘sk’ sound (/sk/) had shifted to this ‘sh’ sound (/sh/). And since this change was pretty universal in Old English, the Anglo-Saxons just kept the old spelling – SC.

But then the Vikings arrived, and they reintroduced that original /sk/ sound. And you might remember that that gave us the modern distinction between *shirt* and *skirt*. The word *shirt* is the Old English version with the /sh/ sound, and *skirt* is the Norse version with the older /sk/ sound. So by the time the French arrived, that SC letter combination was being used for both sets of words. So a document might spell *shirt* and *skirt* the same way. So the French scribes tried to fix this problem. And of course, they fixed it by introducing the SH letter combination for the /sh/ sound.

The SC combination was retained for the /sk/ sound, and we still use that spelling for words like *score*, and *scare*, and *scope*, and *scab*. And with the increased use of the letter K, there was also a tendency to use SK in addition to SC. As a very general rule, Norse words that had the /sk/ sound

tended to be spelled with an SK, and French words with that /sk/ sound tended to be spelled with an SC. But there were lots of exceptions to that rule.

So again, just to summarize, the SC letter combination was used in Old English, but the SH spelling was introduced in early Middle English. In fact, the SH spelling was being adopted around the time that Orm wrote the *Ormulum* because that text is the first known document to spell English words with an SH.

Take the word *shall*. In Old English, it was spelled S-C-E-A-L. But Orm uses the modern spelling S-H-A-L-L. And Orm is the first known English writer to spell the Old English word *shame* with an S-H. And the best example of this is probably the word *English* itself. It was typically spelled E-N-G-L-I-S-C. But Orm replaced the S-C at the end with an S-H. (He actually spelled it ‘Ennglissh.’)

Now, just to be clear, Orm didn’t invent this spelling. It already existed in French. But the *Ormulum* is the oldest English document to use it.

So far, we’ve seen that the French scribes introduced several new letter combinations to represent sounds which didn’t have a specific letter in French. So we got TH for the /th/ and /th/ sounds. And we got CH for the /ch/ sound. And we got SH for the /sh/ sound. So you’ve probably noticed a trend there. The French-educated scribes tended to add the letter H to an existing letter to create these new spellings.

This was an old practice going back to the Romans. Ultimately, the ‘h’ sound is just a breathy sound that exists before or after another sound. And the Romans inherited a lot of words from Greek that had a very aspirated or breathy consonant sound. And to represent those sounds, they just put an H after the consonant. So Greek had a very aspirated P sound that sometimes sounded like combination between a P and an F. And the Romans represented that sound by adding an H after the letter P – giving us our modern PH spelling for the ‘f’ sound. That spelling was used for Greek words with that sound. And after the Norman Conquest some of those Greek words passed into English. So the PH spelling also passed into English during the Middle English period.

Similarly, the Greeks had an aspirated ‘K’ sound – sort of like /x/. So the Romans represented that sound by adding an H after the letter C. And that produced the original version of the CH spelling. But in Latin, those words were usually just pronounced with a normal ‘k’ sound. And those words also passed into English. That’s why we have a lot of words that begin with a CH spelling but are pronounced with a ‘k’ sound like *choir*, and *chorus*, and *chemistry*, and *chaos*. Again, those are all Greek words with a CH spelling to represent what was once a breathy ‘k’ sound at the front.

The point is that the Latin scribes adopted this extra H as a standard way to spell a new sound that didn’t exist in the traditional Latin alphabet. So that’s why we have PH, and TH, and CH, and SH.

This became such a common practice, that it was probably the cause of another spelling change in early Middle English. And that change produced our modern W-H spelling at the beginning of words like *white* and *what* and *when* and *why*. In Old English, all of those words were pronounced

with a slight breathy ‘h’ sound before the W. And so those words were spelled with an initial H-W. So *white* was H-W-I-T – pronounced more like /hweet/. And *what* was H-W-A-T – usually spelled with that letter æ in the middle, so it was H-W-Æ-T – pronounced /hwæt/. So there was a little aspiration at the front. And by the way, some Modern English dialects still retain that initial aspiration in those words.

But apparently, that pronunciation seemed odd to the new French-speaking scribes. Or perhaps they barely even noticed that initial H sound. Or maybe that just didn’t like that spelling. It isn’t entirely clear what the exact motivation was, but around this time, those scribes started to switch those first two letters at the front of those words – from H-W to W-H. Again, some scholars think that the scribes were so accustomed to putting the H after the other consonant to represent a unique sound – like PH and TH and CH and SH – that they decided to do the same thing here. And our modern WH was born.

And it was apparently born around the current point in our story, because Orm is the first known English writer to use that spelling. The word *whose* was *hwæs* in Old English – spelled H-W-Æ-S. But Orm spelled it W-H-A-S. So *whose* got its WH for the first time.

And the word *who* was *hwa* in Old English – spelled H-W-A. But Orm spelled it W-H-A. And this is the first known instance of the word *who* being spelled with its modern W-H at the beginning.

Now I should note that the ‘h’ sound didn’t just appear before the ‘w’ sound in Old English. The Anglo-Saxons actually had a tendency to pronounce words with a slight aspiration before a consonant. So words like *loud* and *lord* and *lady* were also once pronounced with a slight breath before the L. *Loud* was *hlud* – H-L-U-D. And *lord* was *hlaford* – spelled H-L-A-F-O-R-D. And *lady* was *hlæfdige* – again spelled with an initial H-L. But the French-trained scribes apparently thought it was strange to pronounce words with that initial breathy sound, or perhaps again they barely even noticed it. Because they dropped that initial H in those words. And Orm is actually the first known English scribe to drop that H in the word *lady*. He just spelled it with an L at the front (‘laffdiʒ’).

The same thing happened with certain words that began with an ‘R’ sound. They were often pronounced with a slight breathy sound before the initial R. So a word like *ring* was *hring* in Old English – spelled H-R-I-N-G. And *roof* was *hruf* – spelled H-R-U-F. Again, the French scribes dropped the initial H from those words as well.

So we’ve covered most of the major spelling changes related to consonants during this period. But there is one more letter than I need to address. And that’s the letter G.

Back when we looked at the original Old English alphabet, we saw that the Anglo-Saxons used the letter G, but it represented several different sounds at the time. It could be used for the hard G sound – /g/. And in other situations that used it for the /x/ sound.

Now when the Anglo-Saxons borrowed that letter G from the Latin alphabet, they actually used a different form of the letter preferred by Irish scribes. It was much more elaborate than the traditional Roman version of the letter. It resembled a lowercase G, but the loop wasn't closed at the top.

Well, when the Norman scribes arrived in England, they didn't like that shape of the letter G, so they introduced the more traditional G shape that we use today. But they didn't completely get rid of that old G. They kept it around to represent that /x/ sound. That was one of the ways the letter was used in Old English, so they just preserved that use. But some scribes apparently didn't like that spelling – maybe because the funny shape of the letter made it look like a foreign letter. So those scribes elected to use the letter combination GH for the /x/ sound. Again, this was yet another letter combination using that letter H.

The Normans thought of the /x/ sound as a breathy G sound, so it made sense to spell it with a GH. And as we saw in an earlier episode, a word like *knicht* was pronounced /kni(x)t/, and it was spelled with a GH to represent that /x/ sound. And when that sound eventually disappeared near the end of the Middle English period, the GH in most of those words became silent.

But again, throughout the Middle English period, the GH spelling competed with the old fancy-shaped G. Most scribes preferred one or the other. That fancy-shaped G started to become simplified a bit. It started to resemble the number 3 in its shape. And it soon acquired its own name called 'yogh.' So at some point, this fancy-shaped G evolved into an altogether new letter distinct from the original letter G. And as I noted, it was used for the /x/ sound. But it was also used in another situation – for the Y sound. And this requires a little bit of an explanation.

Remember that this yogh letter was originally letter G in Old English. And as we've seen before, the G sound shifted to a Y sound in many words in Old English. This gave us the difference between *gold* and *yolk*. And *garden* and *yard*. But even though the sound changed, the spelling stayed the same – with the letter G. So letter G came to represent this new Y sound in English.

Then the Normans arrived. And they discovered that the letter G was being used for the Y sound in those words. They may not have liked it, but they didn't really have a better option because the modern letter Y wasn't in place yet. So initially, they just decided to keep that fancy-shaped G called yogh for the Y sound.

In order to better understand that decision, we need to consider what was happening in French at the time. And this is where things start to get a bit complicated. The old Latin 'I' sound had undergone a lot of changes, and it actually produced two new consonant sounds. One of those sounds was the 'y' sound and the other was the 'j' sound. Now this seems complicated, but we've seen these changes before.

Do you remember the evolution of words like *Julius* and *Jupiter*? In Latin, they were spelled with an I at the beginning, and they were initially pronounced /ee-oo-lee-oos/ and /ee-oo-piter/. But then that initial sound became a Y sound, and they were pronounced as /yoo-lee-oos/ and /yoo-piter/. And then in Late Latin and early French, the sound shifted again to a J sound, and the pronunciation became /julius/ and /jupiter/. So from /ee-oo/ to /yoo/ to /joo/. And if you can follow that change,

you can start to understand how the modern letters I, Y and J are connected. They all came out of the original letter I.

Now I don't have time to outline the complete history here, but the Y emerged first. It was originally the Greek version of I, and it came to be used for the /y/ sound. And the letter J emerged later, as a fancy version of the letter I with curvy tail on the bottom. And it came to be used for the /j/ sound. But those developments take place later in our story. So in early Modern English, the letter I was still doing most of the work for all of those sounds, and it was confusing.

So all of this helps to explain why the French scribes didn't try to change the spelling of the 'y' sound in English. Since the letter Y wasn't really established yet, they just kept the fancy G of Old English. And in early Middle English, that letter – called yogh – was used for the 'y' sound. So for the most part, the French scribes used that letter the same way the Anglo-Saxons did. It could represent either the /x/ sound or the 'y' sound.

I should note that the letter Y was finally adopted as a distinct letter a couple of centuries later in the 1300s, and at that point, the Y started to take over. As the letter Y became more popular, the fancy G – or yogh – died out. The final nail in yogh's coffin came with the advent of the printing press. Most European printers didn't have a yogh in their printing kit. So the letter Y became the standard way to spell that sound.

So we've covered the 'y' sound, but what about the 'j' sound? Well, the French scribes also had to deal with this sound in English. But before I go through these developments, let me make an important note. The 'j' sound was very rare in English, and it was non-existent in Latin. And that's interesting, because today both languages have lots of word with that sound. And I should note that the Modern French 'j' sound (/ʒ/) – as in a name like *Jacques* – is a later development, but it evolved out of that initial 'j' sound that we still have in English. Anyway, that 'j' sound is all over the place in both Modern French and Modern English. And the reason for the growth and expansion of that sound is two-fold.

First, Late Latin acquired this modern 'j' sound thanks to two completely unrelated sound changes involving two completely different letters. I've already mentioned the first one. From /ee-oo-lee-oos/ – to /yoo-lius/ – to /julius/. That 'j' sound evolved out of the letter I. And that produced words like *Julius* and *Jupiter* and *judge* and *jury*.

Meanwhile, the letter G also experienced the same sound change, and in the case of the letter G, it changed before the front vowels – E and I. In those situations, hard G sound (/g/) slid forward in mouth and became a soft G – or 'j' sound. And that produced words like *general*, and *gender* and *gentle* and *germ*. And of course, that's the same sound that we just saw in words like *Julius* and *judge* and *jury*. So French got this 'j' sound from two completely different sound changes. And that meant that French scribes had two different ways to represent that sound. They could either use the letter I or the letter G (the so-called soft G).

Eventually, that letter I acquired a little curvy tail in the hands of some scribes. And in later centuries, scribes started to use that fancy I with the tail to distinguish that 'j' sound in *Julius* from

the typical vowel sound of I. And that fancy I with the curvy tail became our modern letter J. But at the current point in our story, that hadn't happened yet. So the French scribes were still using letter I in some words and letter G in other words.

And after the Norman Conquest, they encountered a handful of English words with that same 'j' sound. But as I noted earlier, that sound was rare in English. It was found at the end of a few words like *hedge*, *ledge*, *bridge* and *ridge*. That 'j' sound was spelled with a CG in Old English. And the French scribes apparently decided that that sound needed to retain a unique spelling. So they replaced the old C-G with a brand new D-G-E. And that gave us the modern spelling of those words I just mentioned – *hedge*, *ledge*, *bridge* and *ridge*. They all end in D-G-E today.

So as a result of all of that, English acquired three different ways to represent the 'j' sound. First, there was letter I (soon to become letter J). Secondly, there was letter G (also known as soft G). And third, there was the letter combination D-G-E at the end of a word or syllable. A word like *judge* actually combines two of those spellings – J at the front and D-G-E at the end.

One other quick note about Old English words with the 'j' sound. As I noted, Old English didn't really use that sound at the beginning of words. So when we find a Modern English word that begins with a 'j' sound, we're usually looking at a word borrowed from another language. So this is the same thing that we saw earlier with words in English that begin with a 'v' sound or begin with a 'z' sound. They're all usually loanwords borrowed from other languages.

So by now, you can probably start to see why Modern English spelling is so complicated. But despite the inconsistencies, there are some basic underlying rules. And in fact, if the French scribes had applied their new letters in a consistent manner, and if later loanwords had been altered to fit these rules as they came in, then English spelling would make a lot more sense today. But alas, that didn't happen. Exceptions were made. New words came in with their own unique spellings. Sounds continued to change. And later scribes and printers made up new rules and decided on altogether new spellings.

So English spelling was never really settled during this period. And it didn't start to become settled until dictionaries started to be produced in the 1700s and 1800s. For now, scribes relied upon some of the general rules I outlined in this episode. And they tended to spell words phonetically – as they sounded. Most dialects used the same basic consonants, so the pronunciation and spelling of the consonants was a bit more stable. But the vowels were a completely different story. Vowel sounds were undergoing a lot of changes, and that produced a variety of regional accents. This was apparently such a problem during the late 1100s that our friendly scribe Orm invented his own system to represent the vowel sounds in his words. And that system is extremely important to linguists because it shows exactly how the vowels were changing – at least in the East Midlands.

So next time, we'll turn our attention to those vowels, and we'll look at Orm's reforms. Until then, thanks for listening to the History of English Podcast.

## EPISODE 88: THE LONG AND SHORT OF IT

Welcome to the History of English Podcast – a podcast about the history of the English language. This is Episode 88: The Long and Short of It. In this episode, we’re going to turn our attention to the changing vowel sounds of Middle English. And we’re also going to explore the concept of long vowels versus short vowels. This concept has been around since Old English, and it created problems for early scribes because there was no way to distinguish those sounds with the limited letters of the alphabet. But in the late 1100s, a scribe in the East Midlands came up with a way to distinguish long vowels from short vowels. That scribe was Orm – the man who composed that Middle English text called the *Ormulum*. So this time, we’ll see how he dealt with this problem. And we’ll see how Orm’s reforms mirror certain spelling techniques that are still used in Modern English.

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 at [Patreon.com](https://www.patreon.com/historyofenglishpodcast). Just go to [historyofenglishpodcast.com](http://historyofenglishpodcast.com) and link from there.

So last time, we looked at consonant sounds in early Middle English. And we examined how French scribes applied the alphabet to those sounds. This time, we’re going to shift our focus to the vowels. Unfortunately, the story of the vowels is a bit more complicated than the consonants. And that’s because vowel sounds are inherently fluid and variable. Unlike consonants, which tend to be pronounced in very specific parts of the mouth, vowels are pronounced in the open part of the mouth cavity. The actual sounds are shaped by the tongue. So that allows us to move the vowel sounds around in the mouth with relative ease. We can even make them flow into each other. So I can say A-E-I-O-U without ever pausing between them. One vowel sound flows right into the next.

That means that vowel sounds have a tendency to shift and change over time. And it also means that vowel sounds have been variable throughout the history of English. At any given time in history, people in different parts of the English-speaking world have pronounced their vowels a little bit differently. And that’s still true today. It gives life to the many different English accents that exist around the world today.

The problem with all of this is that we don’t really have a good way to represent all of the English vowel sounds with our alphabet. There simply aren’t enough letters for all of the vowels that exist in English.

If you’re like me, you probably learned in school that there are six vowel letters in the alphabet – A, E, I, O, U and sometimes Y. And that’s true. But the problem is that Modern English has at least a dozen different vowel sounds. And I say “at least” because there is some variation among English dialects. And, in addition to that, we also have 9 different diphthongs which are vowel sounds formed by putting two different vowel sounds together thereby producing a new vowel sound.

We can hear some of those different vowel sounds in the following words: *bead, bid, bed, bad, bard, bod, board, bud, bood, bird, bayed, bode, bide, bowed, boyd, beard, baird* and *bored*. That’s 18

different vowel sounds. Again, there are a few more that we could add to the list, but we only have 6 vowel letters to work with.

That means that our vowel letters have to do double-duty – and sometimes triple duty. Take the letter A. We use it for the /ay/ sound in words like *fate* and *hate*. But we also use it for the /æ/ sound as in the words *fat* and *hat*. And sometimes we use it for /ah/ sound in words like *father* and *calm*.

And think about the number of ways we use the letter O. We use it for the /oh/ sound of ‘so,’ and the /oo/ sound of ‘do,’ the ‘uh’ sound of ‘son,’ and the /ah/ sound of ‘got.’ And we sometimes give it other pronunciations as well.

So we ask our modern vowel letters to do a lot of work. And frankly, it’s a bit of a mess in Modern English. Most scholars think that the vowel letters were more orderly and consistent in Old English. As we know, the Anglo-Saxons had borrowed the alphabet from Latin. And the vowel letters represented specific vowel sounds in Latin. So those letters originally represented the same sounds in Old English.

But even during Old English, a vowel sound could be pronounced long or short. And when I say long and short – I mean literally long or short. Sometimes a vowel sound was stretched out a little bit, and sometimes it was pronounced short and quick.

Now we still talk about long and short vowels in Modern English, and today that really refers to slightly different sounds or tonal qualities. But in Old English, it really meant a more literal time difference.

So when we talk about long and short vowels in Old or Middle English, we’re not necessarily talking about the same sounds that we have in Modern English. In fact, in most cases, the sounds were completely different.

The best way to break this down is probably to go through the sounds letter by letter. So let’s start with letter A.

In Old English, letter A represented the ‘ah’ sound – still found in a word like *father*. That was really the long sound. When pronounced short, it was basically the same sound pronounced much more quickly. So long /aahh/ and short /ah/.

Now again, the vowel sounds have changed over the centuries. So today, when we talk about the long A and the short A, we’re talking about the /ay/ sound and the /æ/ sound. It’s the difference between *hate* and *hat*. *Hate* has the long sound, and *hat* has the short sound. But again, these sounds represent more recent developments in the language.

So what about letter E? Well, in Old English, it represented the /ay/ sound. Today, we generally have to look for borrowed words to find the letter E representing that sound. We see it in a word like *café* from French. That was the original long sound. But when that sound was pronounced short and

quick, the overall sound and quality of the vowel tended to change. Long /aaay/ became short /eh/. And that's actually a different sound or phoneme. So letter E actually represented two different sounds – /aaay/ and /eh/. Now we still use that same short /eh/ sound in Modern English. We see it in words like *pet* and *set*. But today, the long sound of E is /ee/. In fact, there's an easy rule to help you remember that. Today, the long sound of a vowel letter is the actual name of the letter. So the long sound of letter E is /ee/ – as in *enough* and *even*. So again, E had kept its traditional short sound, but it has acquired a new long sound.

What about letter I? In Old English, the letter I represented the /ee/ sound – as in *king* and *ring* and *think*. So we can see how these sounds have gotten mixed up. When that long /ee/ sound was pronounced short, it came out as /ih/. So that was the short sound of I. And again, we still use the letter I for that short sound. We see it in words like *sit* and *hit*. But the long sound of I has changed to its current name – /eye/ – as in *bike* and *time*. So again, letter I has kept its traditional short sound, but it has acquired a new long sound.

Now let's turn to letter O. In Old English, letter O represented the /oh/ sound which we find in words like *no* and *so*. The short sound was something like /o/. We don't really have that short sound in Modern English, so it's hard to present it here. Now in Modern English, we know that the long sound of O is the same as its name – so it is /oh/ – as in *hope* or *boat* or *go*. But linguists would tell you that the modern /oh/ sound is little different from the traditional Old English sound. The modern sound is really a diphthong. But just to keep this simple, we can say that the modern sound is very similar to the traditional sound.

The what about the short sound of O? Well, I noted that the original short sound has disappeared, and today the pronunciation of that short sound actually varies. We can hear the short sound in a word like *lot*. But Americans and Brits tend to pronounce *lot* a little bit differently. Standard American English pronounces the short O as /ah/ – *lot*. But in standard British English, the short O is not quite as open. It comes out more like /lot/. So American /laht/ and British /lot/. Well, that's close enough that you can get the idea.

So all of that means that the long sound of O is still very similar to the original Old English sound, but the short sound has changed over time.

So that takes us to letter U. In Old English, it represented the /oo/ sound which we hear in words like *clue* or *true*. But when pronounced short, it came out as /u:/ – as in *put* and *look*. But what about today? Well, today, the long sound of letter U is its name – /yoo/ – as in *tube* and *cube*. But the traditional Old English long sound – /oo/ – still survives. We hear it in *rude*. Now there is a very subtle difference there – /yoo/ and /oo/. /yoo/ has a little 'y' sound at the beginning. And sometimes, we hear both pronunciations as in /tyube/ – and /toob/. Anyway, either pronunciation can be considered a long pronunciation of the letter U.

So what about the short sound? Well, as I noted, it was originally the /u:/ sound in *put* and *look*. And that's still the short sound in some places like the north of England. But in most of the English speaking world, it has shifted to the /uh/ sound in words like *hut* and *cup* and *shut*.

So again, we still hear the traditional long and short sounds of U in words like *rude* and *put*. But today, official long and short sounds can be heard in words like *cube* and *cub*.

Now I should note that the Anglo-Saxons also used to other letters as vowels. Just like today, they also used the letter Y as a vowel, but it represented a very specific sound which we no longer have in Modern English. It was the /ü/ sound which is still found in other languages like French. You basically pronounce the /ee/ sound with rounded lips. So the letter Y was used for that sound. And it could also be pronounced either long or short.

The Anglo-Saxons also had a letter called ‘ash’ which I mentioned in the last episode. It was one of those unique Anglo-Saxon letters, and it looked like an ‘A’ and an ‘E’ pushed together. It represented the /æ/ sound which we have in words like *hat* and *bad*. So the sound has shifted to the Modern short sound of letter A. Again, in Old English, the letter ash could be pronounced both long and short.

So that’s a quick overview of the difference between Old English vowels and Modern English vowels. Obviously, there has been a lot of change over the centuries. The sounds have gotten all mixed up in English. And the major culprit here is the series of sound changes known as the Great Vowel Shift. Those changes will take place a little later in our story of English in the 1400s and 1500s. So I’m not going to go through the details here. We just have to keep in mind that the vowel letters once represented very different sounds.

The other important thing to keep in mind about these vowel letters is that the length of the sounds have always varied. Each vowel letter has always represented a short sound and a long sound. And as I noted earlier, that created a lot of problems for scribes over the centuries because there was no accepted way to distinguish those long and short sounds.

So when an Anglo-Saxon scribe spelled the word G-O-D, it could be pronounced as either /god/ or /goad/. /god/ referred to a deity, and it’s the early version of our modern word *God*. Meanwhile, /goad/ referred to something pleasant or nice, and it’s the early version of our word *good*. Today, we distinguish those words by giving *good* an extra O. But in Old English, both words were spelled the same way.

Let’s also consider the word that was spelled I-S. When pronounced as /is/, it was the original version of our modern word *is*. But when it was pronounced as /ees/, it was the original version of our modern word *ice*. Again, those words have different spellings today, but they were spelled the same way in Old English.

So Old English didn’t really have a way to distinguish these pronunciations in writing. And that created confusion. Scribes had to rely upon context to make the meaning clear. They assumed that no one would confuse *God* and *good* – and *is* and *ice*.

Now today, we have some words that are spelled the same way but have different pronunciations and different meanings – words like *bass* and *bass*, and *bow* and *bow*, and *live* and *live*. But there are only a few of those, and context will still make the meaning clear. But in Old English, this was a

much common problem because there were lots and lots of these words where the pronunciation of the vowel made all the difference. And in writing, there was no way to indicate that difference.

So that was the state of things in Old English. And then the Normans arrived. And when French-trained scribes tried to write down English words, they felt the need to distinguish those pronunciations. That was especially true if the text was intended to be read aloud. And that was problem that Orm encountered when he composed the Ormulum.

As we know, the Ormulum was one of the first major documents composed in English after the Norman Conquest. It was a religious document, and Orm intended it to be read aloud to English-speaking congregations. The people who would be reading from the text were likely to be priest, and many of them spoke French as their native language. Some didn't speak English at all, and the ones who did probably didn't speak it very well. Orm knew that they would have a problem pronouncing all of those English vowels. And if the vowels were pronounced incorrectly, the English congregations wouldn't understand the message.

Orm was apparently very concerned about this problem. So he invented a way to distinguish the long vowels from the short vowels in the Ormlum. And he used it consistently throughout the text.

The main technique he used was to double the consonant after a short vowel. So take the examples I used earlier. The words G-O-D and I-S. When those words were pronounced with a long vowel – like /goad/ or /ees/ – Orm would have left them as they were – G-O-D and I-S. But when the words were pronounced with a short vowel – like /god/ or /is/ – Orm would double the consonant after the vowel – so G-O-D-D and I-S-S.

The reason why we know that Orm did this on purpose is because he tells us so in the text itself. In the Preface to the Ormulum, he specifically states that he wants copiers to pay attention to his double letters. He says that those letters should be copied and written down twice just as he had written them. So he wanted scribes to make sure that they copied his spellings letter-for-letter. And that was actually unusual because spellings were very fluid at the time. There were no dictionaries, and there were no standard spellings. So scribes were free to innovate and add their own personal touches. But Orm instructed other scribes to stick to his original spellings and leave them as they were. Here is what he wrote – first in a Modern English translation, then in the original early Middle English.

And whoever shall will this book to be written again at another time,  
Annd wha-se wilenn shall þiss boc efft operr sipe writenn.

him I ask that he write it down right in the same way that this book teaches him.  
himm bidde icc þatt he't write riht, swa-summ þiss boc himm tæcheþþ.

all after the way that it is, upon this first example  
all þwertt-ut affterr þatt itt iss uppo þiss firrste bisne,

with all such rhyme as here is set with all the many words;  
wiþþ all swillc rime alls her iss sett, wiþþ all þe fele wordess;

And I ask that he look well that a letter is written twice.  
annd tatt he loke wel þatt he an bocstaff write twi33ess,

Everywhere that it upon this book is written in that way  
e33whær þær itt uppo þiss boc iss writenn o þatt wise.

Look well that he it wrote so,  
loke he well þatt he't wrote swa,

for he must not else in English write rightly the word that he should know well for sure.  
forr he ne ma33 nohht elless onn Ennglissh writenn riht te word, þatt wite he wel to soþe.

So Orm developed this unique spelling system, and he wanted to make sure that any scribe who copied his words followed that system.

Now I should note that modern scholars have been able to determine most of the original vowel sounds in Old English words. They did that in part by comparing Old English words with related words in the other Germanic languages. But Orm makes it crystal clear, and that's why his spellings are really a goldmine for historical linguists.

His spellings not only confirm that vowels were pronounced both long and short, they also confirm that the vowels were undergoing changes at that time when he was writing in the late 1100s.

For example, let's consider the word *Christ*. The name has the long I sound today – /Christ/. But remember that the original long sound of the letter I was actually /ee/ – as in *king* and *ring*. So the name was pronounced /Chreest/ in Old English and early Middle English. And Orm confirms this with his spellings. He spells the name C-R-I-S-T. He doesn't double the S, so that confirms that the letter I was pronounced long – as /ee/.

But when he writes down the word *Cristenndom*, he doubles the S. He spells it C-R-I-S-S-T-E-N-N-D-O-M. So it was /Creest/ but /kris-ten-dom/. And that's the same distinction we have today. We pronounce the name with a long vowel as /Christ/, but we pronounce the words *Christian* and *Christmas* with a short vowel. And thanks to Orm, we know that this distinction was already in place in the late 1100s.

Historical linguists have developed some very specific and very complicated rules to try to explain why long vowels became short, and vice versa. And I'm not going to attempt to go through all of those here. But one of those rules is that the first syllable tended to be pronounced short in a 3-syllable word. Since a word like *Christ* is a single syllable, it tended to retain its long sound. But a word like *Christendom* is three syllables, so the first syllable tended to be pronounced quick and short. That might explain the difference that Orm noted between *Christ* and *Christendom*.

This rule also explains some other pronunciations in Modern English. Take the word *halibut* – for a type of fish. It was a type of fish that was often eaten on holy days. And an Old English word for a flatfish was *butte*. So this particular fish was called a *hali-butte* – literally a ‘holy fish.’ And of course, we still have the word *holy*. But notice that *holy* is pronounced with a long /oh/ sound – /holy/. But *halibut* is pronounced with a short /æ/ sound – /hæl-eh-but/. Theoretically, it should be pronounced /holy-but/, but it’s a 3-syllable word. And over time, that first syllable tended to be pronounced short. So it became /hæl-eh-but/ instead of /holy-but/.

This rule also helps to explain the difference between the words *south* and *southern*. Notice that it’s not *south* and ‘*south-ern*’ – its *southern*. The /ow/ sound in *south* is a diphthong, so it tends to be pronounced long. But *southern* has a short vowel – the /uh/ sound. Well, all of this starts to make some sense when we consider that the word *south* was originally pronounced /sooth/, and *southern* was pronounced /soo-ther-neh/. So it was a 3-syllable word. And like most 3-syllable words, the vowel in the first syllable became short over time. So it went from /soo-ther-neh/ – to /suh-ther-neh/ – to /southern/. And that gave us the modern distinction between *south* and *southern*.

Anyway, when Orm tells us that *Christ* had a long vowel, but *Christendom* had a short vowel, he is confirming that some of these types of changes had already taken place by the late 1100s. And that’s important because it confirms that vowel sounds were shifting in this period between Old English and Middle English. We don’t have to wait for the Great Vowel Shift in the 1400s and 1500s to find vowel changes. They were already changing a few centuries earlier.

So that’s why scholars are so fascinated by the Ormulum. It documents a lot of changes that were taking place at the time. And if other scribes would have adopted this spelling technique, we would probably know even more about the pronunciation of Middle English vowels. But unfortunately, Orm’s spellings didn’t gain widespread acceptance at the time. Scribes had to write each letter by hand, and doubling the consonants meant that there were a lot more letters to write down. That made the text longer, and it required more time to write or copy. So even if other scribes came across Orm’s system, they weren’t inclined to use it.

But as the Middle English period progressed, scribes increasingly realized that they needed to find a way to distinguish the sounds of the vowels. They needed to come up with ways to indicate if a vowel was pronounced short or long. And they came up with several techniques to show the difference.

I’m going to discuss some of the techniques they came up with in the next episode, but I should note here that one of the techniques they invented was this exact same technique that Orm used in the late 1100s. The later scribes also doubled the consonant after a short vowel. Now there is no evidence to suggest that they actually borrowed this technique from Orm. It appears that later scribes came up with the same idea on their own. But either way, we still use this technique today.

Think about the difference between *hoping* and *hopping*. *Hoping* has the long vowel – /oh/. And it is spelled H-O-P-I-N-G. But *hopping* has the short vowel – /ah/. And notice how it is spelled – H-O-P-P-I-N-G. You may not have ever realized it, but that double P is telling you something. It’s telling you to pronounce the preceding O short. So *hopping* instead of *hoping*.

Here are some other examples. Compare *write* and *written*. *Write* has a long I spelled W-R-I-T-E. But *written* has a short I, and its spelled W-R-I-T-T-E-N. So the double T tells you to pronounce the I short.

What about *diner* and *dinner*? *Diner* has the long vowel, and it's spelled D-I-N-E-R. But *dinner* has the short vowel spelled D-I-N-N-E-R. Again, the double N tells you to pronounced the I short.

Compare *taping* and *tapping*. Same thing. *Taping* has a long A and it's followed by a single P, and *tapping* has a short A and it's followed by a double P.

And also consider *biter* and *bitter*. Again, *biter* has a long vowel with a single T, and *bitter* has a short vowel with a double T.

So we still use Orm's spelling system, even though it appears that later scribes came up with the same idea independently of Orm.

Now all of this raises a very interesting question. Why would later scribes have come up with the same idea as Orm? It seems odd that they developed the exact same idea on their own a few centuries later. Well, the answer isn't really clear, but it seems that Orm and these later scribes were picking up on the same idea. In Old English and Middle English, there was a tendency to pronounce a vowel as a short vowel if it appeared before doubled consonants. So scribes just extended this idea by doubling consonants after short vowels. So let me try to unpack that for you.

Let's consider how letters were pronounced in Old English. Remember that there were no dictionaries yet and no standard spellings. Almost all words were spelled phonetically. Scribes didn't really have all of the complicated spelling rules that we have today. So when a scribe spelled a word, he tried to spell it exactly like it sounded. And that's why Old English spellings vary so much. But they also reveal how words were typically pronounced at the time.

So when a scribe wrote down a double consonant – like TT, or SS, or BB – he was usually indicating that both consonants were pronounced. So it would be like the sound we hear if we actually pronounced both consonants in /hop-ping/ – and /bit-ter/ – and /tap-ping/. So both consonants would be pronounced back-to-back. Otherwise, the scribe would just write a single consonant. So why is that so important? Well, in that situation, where one syllable ends in a certain consonant sound, and the next syllable begins with the same sound, there is a natural tendency to pronounce the first vowel as a short vowel.

Now this fact is important for two reasons. First, as I noted, Orm and other scribes probably noticed this tendency, and they decided to use it as a way to distinguish short vowels from long vowels.

But the other reason why this linguistic tendency is important is because it helps to explain some other changes that took place during this period. Sometimes the pronunciation of a word changed so that it acquired this double consonant sound in the middle. Before the change, it had a long vowel, but after this change, there was tendency to shorten that initial vowel. So let me give you a few examples.

Take the word *bleed*. In Old English, it was *blēde* (/blay-deh/) – usually spelled B-L-E-D-E. So it had a long vowel and a single D after than vowel sound. Nothing surprising there. But in the past tense, the single D became a double D. So it went from *blēde* (/blay-deh/) to *blēdde* (/blayd-deh/). And the spellings tend to reflect that with that double D. The past tense version is usually spelled B-L-E-D-D-E. Well, as we just saw, when a vowel appeared before a double consonant, it tended to be pronounced short. So the pronunciation shifted from /blayd-deh/ to /bled-deh/. And if you followed that, now you know why we have present tense *bleed* and past tense *bled*. *Bleed* has the long vowel sound – /ee/, and *bled* has the sort vowel sound – /eh/. And *bled* has that short vowel because it once had a double D at the end.

The same thing happened with *feed* and *fed*. The present tense word was *fēde* (/fay-deh/) – F-E-D-E. But in past tense, it became *fēdde* (/fayd-deh/) – with a double D. So in that environment, (/fayd-deh/) became (/fed-deh/). And that gave us the modern distinction between *feed* and *fed*.

The same thing happened with *meet* and *met*. The present tense word was *mēte* (/may-teh/) – M-E-T-E. But in past tense, it became *mētte* (/mate-teh/) – with a double T. So in that environment, (/mate-teh/) became (/met-teh/). And that gave us the modern distinction between *meet* and *met*.

This also happened with *hide* and *hid*. The present tense word was *hyde* (/hü-deh/) – H-Y-D-E. But in past tense, it became *hydde* (/hüd-deh/) – with a double D. So in that environment, (/hüd-deh/) became (/hid-deh/). And that gave us the modern distinction between *hide* and *hid*.

So let's think about what was going on there. Because if you can understand the dynamics at work, you can get a really good sense of how short vowels and long vowels work in Modern English. Why did those double consonants change the vowel sound?

Well, the answer has to do with that first syllable in a two syllable word. So let's focus on that initial syllable. Compare *blēde* (/blay-deh/) and *blēdde* (/blayd-deh/). The initial syllable goes from /blay/ to /blayd/. In the case of /blay/, the vowel sound /ay/ is left at the end of the syllable. Linguists call that an open syllable because there is nothing to box the vowel in. It is just hanging there at the end. So when the vowel in the first syllable of a two syllable word is left open, it tends to be pronounced long.

So let's consider the second example – /blayd/ – with a D on the end. Now the vowel in that initial syllable is boxed in at the end. So again from /blay/ to /blayd/. When that D is added to the end of that first syllable, it is called a closed syllable. It's closed because of that consonant at the end of the syllable. And in an initial syllable, when a vowel is closed in this manner, it tends to be pronounced short. And that explains why those double consonants were so important.

A single consonant was usually pronounced at the beginning of the second syllable, and that left the first syllable open and long. So listen. *blēde* (/blay-deh/) – *fēde* (/fay-deh/) – *mēte* (/may-teh/) – *hyde* (/hü-deh/). All of those initial syllables were left open. So the vowel remained long. That gave us *bleed*, *feed*, *meet* and *hide* – all with long vowels.

But when the consonant was doubled, it was now pronounced at the end of the first syllable and the beginning of the second syllable. So that had the effect of closing the first syllable. That initial vowel was now boxed in with that consonant on the end, and in made the vowel pronunciation short. So listen. *blēdde* (/bled-deh/) – *fēdde* (/fed-deh/) – *mētte* (/met-teh/) – *hydde* (/hid-deh/). And that gave us *bled*, *fed*, *met* and *hid* – all with short vowels

If you understand this basic idea, and you understand that a lot of our modern one-syllable words once had two syllables, then the history of English vowels starts to make a lot more sense.

What we're looking for are 2-syllable words where the first syllable ended in a consonant and the second syllable began with a consonant. That was the perfect setup for a vowel to become short. It happened with those double consonants, but it could happen in other situations as well.

That's how we got the difference between *keep* and *kept*. *Keep* was *cēpe* (kay-peh) in Old English. /KAY-peh/ with a long /ay/ sound. The first syllable ended in that vowel sound, so the vowel stayed long. And it gave us the modern word *keep* with its long E sound. But in past tense, the word was *cēpte* (kape-the), so a T sound was added in the middle. Now the first syllable ended in a P and the second syllable began with a T. Again, *cēpte* (kape-the). Now we have that perfect setup. The first syllable ended in a consonant the second syllable began with a consonant. So the first vowel was shortened over time. And it became /kep-teh/. And thus, modern *keep* with its long vowel and *kept* with its short vowel.

This rule also helps to explain the difference between *five*, *fifteen* and *fifty*. *Five* has a long I sound, but *fifteen* and *fifty* have a short I sound. Again, this general rule explains the difference. As I noted, *five* had a long I sound in Old English, and it has retained that sound over time in part because it is a one syllable word. But when suffixes were added to the word to create *fifteen* and *fifty*, we now have our classic setup – a 2-syllable word where the first syllable ends in a consonant and the second syllable begins with a consonant. That shortened the first vowel. So again, we ended up with *five* with its long vowel and *fifteen* and *fifty* with their short vowels.

Another pair of words that developed through this same basic process were the words *wise* and *wisdom*. *Wise* was a single syllable word with a long vowel, so it has kept a long vowel over the centuries. But when the word *wise* was converted into a noun, the suffix *-dom* was added to the end. That made it a 2-syllable word. Again, we have our classic setup. A 2-syllable word where the first syllable ended in a consonant and the second syllable began with a consonant. That meant that the first vowel tended to be pronounced short. So we ended up with the modern distinction between *wise* and *wisdom*.

This process also gave us the difference between *break* and *breakfast*. As a single syllable word, *break* had a long vowel, and when *fast* was added to the end, we have the scenario where that first vowel became short. And '*break-fast*' became '*breakfast*.'

Now up to this point, we've been focusing on long vowels that became short, but I should note that this same process also worked in the other direction. It could also convert a short vowel into a long vowel.

In our classic set-up, we have a 2-syllable word where the first syllable ends in a consonant and the second syllable begins with a consonant. That shortened the first vowel. But if the first syllable ended in a vowel – a so-called ‘open syllable’ – the vowel tended to stay long.

We sometimes we had this setup with a short vowel at the beginning, and because it was an open syllable, people tended to stretch it long. That was especially true if the syllable was stressed – or emphasized – in the pronunciation.

Were it not for this process, the word *bake* would probably be pronounced as /back/ today. It had a short vowel in Old English, and it probably would have kept that vowel. It was actually a 2-syllable word – *bacan* (/bah-can/). So that initial syllable was open – in ended in a vowel – the short /ah/ sound. But in that environment, people tended pull on that vowel in that open syllable. And the word evolved from *bacan* (/bah-can/) to *bāken* (/baahh-ken/) with a longer vowel. And after the Great Vowel Shift, it became *bake*.

The same process gave words like *hope*, *ride*, *smoke* and *nose* their long vowel sounds. They originally had short vowels.

There was also another process that was working to stretch out short vowels and make them long. And this process didn’t require a 2-syllable word. It worked even in single-syllable words. There were certain consonant combinations that also tended to pull on the preceding vowel and make it long.

One of those was the sound created when you put an L and D together. That is the sound at the end of words like *bold* and *cold*. When a short vowel appeared before this ‘-ld’ sound, it tended to become long. This is why the word *tell* has a short vowel sound, and *told* has a long vowel sound. That ‘-ld’ converted *tealde* into *told*.

We can also hear this vowel lengthening in the words *shield* and *shelter*. Did you know that those two words are related? The original word was *sceld* (/sheld/) with a short E sound. It meant ‘shield’ just like today. And over time, that ‘-ld’ at the end of *sceld* pulled that E and made it long. Today, the standard pronunciation is /sheeld/ with a long vowel sound.

Now when warriors were fighting in combat, they would protect themselves from arrows or other projectiles by placing their shields above their heads, thereby forming a shield wall above their heads. And from the word *sceld* (/sheld/), we got the word *shelter* to describe that type of protective cover. But note that *shelter* doesn’t have that particular ‘-ld’ sound to pull on the vowel. So the vowel remained short. And that gave us the difference between *shelter* and *shield*.

The same thing happened with *child* and *children*. These words actually came up in an early episode of the podcast. There was the question of why we have one *child* – with a long I sound – but several *children* with a short I sound. Well, now we know the answer.

In Old English, the word was *cild* (/chihld/) with a short I sound. But that ‘-ld’ after the I tended to stretch out the sound and make the I a long I. It became /cheeld/. And Orm actually spelled the word

as C-H-I-L-D. He didn't double the L, so that tends to confirm that the letter I was pronounced as a long I at the time he wrote the Ormulum. And after the Great Vowel Shift, when the sound of the long I shifted from /ee/ to /eye/, the word /cheeeld/ became *child* with its modern long I sound. So all of that makes sense, but what about *children*? Why didn't *children* become /child-ren/.

Where the answer is a quirky little exception. The pull of the '-ld' was negated where there was a second syllable that began with a consonant. This is basically our classic setup that we saw earlier where vowels tended to stay short. And that's what happened here. *Children* retained its original short I at the beginning. That second syllable negated the pull of the '-ld' sound.

This process also explains the difference between *mild* and *Mildred*. Did you know that the name *Mildred* came from the word *mild*? It actually combines the original version of the word *mild* with the word *ðryð* meaning power or strength. So '*Mildðryð*' meant 'mild strength.' It was an Old English name. And the same thing that happened here that happened with *child* and *children*. As a single syllable word, that '-ld' pulled on the vowel and converted /mild/ into *mild*. But as a 2-syllable word, *Midred* retained its short vowel.

When you compare *mild* and *Mildred* – and *child* and *children* – you can hear something going on there, you just might not have known what it was. Well, now you know.

This process also explains the difference between *old*, *elder* and *eldest*. The original Old English word was 'eald' (/eld/) with a short vowel. And again, that -ld at the end pulled on the vowel and made it long. Over time /eld/ became ald (/aahld/) with a long vowel, and after the Great Vowel Shift it became *old* with its modern long O. So in that single syllable version of the word, the vowel was made long.

But notice what happened in the versions with 2-syllables – *elder* and *eldest*. The second syllable negated that pull, and the first vowel remained short. By the early Modern English period, an English speaker would use the words *old*, *elder* and *eldest*. At that point, there was no such thing as *older* or *oldest*. But the influence of that long O in *old* eventually spread to those other two words. And in early Modern English, people started to say *older* and *oldest* instead of *elder* and *eldest*. Today, we have both versions of those words. But we only have one version of *old* – the version with the long vowel thanks to that '-ld' sound at the end.

So we've seen how that '-ld' sound tended to pull on the preceding vowel in a single syllable word. Well, the exact same thing happened with you put an N and a D together. That's the sound at the end of words like *sound* and *found* and *find*. That '-nd' combination also pulled short vowels and made them long.

So let's look at a few of those examples. Let's consider the words *kin* and *kind*. They both come from the same Old English root word which had a short vowel. That original root word could mean family or relatives, but it could also meant a part or portion of something larger. And if you think about it, your family is a portion or subset of a larger community or group of people. So that was the connection between the two meanings. *Kin* ended in a simple 'n' sound, so it kept its short vowel.

But *kind* ended in an ‘-nd’ sound, and that sound pulled the vowel and gave it the long I sound that it has today.

Orm actually used the word *kind* in the Ormulum, and he spelled it K-I-N-D-E. He didn’t double the N, so that seems to confirm that it had a long vowel sound in the late 1100s.

This same process also gave words like *bind*, *blind*, *grind* and *find* their long I sounds. And Orm confirms that *find* was also undergoing this change when he wrote the Ormulum. He spelled it F-I-N-D-E-N-N, which suggests that it had a long I sound.

This process also gave us the verb *wind* (/wynd/) its long I sound. But what about *wind* (/win-d/) – with its short I sound? What happened there? Why do we *wind* (/wynd/) a clock, but the *wind* (/win-d/) blows during a storm. Well, the answer is that both words were pronounced *wind* (/wynd/) at one time thanks to the pull of the ‘-nd’ at the end. Even Shakespeare spoke of the *wind* (/wynd/) that blows outside. And we know that he used that pronunciation because he rhymed it with words like *find*, *mind*, *unkind*, and *behind*. So why did the noun revert from *wind* (/wynd/) back to *wind* (/win-d/). Well, the answer probably lies in the word *windmill*.

The windmill was introduced to Europe from Persia – and it was a relatively new technology at the current point in our story in the 1100s. It was spreading around Europe, and in England, the word *windmill* first appears in a document composed in the late 1200s. But the word *windmill* was pronounced /wind-mill/ – not /wynd-mill/. So why was that? Well, remember, the pull of that ‘-nd’ sound was negated if there was a second syllable – especially a second syllable that began with a consonant. So that’s why we have *child* and *children*, *mild* and *Mildred*, *wise* and *wisdom*. And here, we got /wynd/ and *windmill*.

But it must have seemed odd to English speakers that windmills were powered by /wynd/. And it was probably inevitable that speakers would try to resolve that difference by pronouncing both words the same way. They could have gone with /wynd/ in both cases. They could have had /wynd/ powered /wyndmills/. But ultimately, they settled on *wind* and *windmill*. So *wind* reverted back to its original pronunciation with a short vowel.

I should note that there are exceptions to all of these rules, and in fact, there were a lot more rules and a lot more exceptions. But the important point to take from all of this is that long vowels and short vowels underwent a lot of changes in late Old English and early Middle English. Whatever the cause, it was a bit of a mess in early Middle English because scribes didn’t have a way to mark the differences in pronunciation.

Again, that’s why the Ormulum is so significant. It was one of the rare attempts to make those pronunciations clear. But Orm’s spelling innovations didn’t gain widespread acceptance at the time. Later scribes would have to figure all of this out. They would have to come up with their own spelling innovations to represent the English vowel sounds.

The good news is that later scribes did just that. They actually solved a lot of these problems. The bad news is that the Great Vowel Shift was yet to happen. And when it did happen, all of those

spellings became antiquated and they no longer reflected the way a lot of words were actually pronounced. Furthermore, English continued to borrow lots of words from other languages. And most of those words came in with their own unique spellings. But nevertheless, we do have some general rules to handle the spelling of vowels in English. And next time, I'm going to shift focus from the pronunciation of the vowel sounds to the actual spelling of those sounds.

We'll look at how Middle English scribes tried to sort through some of these spelling issues, and we'll see how they came up with some of the general spelling rules that we still use today. And you might not even realize that you're using specific rules. But they're there. So we'll look at those rules next time.

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

## EPISODE 89 – ‘I BEFORE E’ AND ALL THAT

Welcome to the History of English Podcast – a podcast about the history of the English language. This is Episode 89: ‘I Before E’ and All That. In this episode, we’re going to continue our look at Middle English vowels – and we’ll see how scribes tried to represent those sounds with a limited alphabet. They had to figure out how to stretch the letters to represent different sounds. In the process, they came up with a lot of spelling innovations that we still use today. So this time, we’ll look at those innovations.

But before we begin, let me remind you that the website for the podcast is [historyofenglishpodcast.com](http://historyofenglishpodcast.com) – and you can reach me by email at [kevin@historyofenglishpodcast.com](mailto:kevin@historyofenglishpodcast.com). I’m on twitter at [englishhistpod](https://twitter.com/englishhistpod).

Also, I have a couple of quick announcements before we get started. First, I want to tell you about a new podcast that focuses on the etymology. It’s called animology, and its put together by Collen Patrick-Goudreau. The theme of the podcast is the history of animal-related words and expressions. I thought many of you might find that interesting. Just look for that podcast wherever you get your podcasts.

And I also wanted to give all of you a quick update about this podcast as well. Some time back, I mentioned that I had a general plan to tell the story of English in about 100 episodes. And apparently, quite a few of you remembered that statement, because several of you have reached out to me recently to inquire if that was still the plan. After all, I’m only about 10 episodes away from that goal. Well, the good news – or bad news depending on your perspective – is that I no longer have a specific number of episodes in mind. Obviously, I can’t really complete the story in the next 10 episodes. So we’ll just move forward with the story, and let it take its course. A few months back, I introduced the Patreon site as a way to provide some bonus content and to help me dedicate more time to the podcast through listener support. Well, I wanted to thank all of you who have signed up at Patreon. And thanks to your support, I’ve met the goal that I stated there. So I’m committed to producing 20 new episodes this year – all of them ad-free. So by the end of this year we should be up to around Episode 108 or so. And we’ll see where it goes from there. So that’s the update, and with that, let’s turn to this episode.

Last time, we looked at the difference between long vowel sounds and short vowel sounds – and we saw how those sounds sometimes shifted within certain words. This time, I want to examine how scribes tried to spell those sounds with a very limited alphabet. Many of their spelling innovations are still with us today. So we’ll try to make some sense out of the mess that is Modern English spelling.

As we saw last time, English had a lot of different vowel sounds, but it only had a handful of letters to represent those sounds. In Old English, each vowel letter could represent either a long sound or a short sound. Initially, the difference was one of length, but over time, the sounds became more and more distinct in terms of tonal quality and sound. But both sounds were represented with the same letter. So the long A sound and a short A sound were both spelled with letter A.

That made writing easy, but it created problems if you wanted to distinguish those two sounds. That was the problem that Orm ran into when he composed the *Ormulum*. He wanted to distinguish those sounds because he wanted the text to be read aloud. And since each vowel letter had a long sound and short sound, he had to invent a way to make that difference clear. So as we saw last time, he decided to represent a short vowel sound by doubling the consonant letter after that short vowel sound – just like we do today to distinguish the pronunciation of *diner* and *dinner*, and *hoping* and *hopping*, and *write* and *written*. We use double consonants to mark the short vowel sound. But Orm’s spelling innovations didn’t gain widespread acceptance at the time. So as English documents started to reappear in the 1200s and 1300s, scribes had to come up with other ways to distinguish those sounds.

Now I should remind you that spellings were very fluid in Middle English. Dictionaries didn’t exist yet, so scribes had to spell words as best they could. They were left to their own devices. They had to spell words phonetically using the traditional sounds of the various letters.

And this actually presents one of the greatest challenges in reading Middle English documents. You have to figure out all the spellings. So we find a common word like *name* spelled N-A-M-E like today, but we also find it spelled N-A-A-M and N-A-Y-M, among others.

And a word like *queen* also had various spellings, including modern Q-U-E-E-N, as well as Q-U-E-A-N and Q-U-E-N-E and Q-U-E-I-N-E. And you could find the word *heaven* spelled H-E-O-F-O-N-E, H-O-U-E-N-E, H-E-U-I-N and many, many more. The scribe just spelled it the way it sounded to him at the time. And even within the same document, the spelling often varied.

In fact, scholars have found that the word *though* was spelled over 500 different ways in Middle English documents.

Much of this variation was due to the vowel sounds. It was difficult to represent all of the various vowel sounds with a small handful of vowel letters. First of all, those vowel sounds varied from one regional dialect to the next. So many scribes used different vowel letters because they pronounced the words differently. But even when two scribes spoke the same dialect, they didn’t always agree how to represent those sounds in writing.

There were over a dozen different vowel sounds in the language, together with several different diphthongs. But there were only 7 letters to represent those sounds. Those letters were A, E, I, O, U, Y and that Old English vowel letter called ‘ash.’ The Æ represented the /æ/ sound, but that quickly disappeared after the Norman Conquest. The Normans didn’t like it because it wasn’t used in French. And it was gone by the mid-1200s. So that just left the other 6 letters.

That meant that the scribes had to make the most of those few letters. They had to figure out how to make 6 letters represent about 20 different vowel sounds and diphthongs.

Of course, they could have invented new letters, but that almost never happened. Throughout the history of the alphabet, scribes tended to work with what they had rather than create new letters. The

creation of new letters would have required a broad consensus among scribes and academics at a time when such a consensus was virtually impossible. It's still virtually impossible.

Another option was to use the existing vowel letters and do what some other European languages did – and that was to use accent marks to represent different vowel sounds. These little markings or accent marks are sometimes called diacritics. For example, French uses a small upward sloping accent mark over the letter E to represent the /ay/ sound. You often see it above the E in the word *café*. That mark is called the “accent aigu” in French – literally “the acute accent.” And many European languages adopted this technique of using accent marks to distinguish specific vowel sounds.

And some English scribes also experimented with accent marks. Even Orm used them in the *Ormulum*. In addition to his double consonants to represent short vowel sounds, he also occasionally used accent marks above certain vowels. For example, the word *out* was *ut* in Old English – spelled U-T. In the *Ormulum*, Orm spelled it U-T, but he put two of those acute accent marks above the U to confirm that it was pronounced with a long /oo/ sound. And he also used a few other accent marks in the document.

But for whatever reason, those accent marks never really caught on in English. They were only used sparingly, and they never gained widespread acceptance.

So that meant that English writers had to work with the existing letters of the alphabet. Each scribe spelled words as best he could. And those various spellings didn't really become fixed until the introduction of the printing press in the 1400s and the first dictionaries in the 1600s. At that time, printers and lexicographers started to pick and choose among those various spelling innovations. Unfortunately, there wasn't much consistency in their decisions. So it left English with a lot of random spelling rules. And almost every rule has numerous exceptions.

Generally speaking, most of these spelling rules were based on techniques that had developed in Middle English. So in order to understand why we spell words the way we do today, we need to go back and see how the Middle English writers dealt with these issues.

So let's begin with the basic problem of how to distinguish short vowel sounds from long vowel sounds. As we saw last time, Orm solved this problem by doubling the consonant after a short vowel. So he focused on words with short vowel sounds. Words with long vowels were generally left as they were.

Well, as I noted last time, this technique didn't really catch on, and it failed to gain widespread acceptance. And in fact, most Middle English writers took the opposite approach. They actually decided to leave words with short vowels as they were, and they elected to change words that had long vowels. So most spelling innovations from this period involved the long vowels.

Last time, I gave the examples of *god* and *good* – and *is* and *ice*. Notice that the versions with the short vowels – *god* and *is* – retain their original simple spellings. There are no double consonants. No extra letters. Just simple straight-forward spellings. But the versions that had long vowel sounds

were modified. *Good* got a double O, and *ice* got a silent E at the end. We'll look at these techniques in detail a little later in the episode, but I wanted to make the point here that most of those spelling innovations were focused on the long vowels – not the short vowels.

Even today, when we have a short simple words with simple straight-forward spellings, they tend to be pronounced with a short vowel – *hat, pet, dog, cat, cup, pad, hit, ham, wed*, and so on. All of those words have short vowel sounds. And if we had never seen any of those words before, we would probably pronounce them with a short vowel sound because the general rule in English is that a word with simple straight-forward spelling is pronounced that way.

Now of course, there were exceptions. In certain situations, scribes felt the need to clearly indicate that the vowel sounds were pronounced short. Some of those exceptions make sense because they were designed to prevent potential confusion. And those exceptions will make more sense when we get to the long vowels, so I'll discuss those a little later. But some of the exceptions seem completely random, and its not really clear why scribes used them.

For example, some scribes picked up that old idea of doubling a consonant after a short vowel. But they only tended to do that with certain consonant letters. So they tended to double an F, an S, an L and a Z (or zed). But they didn't tend to double other letters. Again, it isn't clear why those particular letters stood out, but they were routinely doubled, and those double consonants are still common in Modern English.

So for example, we see that double F in words like *cliff, sniff, off, staff, stuff, bluff, puff* and so on. Again, all of those words have short vowels, and those vowels are followed by a double F. We don't really know why scribes felt the need to double that F to indicate those short vowels – but they did.

The same thing happened with words ending in L. Again, it was common to double the L when it followed a short vowel. So we see those double L's in words like *fell, smell, hell, ill, pill, still, full, pull* and many others.

They also tended to double the S after a short vowel. That gave us the modern spellings of *mass, class, mess, chess, miss, kiss, loss, cross*, and many others. Again, these double S's became a standard spelling technique to represent a short vowel sound.

And also, as the 'z' sound became more popular, the letter Z was doubled in words like *jazz, fizz, whizz, fuzz* and *buzz*.

So all of that means that the letters F, L, S and Z were often doubled – just like Orm did in the Ormulum. We don't really know why those letters were given special treatment, but it became a standard spelling convention. I should also note that F, S and Z all represent fricative sounds. So that might have something to do with it. Apparently, scribes felt the need to double a consonant if it represented a fricative sound. But again, for whatever reason, those letters got special treatment and were routinely doubled.

Scribes also felt the need to give a special treatment to words with a short vowel that ended in a ‘k’ sound. They essentially doubled the consonant in those words as well, but there were two different letters for that ‘k’ sound. There was the traditional letter C and the newly introduced letter K. In Middle English, those words sometimes ended in a C and sometimes ended in K – depending on the scribe. And apparently later scribes felt the need to double that letter as well, just like they did with F and L and S and Z. But which letter did you double – the C or the K? Well, ultimately they decided to use one of each, and that gave us our modern CK spelling.

So take the word *back*. In Old English, it was often spelled B-A-C. But during the early Middle English period, many scribes spelled it B-A-K. By the time of late Middle English, the spelling was B-A-C-K. So scribes felt the need to double the consonant, but rather than use double C or double K, they just used CK.

And that explains the modern spelling of words like *back, hack, neck, check, pick, sick, sock, lock, suck, luck*, and many others. Again, that CK is basically a double consonant, and it is another example of using a double consonant as a marker to tell you that the preceding vowel sound is pronounced short.

So we have these few situations where scribes and early printers used double consonants to indicate a short vowel sound, but these were very much exceptions to the general rule. As a general rule, they just left a single consonant in place after a short vowel. They kept the spellings short and simple unless there was long vowel sound. But what if there was a long vowel sound? Well, as I noted, that’s where they focused most of their attention. They came up with a variety of ways to represent a long vowel sound and to distinguish that sound from a short sound. So most of the spelling innovations concerning vowels involved long vowel sounds.

One technique that scribes used to represent a long vowel sound was simply to double the vowel. And that actually makes sense if we think about it. If you want to represent a short vowel, just write the vowel letter one time. And if you want to represent a long vowel sound, then double the vowel letter. Visually, you can see the difference in writing. So words like *tree* and *flee* and *see* all got double E’s. And *soon* and *moon* – and *fool* and *tool* – all got double O’s.

This also explains the example I gave last time of *god* and *good*. *God* kept its simple straightforward spelling since it had a short vowel. But *good* – which was pronounced as /goad/ – got a double O to reflect that it had a long vowel sound.

This also helps to explain why Orm’s spelling system didn’t really catch on. Using Orm’s system of doubling the consonant after a short vowel, *God* would have been G-O-D-D. And *good* would have been G-O-D. Now both spellings have a single O. What distinguishes them is the D or double D at the end. But you’re not trying to show a difference in the ‘d’ sound. You’re trying to show a difference in the ‘o’ sound – the vowel sounds. So why modify the D? Why not just modify the letter O? After all, that’s the letter sound we’re concerned about. So just double the O when it’s pronounced long. Thus, G-O-D for the short vowel – /god/, and G-O-O-D for the long vowel – /goad/ – or /good/ today.

That system was much more logical, and some Middle English scribes came to prefer that spelling technique. So why didn't that technique become the accepted standard? I mean it makes sense, so why didn't everyone just follow that rule?

Well, there were a couple of problems with it. And those problems were the letters I and U. When you doubled those letters, the words became very difficult to read. We have to keep in mind that scribes tended to write in a flowing style – very much like our modern cursive letters. So one letter tended to flow into the next. And at the time, the letter I didn't have a dot over it.

So imagine you are writing two back-to-back I's in cursive. Try spelling the word *skiing* without putting a dot over the I's. Those two I's end up looking like a U. It looks like 'skung' instead of *skiing*. And what if you double the U. Try spelling that word *equus* – E-Q-U-U-S – in cursive. You end up with a bunch of vertical strokes that look like a bunch of I's – or maybe IU's – or UI's. And if those letters were followed by an M or an N or an L, all those basic up and down strokes started to blend together. It was hard to distinguish the individual letters. And then in later English, the letter W emerged as a separate distinct letter for the /w/ sound. It was literally a double U. So if you were using double U's for the long U sound, now they looked exactly like the letter W.

So all that created problems for scribes who preferred to double the vowel letters. So they rarely used a double I or a double U to represent long vowel sounds. And that's why we have very few words today with a double I or a double U.

That also means that the technique of using double vowel letters was pretty much limited to double A, double E and double O. The double A was actually common at one time. If you read back through Middle English documents, you'll find words like *case* spelled C-A-A-S, and *mate* spelled M-A-A-T, and *hate* spelled H-A-A-T. But those double A's soon fell out of use.

So that left double E and double O. And most of the examples I gave earlier have those letters. So for double E, we have *tree*, *flee*, *see*, and we can add in words like *keep*, *seek*, *seed*, *sweet*, and so on.

Double O is little more complicated. We still have it in a lot of words, but the pronunciation of that double O varies in Modern English. Remember that the original long O sound was /oh/. But during the Great Vowel Shift in the 1400s and 1500s, the sound changed from /oh/ to /oo/ in most words. So it switched from the long O sound to the long U sound. So today, when we see that double O, it usually has the modern /oo/ sound – the long U sound. So *moon*, *fool*, *tool*, *boot*, *school*, and so on.

But in some words, that sound changed to a short U sound – /u/. And that resulted in the pronunciation of words like *good*, *hood*, *look*, *book*, and so on. And in some words, it shifted to the /uh/ sound – *blood*, *flood*, and so on. So today we find that those double O's have different sounds, but those double O's were adopted back when those pronunciations were more consistent.

So this double vowel technique was used, and it still survives, but it was only used for certain letters. That limitation allowed other techniques to emerge to accomplish the same goal – to represent a long

vowel sound. One of those techniques was to combine two different vowel letters rather than simply doubling the same letter. The French-trained scribes really liked this technique. And they especially liked to use the letter I in this way. So they would add an I to another letter like A or E or U to indicate that the other letter was pronounced long. This technique was especially popular in the north of England and in Scotland, but it has survived into Modern English as well. So let's break that down and see what they did.

To indicate a long U sound, they would add an I to it. That created a 'UI' spelling which still exists in Scotland, but was never really adopted in the south of England. That's why the Scottish word *guid* (/good/) is spelled G-U-I-D.

They also added an I to the letter A to indicate that the A was pronounced long. That gave us the 'AI' spelling that we have today. So when we come across words like *rain*, *raid*, *saint*, *drain*, *maid*, and *sail* – that I is telling you to pronounce the adjoining vowel A as a long A. It's just a trigger. It's technically a diacritic, just like putting an accent mark over the A to indicate that its pronounced long. But in this case, it's putting an I beside the A to tell you the same thing.

Now Middle English scribes also used this technique with the letter E. To represent a long E sound, they would put an I beside it, and that gave us the 'IE' and 'EI' spellings that we have today. Again, that I was a trigger that told you to pronounce the E as a long E. And today, most of the words with the 'IE' or 'EI' spelling have that long /ee/ sound. So we see that in words like *grief*, *chief*, *relief*, *believe*, *field*, *niece*, *piece*, *receive*, *ceiling*, and so on. That I is telling you pronounce the adjacent letter E as a long vowel.

Now I should note that this spelling was typically applied to words that came into English from French. And scribes did that because French also used that spelling. In fact, the 'IE' and 'EI' spellings are ultimately from French. But by the 1400s, this spelling had become so popular that it was extended to some native English words as well. So Old English words like *fiend* and *thief* got their modern 'IE' spellings during that period.

Now today, some of those words I mentioned are spelled with an IE and some are spelled with 'EI.' And in fact, we even have a general rule today to try to keep track of those spellings – 'I before E except after C.' But if we were to go back to Middle English, we would find that those spellings hadn't been fixed yet, so that rule didn't work back then. In fact, words like *brief*, and *relief*, and *niece*, and *chief*, and *receipt* – they could be spelled with either an 'IE' or an 'EI' depending on the scribe. And they could also be spelled with double E's – remember that technique? So all of these spellings innovations were in use at the same time, and they were somewhat interchangeable.

But after the invention of the printing press, and then the production of the first dictionaries, the spellings started to become fixed. And in most cases, the printers and lexicographers settled on IE as the standard spelling. However, there were a small group of words – literally about 5 words – that had a C before those letters. And in those words, the spelling went the other way. Those words were *ceiling*, *receive*, *deceive*, *conceive*, and *perceive*. And of course, there are variations of those words like *receipt* and *conceit* and *deceit*. Those were the words where the dictionary makers went with C-E-I instead of C-I-E. And it isn't entirely clear why they did that.

You'll notice that outside of *ceiling*, all those words are variations of the root '-ceive' which meant 'to take.' And there is some evidence that those words were sometimes pronounced with an /eh/ sound instead of an /ee/ sound. So *receipt* and *receive* were sometimes pronounced /re-set/ and /re-sev/, and *conceit* and *conceive* were sometimes pronounced /con-set/ and /con-sev/. Even Shakespeare sometimes based his rhymes on those alternate pronunciations. So that may have been why the printers and dictionary makers reversed the spelling in those words to indicate a slightly different pronunciation. Of course, over time, all of those words came to be pronounced with a long /ee/ sound. So any difference in pronunciation was lost over time.

So today we have that rule – 'I before E except after C.' But the problem with that rule is that there are so many exceptions to it that it barely works at all. To make the rule work, the first thing we need to do is limit it to words that have the long /ee/ sound which was the original context in which that spelling evolved. If we do that, then the rule works pretty well. The problem is all of those words that don't have the /ee/ sound – like *freight*, and *neighbor*, and *weight*, and the number *eight*. All of those words use 'EI,' instead of the usual 'IE'. And the 'EI' doesn't follow a C in those words. So the rule doesn't work there. In fact, this is such a common exception that some of you may know a longer version of that spelling rule – 'I before E except after C, or when sounding like A, as in neighbor or weigh.'

But it doesn't stop there. In fact, what about the word *their* – T-H-E-I-R. That's another exception. And what about words like *forfeit*, and *seize*, and *vein*, and *either*, and *heir* – as in 'the heir to the throne.' Those are also exceptions. They're all spelled with an 'EI' – not 'IE.' And even when we have a C, it's not always followed by 'EI' as the rule suggests. What about the word *ancient* – A-N-C-I-E-N-T. And we have *sufficient*, and *proficient*, and *conscience* – all with a C-I-E which violates the rule. So welcome to English spelling. It's never as simple as it seems.

The main point here is that the 'IE' and 'EI' letter combinations have their ultimate origins in French. And it came into English when French-trained scribes used those spellings for French words that were entering English during the Middle English period. And the 'IE' and 'EI' originally represented the long sound of letter E because the I was used as a marker to indicate that vowel next to it was pronounced as a long vowel.

So 'UI,' 'AI,' 'EI,' and 'IE' all emerged as standard spelling innovations in Middle English. Sometimes, scribes combined other vowel letters as well. For example, they put E and A together to represent a long /eh/ sound. So today, we see that spelling in words like *peace* – P-E-A-C-E. And the word *sea* – S-E-A. But notice that the vowel sounds in those words have changed over time. Today, they're pronounced *peace* and *sea*, but in Middle English they would have been /pehhs/ and /sehh/.

So if you have a hard day at work or school, you might want a little bit of peace and quite – a 'piece of peace' if you will. A PIECE of PEACE. Those are homophones today, they sound just alike. But in Middle English, you would have wanted a /pace/ of /pehhs/. The pronunciations were slightly different. So they were spelled differently. Eventually, those pronunciations merged into the modern pronunciation /peace/, and the words became homophones. But those original spelling differences remain.

And along the same lines, if you go to the beach, you *see* the *sea* with the homophones – S-E-E and S-E-A. But in Middle English, you would /say/ the /seh/ . Again, the pronunciations were slightly different, and the words were spelled differently. But again, over time, those vowel sounds converged, and instead of going to the beach to /say/ the /seh/, you now go to *see* the *sea*. But those old Middle English spellings remain, and they're telling us that those words were once pronounced differently.

So the 'EA' spelling was used in Middle English for the sound that linguists call the long Open E sound – the sound found in /peh/ and /seh/.

Middle English scribes also began using the 'OU' letter combination. This was another spelling innovation that was imported from French. In Middle English, it was used for the long /u:/ sound of U. So the words *house* and *mouse* were originally Old English words – *hus* and *mus*. *Hus* was H-U-S. And *mus* was M-U-S. Again, scribes looked for ways to represent that the U was pronounced as a long U in words like that. Remember that the double U created problems because it was difficult to read in the middle of a word. So some scribes began to use the French OU spelling instead. So Old English H-U-S became Middle English H-O-U-S. But it was still pronounced /hus/. And Old English M-U-S became Middle English M-O-U-S. But it was still pronounced /mus/.

And then the Great Vowel Shift happened. And /hus/ and /mus/ became /hoas/ and /moas/ – and then became /house/ and /mouse/. Now some English dialects still retain that intermediate pronunciation as /hoas/ and /moas/. But standard English shifted those pronunciations to the modern /ow/ sound. And those words retain that French 'OU' spelling which they acquired in Middle English.

Again, that OU spelling began as a way to indicate that there was a long U sound in those words. By the way, this is the same process that converted Old English *hund* into Modern English *hound* with its OU spelling, and Old English *pund* into Modern English *pound* with its OU spelling.

So we've seen how scribes put two vowel letters together to represent a long vowel sound. Sometimes it was two different vowel letters, and sometimes the same letter was simply doubled. And in all of the examples I've given so far, the two vowel letters were next to each other – side-by-side.

But in the late Middle English period, scribes came up with another way to represent a long vowel sound, and it also used two vowel letters. But this time, the two vowel letters were separated from each other. There was actually a consonant letter in between them. And this new method actually became so popular that it is now the primary way we represent a long vowel sound in Modern English. This new method was the 'silent E' at the end of a word.

Even if you were never taught this in school, you may have noticed this technique just from observing how the silent E works in Modern English. Generally speaking, when we have a vowel and a consonant, we put a silent E at the end to show that the first vowel is long. So that silent E at the end is a marker, just like how the letter I was used as a marker beside the A in words like *raid* and *braid*, and just like how the I was used as a marker beside the E in words like *grief*, and *chief*

and *niece*. In this case, the silent E works the same way. It's also a marker to indicate that the other vowel in the word is pronounced long, but in this case the marker is separated from the vowel and stuck at the end of the word.

So we have *hat* with a short vowel. It has a simple straight-forward spelling. But we have *hate* with a long vowel and a silent E on the end. And we have *bit* and *bite*. *Cop* and *cope*. *Mad* and *made*. *Fat* and *fate*. *Pin* and *pine*. *Tub* and *tube*. And on and on. The word with the short vowel has a short and simple spelling. The word with the long vowel has a silent E on the end.

So where did it come from? Why did scribes and printers decide to use the silent E in the first place. Well, to understand that history, we have to start at the beginning – with Old English. As we know, Old English used a lot of different inflectional endings – endings like ‘-a,’ ‘-as,’ ‘-an,’ ‘-e,’ ‘-es,’ ‘-en,’ ‘-u-,’ ‘-um,’ and others. But after the Viking invasions, and the introduction of Old Norse, those inflectional endings started to break down in northern and eastern England. And that process was reinforced after the Norman Conquest.

Now those endings didn't just disappear. Initially, they were simplified. They merged into a somewhat generic ‘-eh’ ending at the end of words. Linguists call the sound a ‘schwa,’ but it's basically just an ‘eh.’ So in the last episode, I discussed the original Old English version of words like *bleed*, *feed*, *meet* and *hide*. In Old English, those words were *ble-de*, *fe-de*, *me-te* and *hy-de*. They still had inflectional endings, but it was just that generic ‘-eh.’ And that ending was spelled with an E.

So when you look at an Old English document, you see lots of different endings on words. But when you look at a Middle English document, you tend to see the same generic E ending over and over. Lots of words ended in an E in Middle English, and that E was still pronounced as /eh/. But that ending became so generic, that it no longer had any real meaning. Those different endings in Old English were markers that conveyed very specific information. But when they all became simplified to a generic ‘eh’ ending, that sound no longer served any purpose. So people started to drop it altogether because it wasn't really doing anything.

This happened first in the north of England and in Scotland. That was where Norse influence was the greatest, and that was where the breakdown of inflectional endings had started a few centuries earlier. So the trend always began there and spread south. And now, around the current point in our overall story – in the late 1100s and 1200s – people in the north stopped pronouncing those generic ‘eh’ endings altogether.

By the 1300s, that trend has spread to southern England. By the late 1300s, Geoffrey Chaucer was writing around London in the south, and his writings often used rhyming verse, and his rhymes suggest that the E at the end of words was sometimes pronounced and they were sometimes silent. So they were still in the process of disappearing around London in the late 1300s.

By the mid 1400s, those final E's were largely silent throughout England. And there is evidence of this silence in the documents produced in the late Middle English period. Since scribes still tended to spell words phonetically, many of them had started to drop the E at the end of words altogether.

But some of them retained the E as a marker for a long vowel – the same way we use it today. And it was used as a marker because a lot of those words had long vowel sounds.

In order to follow this, let's consider a word like *side* – S-I-D-E. It's an Old English word, and it was spelled the same way in Old English. But it would have been pronounced as /see-deh/. So it was basically broken down into two -syllables – S-I /see/ – and D-E /deh/.

You might remember from the last episode that when the first syllable ended in a vowel sound – like /see/ – it tended to be stretched out and pronounced long. It's called an open syllable. But then the E at the end became silent in Middle English, and the pronunciation shifted from /see-deh/ to /seed/. So it was reduced to a single syllable. But it still had that old long sound of letter I – /seed/. And when that I sound shifted in the Great Vowel Shift from /ee/ to /eye/, the pronunciation of the word shifted again from /seed/ to /side/. So again, from /see-deh/ to /seed/ to /side/. The vowel remained long, but the E became silent. The E was just sitting there at the end marking that long vowel sound.

Well that same process happened in a lot of words in English. And even though it isn't entirely clear, it appears that scribes started to treat that silent E at the end as a marker for those long vowels. And they began to add silent E's to other words as well to indicate long vowels. So this became a standard spelling innovation. And it became one of the most popular ways to indicate a long vowel in Modern English.

But it also created a lot of problems because that silent E was just left hanging there at the end. And sometimes, it tended to get lost. So scribes had to come up with ways to fix those problems.

It was especially a problem with verbs. If a verb was converted into a noun, the suffix '-er' was often added to the end. So *jump* became *jumper*, and *hunt* became *hunter*. And *dine* became *diner*. But notice what happened in that word *dine*. *Dine* had a silent E on the end, but when it became *diner*, the silent E was lost. Now it looked like D-I-N with an '-er' suffix. And the E in that '-er' suffix was pronounced. Well, D-I-N would normally be pronounced as /din/. So D-I-N-E-R looked like it should be pronounced short – as /dinner/. But English already had the word *dinner*. So scribes had to figure out how to distinguish *diner* and *dinner* – because the silent E didn't work in that situation. So they decided to shift their focus from the long vowel to the short vowel – from *diner* to *dinner*. What they did is they decided to leave *diner* as it was and mark *dinner* with a double N. So they decided to mark the short vowel the same way Orm did it – by doubling the consonant after the vowel. And that produced the difference between *diner* and *dinner*.

The same thing happened with *bite* and *biter*. When that '-er' suffix was added to *bite*, the silent E was lost in the spelling. So *biter* looked like it should be pronounced /bitter/. To avoid confusion between *biter* and *bitter*, they doubled the consonant in *bitter* using that traditional technique. And *bitter* got its modern double T's.

So something very interesting was happening there. We saw that scribes generally felt no need to mark short vowels. They focused their attention on how to mark long vowels. But when they absolutely had to – when their spelling innovations for long vowels broke down and didn't work – they would go back and mark the short vowel. So that was what was happening here. When the

‘silent E’ technique broke down because the E got lost at the end, the scribes would just mark the short vowel instead – with double consonants.

So today, when we come across that double consonant spelling to mark a short vowel, it’s often because scribes and printers needed to clear up some confusion that would have otherwise existed.

So that is why we have *hoping* with one P and *hopping* with two P’s. And *taping* with one P and *tapping* with two P’s. *Hope* and *tape* have those silent E’s to mark the long vowel. But when *hope* becomes *hoping* – and *tape* becomes *taping* – the E is dropped at the end, and the ‘-ing’ suffix is added. The silent E disappears altogether. And H-O-P-I-N-G looks like it should be /hop-ing/ – not /hope-ing/. And T-A-P-I-N-G looks like it should be /tap-ing/ – not /tape-ing/. So again, scribes solved this confusion by leaving the long versions as they were, and they marked the short versions with double consonants. So /hop-ing/ became H-O-P-P-I-N-G. And /tap-ing/ became T-A-P-P-I-N-G.

So where does all of this leave us? Well, let’s summarize the rules we’ve covered in this episode. First, when a vowel doesn’t have an obvious marker, it is usually pronounced short. However, we covered two major exceptions. First, the short vowel was marked with a double consonant when it was necessary to clear up some confusion as to how the vowel was pronounced. So when the spelling rules for a long vowel broke down, then the scribes would just mark the short vowel with a double consonant. The other exception was those words that ended in F, L, S or Z, which also tended to have double consonants, and also those words that ended in ‘CK,’ which was another type of double consonant that marked a short vowel.

Beyond those general exceptions, short vowels were left unmarked. And scribes chose to mark the long vowels instead. They did that by either doubling the vowel letter, or using two different vowel letters, or adding a silent E to the end. Again, all of these techniques existed side-by-side for much of the Middle English period.

So as I noted at the beginning of the episode, the word *name* was sometimes spelled with a double A – N-A-A-M. And sometimes with two different vowels – N-A-Y-M. And sometimes with a silent E at the end like we do today – N-A-M-E. And a word like *queen* was sometimes spelled with a double E like we do today – Q-U-E-E-N. And sometimes with two different vowels – Q-U-E-A-N. And sometimes with a silent E – Q-U-E-N-E.

All of this didn’t get sorted out until the Modern English period, and when it was sorted out, it was a piecemeal process. There was no grand committee of English experts to apply a simple consistent set of rules.

And even when relatively straight-forward rules were adopted, they were confused by later events. Sounds continued to change within English. Foreign words were borrowed with unique spellings that didn’t match the traditional rules – and those unique spellings were often retained. And later English scholars tried to reform English spelling. But they didn’t reform the spellings to make them easier. They actually made them more complicated. They tried to change the spellings of many words to reflect the ultimate Greek and Latin roots of those words. So a word like *debt* got a new letter B in

the middle because it came from the Latin word *debitum*. But the word *debt* has never had a pronounced ‘b’ sound in English.

So all of that contributed to the mess that is English spelling today. And I should note that I only scratched the surface in this episode. I’ll have a lot more to say about spelling in future episodes. But I think we’ve had enough spelling rules for the time being. So next time, I’m going to return to our overall historical narrative.

In the next episode, we’ll return to the events on the ground in England and France. Henry II’s son was now the ruler of the Angevin Empire. His name was Richard – officially King Richard I – but more well-known to history as Richard the Lionhearted. As his nickname suggests, he loved to fight. And after he became King of England and ruler of the Angevin Empire, he spent much of his time fighting in the Near East – in the Crusades. So next time, we’ll look at Richard’s reign. And we’ll see how influences from the Arab world started to filter into Western Europe. That included a lot of words as well. So we’ll look at those new influences on the English language.

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

## **EPISODE 90 – HEALERS, HOSPITALS AND HOLY WARS**

Welcome to the History of English Podcast – a podcast about the history of the English language. This is Episode 90: Healers, Hospitals and Holy Wars. In this episode, we’re going to turn our attention away from England – and even away from Europe. We’re going to shift our focus to the Near East – and the growing influence of the Islamic world during the Middle Ages. This was a period when the Christian and Islamic worlds were coming into contact with each other in many different ways – through trade, through pilgrimage, and through the series of violent clashes known as the Crusades. Through these interactions, Christians in Europe discovered a civilization that was more advanced than its own in many ways, especially in fields like mathematics, astronomy and medical care. And as Europeans discovered those new ideas and technologies, they started to borrow words from that culture. So this time, we’ll explore those developments, and we’ll see how that eastern culture influenced the English language.

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 at [Patreon.com](https://www.patreon.com/historyofenglishpodcast). Just go to [historyofenglishpodcast.com](http://historyofenglishpodcast.com) and link from there.

And one other quick note. I recently spoke with the Silly Linguistics Podcast about podcasting and putting this particular podcast together. For those of you who are interested in listening to that discussion, check out the Silly Linguistics Podcast at iTunes or wherever you get your podcasts.

Also, in these next few episodes, I’m going to be discussing developments in the Islamic world during the Middle Ages. That means I’ll be using some Arabic words from time to time. And I’ll be discussing a different part of the world. So I thought it might be a good idea to invite someone on who could help me out.

[Elias Belhaddan] This is Elias Belhaddan of the History of Islam Podcast.

[Kevin Stroud] Thanks Elias. Elias has been a great help with some of the Arabic words I’m going to be discussing, and he may also pop in from time to time to offer a few thoughts of his own. And if you want to learn even more about the history of Islam, be sure to check out his podcast appropriately called the History of Islam Podcast.

So let’s turn to this episode, and let’s return to the events on the ground that shaped the history of the English language. A few episodes back, we left the overall historical narrative with the death of Henry II after a protracted battle with his son Richard. Richard had been a thorn in his father’s side for most of his life, but he was also the eldest son, so he was next in line to the throne. And when his father died, Richard promptly headed to England to be crowned as the new king. And in 1189, Richard became the King of England and the new ruler of the Angevin Empire.

Now Richard was a fascinating figure. He epitomized the concept of the chivalrous warrior, and he was the first King of England to fight in the Crusades. In fact, his reign is really synonymous with the Third Crusade. I have alluded to the Crusades in earlier episodes, but I haven’t spent much time

on them. And that was partly because they didn't have much of an impact on the English language at the time. But all of that was starting to change around the time of Richard's reign in the late 1100s.

By this point in history, Persian and Arabic influences were starting to make their way into Western Europe and into England. And as English manuscripts started to be produced again, those new documents included words that be traced back to the Near East.

So this time, I want to digress from the main storyline, and I want to give you a quick history of the Muslim world up to the current point in our story. This is important for a couple of reasons. First, it will help to set the stage for the Third Crusade, but it will also reveal a remarkable period of scholarship and technological innovation. Frankly, this story is often neglected in the West, and that's unfortunate because I think we fail to realize how much influence the Arab world had on Western culture in the late Middle Ages. And that influence is still reflected in some common words that we use all the time.

But before we turn to the Near East, I want to mention something about a particular piece of technology – the magnetic compass. At the current point in our story, it was a relatively new invention. A few episodes back, I mentioned that it was invented in China in the 1100s. Like many Chinese technologies, it made a slow and gradual trek eastward across India and the Arab world before it finally reached Europe. When it reached Western Europe, it changed everyone's perspective on the world. It allowed for greater travel at sea – and it enabled geographers to make better and more accurate maps. And because the compass needle always pointed to magnetic north, those maps were drawn from that perspective. And even today, almost all maps are drawn with the north at the top of the page. Even most modern GPS devices are oriented toward the north by default.

But that northern orientation didn't always exist. Before the magnetic compass arrived, Europeans tended to be oriented toward the east. That was the direction in which the Sun rose. And that was also the general direction of the Holy Land where Christianity was born. So when a new church was built, it was usually designed so that its axis faced east toward Jerusalem. Today, we would say that the church was 'oriented' toward the East. And in its original sense, the word *orient* literally meant to arrange something so that it faced toward the east. And that's also why the lands to the east of Europe came to be known as the Orient. The word *orient* comes from a Latin word that meant the east or the place where the Sun rises. So the East was the Orient and, over time, things pointing toward the east were said to be *oriented*.

Of course today, when we speak of the Orient, we are usually referring to the Far East – to places like China and Japan. But the word originally had a much broader sense. It included India, as well as the Middle East – or the "Near East" as it was once more commonly known.

Now even though most Europeans tended to be oriented toward the Orient, they actually knew very little about the Orient. Most of them were illiterate, so they weren't able to read books about it. They gathered some knowledge through the stories of the Bible as told to them by priests, but even then, those stories were set in the distant past.

Most of what they knew about contemporary Eastern culture came from traders and pilgrims who traveled to the Holy Land and returned to tell stories about their journey. But in the year 1072, most of those pilgrimages to the Holy Land were interrupted. Turkish Muslims had captured Jerusalem, and they essentially sealed it off from the Christian world. In Western Europe, the reaction to those events was outrage, and it led to a concerted military effort to reclaim Jerusalem. Of course, those series of wars were the Crusades.

The First Crusade was a victory for the European forces because they briefly recaptured Jerusalem. And that allowed Christian pilgrims to return to the city. But it was an incredibly long and difficult journey from Western Europe to Jerusalem. Many pilgrims were sick and exhausted by the time they got there. And there were also threats from hostile forces in the region. So various groups of Christian knights in the region started to join together to defend the lands that had been won in battle – and also to offer shelter and protection to Christian pilgrims. Very soon, those knights formed two major military orders to serve those purposes. One of those orders was the Templars. But the other order is more important to this story. They were called the Hospitallers – and their primary function was to protect pilgrims and provide lodging for them. The Latin word for an inn or a lodge was a *hospitum* – from the same root as words like *host*, and *hospitable*, and *hotel*. And this particular hospitum, which provided hospitality to pilgrims, was called the “Hospital of St. John of Jerusalem.” But the word *hospital* didn’t mean what it means today. Again, it was more like a hotel or an inn – a place of refuge and shelter. But so many of those pilgrims needed medical attention by the time they got to Jerusalem that the facility was soon swamped with sick and injured people. And as a result, this particular facility started to acquire a new mission – a medical mission. And again, the name of that facility produced the name of the military order that was in charge – the Hospitallers.

As pilgrims and knights returned to Europe from the Crusades, they saw the value of facilities like the one in Jerusalem run by the Hospitallers. So around the current point in our overall story – in the late 1100s – a lot of brand new hospitals started to be constructed throughout western Europe, including several within the city of London.

And it is probably appropriate that these new facilities were ultimately connected to events in the Holy Land because the words *health* and *holy* come from the same Indo-European root word. I’ve mentioned this before, but it’s a good time to mention it again. The words *health* and *holy* come from Old English. And they’re both also related to the word *whole* – W-H-O-L-E. And that word *whole* is really the key.

In Old English, a sick body was considered to be broken. And in fact, Old English used the word *broc* – B-R-O-C – to refer to a state of sickness. Of course, it could literally be a broken condition, as in broken bones, or broken skin in the form of lesions or cuts. By contrast, a healthy body was considered to be ‘whole’ – and that’s how we got words like *heal*, and *health*, and *healthy*. And by analogy, this idea of physical health was extended to spiritual health.

If person was in good physical health, he or she was pure and whole, uncontaminated by bad or evil contagions. In that case, the person was deemed to be *healthy*.

And if the person was in good spiritual health, pure and whole, uncontaminated by bad or evil temptations, then that person was deemed to be *holy*. And that's the ultimate connection between *healthy* and *holy*.

Now back in Episode 63, I discussed how the Anglo-Saxons dealt with sickness. In that episode, I noted that the Anglo-Saxons relied on herbal remedies and charms. But in certain parts of Europe, especially those regions familiar with Greek medicine, they tended to use a different treatment – blood-letting. This was tied to the Greek concept of the four humors. If a person was sick, the humors were out of balance, and blood-letting was a way to achieve the proper balance.

Now, here's the thing about blood-letting. First of all, that term *blood-letting* was entering the English language around the current point in our overall story. But the term really has two different meanings. It can refer to both medical treatment – and warfare – as in “There was much blood-letting between the two armies.” So the intended meaning of that term really depends on why the blood is being let. And that takes us back to those Hospitallers because they engaged in both types of blood-letting. They provided comfort and medical care to sick people. But at the same time, they were warrior knights engaged in a Holy War. So there was a lot of blood being spilled, but whether it was intended to heal or kill usually depended on whether you were a Christian or a Muslim.

And in order to understand why that distinction was so important, we need to turn our attention to the origin of the conflict. And that takes us back to the rise of Islam in the early Middle Ages. This part of the story takes us to Arabia which was the home of Mohammad – the man known to Muslims as the Prophet Mohammad. By the time of his death in the year 632, the whole of the Arabian Peninsula had been united under Islam. It was also increasingly unified under a common language. The nomadic peoples of Arabia spoke a wide range of dialects, but a common Arabic dialect started to develop during this period. And this process was furthered after the region was unified politically. This actually served as the model going forward. As the Arab world expanded, it encountered a variety of other peoples and ethnic groups with different religions and languages. But under Islamic rule, many of those people started to speak Arabic, and they converted to Islam. So they were increasingly unified by a common religion and a common language.

Within about 20 years after Mohammad's death, the Quran had been written down – and that important text also helped to standardizing the language. All of this is very similar to the way Christianity and Latin spread together throughout Europe. The spread of the religion and the spread of the language were fundamentally linked in both cases.

Within a couple of decades, Mohammad's followers had spread north and conquered the Persian Empire. That took the Islamic religion and culture to modern-day Iraq and Iran. By the 660s, the Islamic Empire encompassed most of the region we know today as the Middle East, including Syria, Palestine and Egypt. Within another decade, it had expanded all the way across northern Africa to modern-day Morocco.

From Morocco, the Muslim forces crossed the Mediterranean and spread into southern Spain. This meant that their power and influence extended into Europe itself. And this had tremendous long-term consequences because it provided an avenue for Muslim culture to spread into Western Europe.

For this important development, I'm going to let Elias jump in and describe the Muslim capture of Spain.

[Elias Belhadden] The man responsible for this was known as Tariq ibn Ziyad. Tariq was an ethnic Berber who were the indigenous inhabitants of North Africa. And he was a former slave the slave of a man called Musa bin Nusayr, who was the governor of Ifriqiya – a province within the Umayyad Empire which stretched from the deserts west of Egypt all the way to the shores of the Atlantic. Tariq was freed and appointed as a general by his former master. In 711, he hopped over from North Africa to the Iberian Peninsula landing somewhere near Gibraltar giving it his name. *Gibraltar* comes from the Arabic *Jabal Tariq* meaning “Tariq’s mountain.” The Iberian Peninsula was ruled at this point and time by the Visigoths, a Germanic people who had been present in former Hispania since they took it from the Romans a few centuries earlier. Before beginning his march northwards, Tariq waited with his force of around 7,000 mostly Berber men for some further reinforcements. These came in the form of 5,000 men – a contingent sent to him by Musa bin Nusayr. Tariq could finally head north but his march was soon interrupted by the Visigoths. The two armies faced off near a river known as Río Barbate. And in this battle, Tariq ibn Ziyad’s highly skilled horsemen managed to carry the day and decisively defeat the significantly larger Visigoth force. Following this great victory, Tariq ibn Ziyad was joined by Musa bin Nusayr, and in just two very short years, the vast majority of the Iberian Peninsula was subjugated in an almost blitzkrieg fashion.

[Kevin Stroud] Ultimately, the spread of Muslim of power was checked in the north. The Franks were able to repel the forces from southern France. And that ended the expansion of Muslim armies into Europe. But it left most of Spain under Muslim control. And as I noted, that was really a crucial development in our overall story – because Muslim Spain was the primary source for the introduction of Arab culture to Western Europe.

So in less than a century, a massive region had come under the control of Muslim forces, almost all of which was loosely organized under the leadership of a family of rulers called the Umayyads. Their capital was established at Damascus in Syria. And they were generally tolerant of native religions. They didn’t force conversions, and they allowed Christian pilgrims to continue to travel to Jerusalem and the surrounding areas. But over the next few generations, more and more people within these regions converted to Islam. Arabic was also the official language of the government. So Arabic gradually replaced most of the native languages throughout this massive region.

Then in the year 750, the Umayyad rulers were defeated by a rival family called the Abbasids. And this ushered in a new dynasty called the Abbasid Caliphate. Then, in the very next year, there was another important development. Muslim armies had spread so far east that they encountered a Chinese force along the Silk Road in Central Asia. And the Muslim army defeated that Chinese force at an important battle in the region north of Afghanistan.

That obscure battle is important to our story because it gave the Muslim forces access to a specific Chinese innovation. That innovation was paper. The Chinese had figured out how to make paper, and following that battle in 751, the victorious Muslims took the defeated Chinese as prisoners of war. The Chinese prisoners included several craftsmen who knew how to make paper. And according to tradition and legend, those craftsmen were forced to reveal how that paper was made.

Whether or not the Muslims actually acquired papermaking knowledge in this manner, the fact is that paper mills started to spring up throughout the Arab world a short time later.

I'm going to have a lot more to say about paper in an upcoming episode, because for now, it still hadn't reached Europe. But from the mid-700s, it was an increasingly common writing material in the Arab world. And it allowed for the mass production of documents – in Arabic of course. Before paper, most scribes used papyrus or parchment. Those materials were difficult to produce and could be very expensive. So previously, writing was limited to the most important documents. And only a few copies existed.

But now, in the Arab world, paper could be mass produced. So it was abundant and cheap. That meant scribes could make as many copies as they wanted. The only limitation was the number of literate scribes that could be assembled. And that soon became a priority for the Abbasid rulers.

I should note that the Arabic paper trade became quite substantial in the period before paper mills were introduced to Europe. And that's why the word *ream* – as in a 'ream of paper' – is actually an Arabic word. The original word was *rīzmah* meaning 'a bundle of something,' specifically a bundle of paper.

Now three years after that victory over the Chinese and the acquisition of paper, the Abbasids got a new leader known as a caliph (/kæ-lif/) – or (/kay-lif/) – either pronunciation is acceptable in English. I'll just use caliph (/kay-lif/) going forward. The new caliph was al-Mansur, and he is very important to our story for a couple of reasons.

First, he decided to move the capital from Damascus to a brand new city which he established between the Tigris and the Euphrates in modern-day Iraq. That city was called Baghdad. There had been a small settlement there before, but al-Mansur laid the foundations for the modern city. So that's one reason why al-Mansur is notable. The other reason why he is important to our story is because he accidentally made a major discovery a few years later when he became ill.

He was having stomach problems. And no one in Baghdad could provide an effective treatment. So he looked elsewhere. About 150 miles north of Baghdad, in the mountains of southern Persia (in Jundi Shapur), there was a Christian monastery that had been around for over a century. And this particular monastery traced its origins back to Constantinople, so it had a lot of old Greek texts. And the monks had translated those Greek texts into their native Semitic language called Syriac.

Those translations included medical texts from the classical Greek period. Those were the texts that described the humors and how to treat people using blood-letting and other treatments. The monastery had even established an early type of medical school and hospital to treat people using some of those theories. Now I say 'hospital,' but that's being a bit generous – especially when compared to modern standards. It was a place where sick or injured people went to find a treatment for a particular illness, but again, there was no modern medicine. So the monks used these old Greek medical texts and combined them with folk remedies and whatever other treatments they could provide.

Well, the new Arab leader, al-Mansur, reached out to the monks in this medical monastery, and he summoned the head of the medical center (Jurjis ibn Jibril ibn Bukhtishu) to come to Baghdad to see if he could treat the caliph's stomach problems. And apparently, the monk provided a cure – or he at least provided some relief – because al-Mansur made the monk his personal physician. And in fact, the monk's family continued to serve as personal physicians to the caliphs for several generations after that. So a close personal link was established between the Abassid court at Baghdad and that medical monastery in the Persian mountains.

Thanks to that connection, al-Mansur and his successors came to realize that there was a world of practical knowledge locked up in some of those old books. They also realized that the wisdom of other cultures could be put to practical use in the Islamic world. So Muslim scholars started translating some of those Greek texts. The monastery also had a lot of Persian texts, so those were also translated.

The next major development took place about 20 years later with one of al-Mansur's successors named Harun al-Rashid. Al-Rashid became caliph in the year 786, and he ordered the construction of a large medical center in Baghdad. But more importantly, he organized all the translators and scholars in Bagdad into a new research center called the House of Wisdom. The House of Wisdom was an attempt to collect all of the practical knowledge of the world in one place. At its most basic level, it was a library filled with scholars. Their goal was to collect as many documents and texts as they could and then to translate them into Arabic.

Indeed, many manuscripts were translated into Arabic during this period from the late 700s through the 800s. It included Persian, Hindu and Greek texts. And in fact, some of those texts, including several important Greek texts, would have been lost to history had it not been for these Arabic translations.

Interestingly, the translators weren't really interested in history or drama or other works of literature. So for example, they never bothered to translate the works of Homer. They were only interested in documents that provided a practical knowledge of the natural world. So they copied works related to natural science, medicine, math, astronomy, geography, and so on.

The access to all of this knowledge led to a new era of scholarship and learning in the Arab world. One of the earliest figures to emerge from this new culture was a scholar named Jābir ibn Hayyān, but he is generally known in the West as Jabir the Alchemist. Jabir was primarily interested in an ancient pursuit – the attempt to transform various metals into gold and silver. This became a popular pursuit throughout the Middle Ages. As part of that pursuit, Jabir did a lot of work and experimentation with various metals and other substances. He studied processes like evaporation, distillation and crystallization. Remember this was the late 700s, so we're still 7 or 8 centuries away from the scientific revolution in the west.

Jabir's work was influential, but later scholars had a tough time making sense out of some of his notes and research. And they couldn't always follow his theories. So there is one school of thought that says that Jabir's name gave us the word *gibberish* to mean writing or speech that's difficult to understand. Not everyone agrees with that etymology, but it is one of the popular theories.

Though modern scholars sometimes struggle with Jabir's theories, his work was picked up and expanded upon by other scholars at the new House of Wisdom.

To explain the work they were doing, Arab scholars turned to a Greek word – presumably a word they had encountered in all of those translations. That word was *chymeia*. It was an old Greek name for Egypt, and it apparently referred to earlier Egyptian attempts to transform metals into gold or silver. The Muslim scholars took that Greek word and added the word *al* to the front of it. That produced the Arabic word *al-kīmiyā*.

Now that prefix *al* is going to be very important as we discuss Arabic words that passed into English because it appears in a lot of those words. And it is very common because it is the Arabic word for *the*. And when those nouns passed into European languages, the *al* part was often retained at the front.

So *al-kīmiyā* is often translated as ‘the Egyptian Art’ – or simply ‘the Art’ – which again is a reference to the earlier Egyptians who worked with metals. And *al-kīmiyā* eventually passed into Latin, and then into English, as the word *alchemy*. But many European translators understood that the *al* part at the front was merely an article – the word for *the* – so it was sometimes dropped at the front. And that ultimately produced the word *chemistry*. So for much of the Middle Ages, there wasn't much of a difference between a *chemist* and an *alchemist*. One version retained the Arabic article and one didn't.

But by the 1600s, the scientific revolution was underway in Europe, and scholars tried to distinguish pseudo-science from actual science. Actual science used the scientific method. And it was at that point that the word *alchemy* was relegated to attempts to turn metals into gold and silver. And the word *chemistry* – without the *al* – was used for the scientific study of the properties of matter.

Now as I noted, one of the primary goals of most alchemists was to find a substance that could turn a base metal like mercury into gold or silver. Now this may seem a little crazy today given what we know about modern chemistry, but at the time, many people thought it was possible. And they thought it was possible because there were ancient legends about people who had discovered a magical substance that could make that kind of transformation. According to those legends, there was a specific stone that could be used to produce this transforming substance. The stone could be ground into powder, and that powder could then be mixed with other substances to produce gold. This legendary stone came to be called the ‘philosopher's stone’ in the West. And according to some of those legends, the stone's powder could also be used to extend life and cure illnesses. The Arabic term for this magical powder was *al-iksir*. Again, the term was probably borrowed from an earlier Greek word. But Arabic *al-iksir* passed into Latin and then into English as *elixir*. And we still use the term today to refer to a liquid substance with healing properties. The word first appeared in English in the mid-1200s, so again, around the current point in our overall story of English. And in that word *elixir*, we can see that these Muslim scholars weren't just interested in turning metals into gold, they were also interested in treating illnesses.

Now in order to discover this magical elixir, early alchemists worked with different substances, changing their qualities, melting them, burning them and distilling them. They also worked with

plants. And when plants were burned in a pot, it left ashes behind. Back in Episode 71, I mentioned that this type of residue was called '*pot-ash*' in the Germanic languages. The Dutch version of that term '*pot-ash*' was later borrowed into Latin, and that produced the Latin word *potassium* for the metallic element that was produced through that process.

Well the Arabic term for that ash was *al-qaliy* – literally 'the ashes.' Now if you think back to all of those fun chemistry classes that you had in school, and if you recall the periodic table of the elements, you might remember that the chemical symbol for potassium is K. It's not P – for potassium – it's K. Well, now we know why. It all goes back to this Arabic word for pot-ash – *al-qaliy*. Remember the *al* is just the Arabic word for *the* – so it was sometimes dropped. And *qaliy* passed into Latin as *kalium*, and it produced the symbol K.

But that Arabic term *al-qaliy* also produced another word – the word *alkali* – and its related word *alkaline*. So if you go to the store and buy an 'alkaline' battery, you're using this Arabic word – which has its origins in alchemy. An *alkali* is a substance that's used to neutralize an acid. So if you have a swimming pool or a spa, you have to keep the water checked to make sure that everything is balanced. It sort of like balancing the humors according to Greek medicine. You don't want the water to get too acidic. If it does, you can add a chemical that balances the water. It increases the alkalinity of the water, and that neutralizes the acid.

Well, the same thing happens in your stomach. If you have heartburn, it's sometimes caused by too much acid. So you might take an antacid like Rolaids or Tums. Well, an antacid is just a strong alkaline substance. It neutralizes the acid in the stomach.

The earliest remedies for an upset stomach can be found among the Sumerians around 3500 BC. That included remedies like milk, peppermint and baking soda. All of those substances have a high alkaline content. So again, they help to neutralize the stomach's natural acids. Now the Sumerians probably didn't understand the science behind that, they just knew that those substances worked. But thanks to the work of some of these early Arab scholars, we now know how alkaline substances work. And in fact, Jabir the Alchemist not only recognized the difference between acids and bases, he also studied how to use a specific amount of one substance to neutralize the other. Again, for our purposes, the important thing to take from all of this is that the word *alkaline* comes to us from Arabic, and it refers to a substance that has a very practical medical application today.

I should also note that we have another English word related to alchemy that probably came to us through Arabic. When mercury was blended with another metal, it was called an *amalgama* in Medieval Latin. And we still have that word today as *amalgam*. Today, it means any kind of mixture or combination. Most scholars trace the origins of that word back to an Arabic term *al-malgham*, which referred to a softening agent used for sores. Like a lot of these words, the ultimate root may have been borrowed from Greek.

But all of that means that words like *alchemy*, *chemistry*, *elixir*, *alkaline* and *amalgam* can all be traced back to Medieval alchemy, and all of those words either came from Arabic or came from an Arabic translation of an earlier Greek word.

In these words, we can see how these scholars were working with metals and other substances in an effort to figure out how they worked and to see if this research could improve their quality of life. And that was really the key. The Muslim scholars were more focused on the practical benefits of those old Greek texts.

They were especially interested in texts associated with astronomy. Islam required them to pray in the direction of Mecca at certain times each day. Since the magnetic compass hadn't been invented yet at this point in history, they had to come up with other ways to locate Mecca. And modern clocks didn't exist yet, so time-keeping was also an issue.

One way to determine direction and time was by studying the location and movement of the sun during the day and the stars at night. As it turned out, the Greeks and Persians had developed very detailed star tables, so the Muslim scholars proceeded to translate those into Arabic.

The study of the stars and planets was important as a means of navigation. So merchants and other navigators were also interested in this research. And Muslim doctors also consulted the stars. Like many ancient people, they consulted astrology when diagnosing illnesses and prescribing cures. They thought a person's birth sign could be used to diagnose and treat illnesses. Some of these ideas had also been picked up from the Greeks. So astrology and astronomy were important for a lot of different reasons, and it was the most widely practiced science in the Islamic world.

In the year 813, the Abassids got a new leader named al-Ma'mun. And shortly after he became caliph, he ordered the building of the first astronomical observatory in Baghdad. The primary reason for the observatory was to check all the measurements in those texts on astronomy had been translated into Arabic. The problem is that all of those old Greek and Persian texts had conflicting measurements. So the Muslim scholars needed to check the measurements and figure out which ones were accurate and which ones were off. Over a one-year period from 828 to 829, the scholars conducted an extensive study of the stars and planets, and they checked them against those older texts.

The observers didn't have access to telescopes, because that technology wasn't available yet. So they had to make their measurements with the naked eye.

Given all of this interest in astronomy and astrology, it probably isn't surprising that several English words related to those subjects come from Arabic. For example, the word *zenith* – meaning the highest point in the sky – and the word *nadir* – meaning the lowest point – both come to us from Arabic, and both words came in during the 1300s. And the name of the star *Betelgeuse* was also derived from an Arabic phrase.

Most scholars also think the word *almanac* came from Arabic. It came into English via Latin and French in 1300s, and it meant a 'book of tables of astronomical data.' And some people still use the Farmer's Almanac to predict the weather months in advance. This is really a type of astrology, and it shows how interconnected astrology and astronomy once were. After the scientific revolution, they became distinct disciplines, in much the same way that alchemy and chemistry became distinct.

I noted that the caliph named al-Ma'mun ordered the construction of the first astronomical observatory in Baghdad. Well, he did a lot more than that. He was really an essential figure in the overall evolution of Muslim scholarship and the growth of the House of Wisdom. One thing he did was to put his court physician (Hunayn ibn-Ishaq) in charge of the House of Wisdom. And that physician was another doctor from that medical monastery north of Baghdad.

Al-Ma'mun was fascinated by books, and he was really a key figure in the collection of manuscripts from other cultures. He sent his emissaries far and wide to collect scientific texts. When he defeated foreign rulers in battle, he sometimes forced them to make tribute payments in books rather than gold. It was really during his reign that the House of Wisdom became such an impressive place of learning and study. I should note that the actual building that contained the House of Wisdom no longer exists, so no one knows how big or grand it was. But it must have been impressive given the amount of scholarship that it produced.

One of the scholars who worked at the House of Wisdom was named al-Khwarizmi, and he may have been the most influential scholar of them all. He contributed to many different fields, but he is most famous for his contribution to mathematics.

Around the year 825, he composed a great work on arithmetic using Hindu numerals that had originated in India. Thanks to the contribution of al-Khwarizmi and others, those Hindu numerals replaced the native numbering system that the Arabs had been using. The Arabs had previously used letters for numerals. And as we know, the Romans did the same thing, and the Roman numerals were used throughout Western Europe. So for example, the Romans represented the number 1 with an I. The number 5 was V – which remember was just a different way of writing letter U at the time. 10 was X. 50 was L. 100 was C.

Now that was fine, but it wasn't easy to do math with those numbers – or letters. You couldn't line them up to do math the way we do with modern numerals. Today, we can line up a group of numbers, and we can add or subtract or multiply one column at a time. But Roman numerals didn't work that way. Like a lot of ancient numbering systems, there were no columns. There was just a random collection of letters. And the number of letters didn't necessarily reflect the inherent value of the number. As I noted, the Roman number 100 was represented by a single letter – C. But one number less – 99 – was represented by 4 letters – XCIX. So again, you couldn't really line them up to solve math problems.

But Hindu numerals worked on a completely different system. It was basically the same system we use today – because those Hindu numerals were the original version of modern numerals. And they were introduced to the Arab world, and ultimately to the Western world, thanks in large part to al-Khwarizmi's book. Since these numerals passed through the Arab world before they reached the West, they are generally known today as the Hindu-Arabic numerals. Some people just call them Arabic numerals, but their ultimate origin was in India.

I'll have much more to say about numbers in a future episode where I intend to discuss the development and evolution of numbers, and I'll look more closely at our modern words for numbers at that time. But for now, the important thing to know is that those Hindu numerals had one major

advantage over other numerals – like Roman numerals. That benefit was the fact that Hindu numerals put an emphasis on position and place value.

The position of each digit in the overall number told you something very specific. It wasn't random. So the number 5,432 tells you that you have 5 groups of a thousand – four groups of a hundred – three groups of 10 – and 2 groups of 1. And all of that is determined by the specific order and position of each individual digit. Because position is so important, we can line up those numbers, and we can add or subtract or multiply each column. It makes complicated math relatively easy. And it was a huge improvement on the systems that had been used previously.

Al-Khwarizmi described this system in his book called “The Book of al-Khwarizmi on Hindu Numbers.” It was later translated from Arabic into Latin. And the Latin version of the title was “Liber Algorismi de Numero Indorum.” And notice how al-Khwarizmi's name was translated in that title – as “Algorismi.” And throughout the text, the translator uses the phrase “Dixit algorismi” – literally “al-Khwarizmi says.” Well, that book was very influential, and that translation of al-Khwarizmi's name as “Algorismi” became very common and well-known. And Latin version of al-Khwarizmi's name led to the word *algorism* to refer to the use of those Hindu-Arabic numerals – as opposed to Roman numerals. In fact, that word entered English in the early 1200s, around the current point in our overall story of English. And *algorism* later produced the word *algorithm* to mean the specific way in which those numerals were organized to solve a math problem. So ultimately, *algorithm* is derived from the name al-Khwarizmi.

Al-Khwarizmi's text on numerals is also important for another reason. It didn't just use the traditional digits 1 through 9, it also used a zero. Think about that for a second. How do you write a zero with Roman numerals? Well, you don't. Because there was no zero. In fact, the number zero didn't start to become accepted as a standard number until around this time, and the writings of al-Khwarizmi helped to introduce that number to both the Arab world and to Western Europe.

That's also why the word *zero* is the only English word for a basic number that didn't come from Old English, or Latin or Greek. It came from Sanskrit – via Arabic. And it came in via Arabic thanks to al-Khwarizmi.

Now the history of zero is kind of complicated. The earlier Greeks had the ‘concept’ of zero – in the sense of a void or a number having a value of nothing, but they didn't have a specific numeral to represent that value. And the Babylonians had a symbol for a zero, but they only used it as a place holder. So they used it in the way we would use the zero today if we wanted to distinguish 15 from 105 or 1005. But they didn't really treat it as its own independent number in making calculations.

It was the Hindu scholars who took the concept of zero as a unique number and gave it a specific numeral to be used in making calculations. And al-Khwarizmi helped to introduce it to the West. And today we use that zero just like any other number.  $2+0$  is 2.  $2 \times 0$  is 0.  $2$  divided by 0 is 0. Those types of calculations weren't really possible before the zero was introduced. So zero was no longer just a place holder. It functioned as its own independent number.

I noted that the word *zero* came into English from Sanskrit – via Arabic. The original Sanskrit word meant a void – and it could also refer to an empty place like a desert. The word passed into Arabic meaning zero or nothing – and in Arabic the word was *sifr*. That Arabic word actually came into English twice. The first time was in the 1300s when it passed through Medieval Latin and came into English as *cipher*. Again, it meant zero, and we still have that word today – even though it’s a bit obscure. Over time, *cipher* came to refer to any of the Hindu-Arabic numerals. Now in the late Middle Ages, before these new numerals were commonly used in Europe, government agents would send coded messages with those numbers. Each number represented a specific letter. Of course, if these coded messages were intercepted, the other side tried to decode the message. So they had to figure out what each number – or cipher – represented. And that led to the word *decipher* to mean the process of decoding a secret message – or discovering the meaning behind something. So we still use that word *cipher* in that context.

Again, *cipher* was the first version of the Arabic word for zero to enter English. Then over the next few centuries, that word evolved within the Romance languages. First, it evolved within Italian, then the Italian version was borrowed into French, and then the French version was borrowed back into English in the early 1600s. And by the time it was borrowed into English for the second time, it was pronounced as ‘zero.’ And that gave us our modern word *zero*.

Again, the number zero was an innovation of the Hindu numbering system. And it allowed the Arab scholars to make sophisticated calculations. And al-Khwarizmi helped to introduce that number to the West.

About five years after his book on Hindu numerals, al-Khwarizmi wrote another book about mathematics. The full Arabic title is little too much for me, so I am going to let Elias pronounce it: “al-Kitab al-Mukhtasar fi Hisab al-Jabr wal-Muqabala.” Now that Arabic title translates as “The Compendium on Calculation by Restoration and Balancing.” The key is one particular part of that Arabic title – the term *aj-Jabr*. And in fact, that Arabic title was so long for people in the West, that it was usually referred to as simply *al-Jabr*. The term literally meant ‘the restoration.’ In Arabic, it referred to the setting of broken bones. So it referred to the process of re-uniting the two parts of a broken bone, thereby restoring it to its original state.

And why is that term *al-Jabr* – meaning ‘restoration’ – so important? Well, because it gave us the word *algebra*. By the 1500s, it had entered English as a specific term for a type of advanced math using letters to represent unknown numbers.

Now when al-Khwarizmi used that term *al-Jabr* – meaning ‘the restoration’ – he used it to refer to the restoration of balance in a mathematical equation. So if we have a simple equation like  $x - 1 = 4$ , al-Khwarizmi wrote that the first step was to restore the balance by getting rid of that negative. So you do that by adding 1 to each side. That leaves you with  $x = 5$ . And that gives you the answer for  $x$ . That was a type of restoration, which al-Khwarizmi likened to the setting of a broken bone to heal it. And thus, *al-Jabr* – meaning ‘bone-setting’ – became *algebra* for this type of mathematical problem solving. And the steps that al-Khwarizmi described were called the *algorithm* – again based on his name.

And notice that we once again see a connection to our theme of restoring health – taking something broken and making it whole again. So the word *algebra* has its origins in a term that referred to a type of healing.

And speaking of healing, by the late-800s, another major figure in Muslim scholarship had emerged. His name was al-Razi, and he is most famous for his contribution to medicine. By this point, it had been about a century since the Abassids had made contact with that medical monastery north of Baghdad, and similar institutions were starting to be established throughout the Arab world.

This was also a period during which a lot of charitable endowments were being set up in the Arab world as encouraged by Islamic law. And some of those endowments were being used to fund these new medical houses. I'll call them 'hospitals,' but we're still long way from what the modern concept of a hospital.

Al-Razi was a physician during this period, and he served as the chief physician of one of those new hospitals in Baghdad. But rather than simply using conventional medicines and treatments, al-Razi preferred to experiment. He was a proponent of trial-and-error – to see what worked and what didn't. He carried out one of the earliest known examples of a clinical trial using a control group. He selected two sets of patients who were all showing signs of meningitis. He treated one group with blood-letting, but not the second. Of course blood-letting wasn't very scientific by today's standards, but the idea of using two different groups and comparing the results of different treatments was revolutionary.

Al-Razi collected his observations in a series of detailed notes. His working files were so extensive that they were later compiled into a medical text after he died. It is still the largest Arabic medical textbook covering 23 volumes in modern printing.

It was later translated into Latin, and it became an essential textbook in Western universities as well. In fact, the origins of disciplines like gynecology and obstetrics can be traced back to this text. And it also contains some of the earliest writings about eye surgery.

Al-Razi also composed a separate text on smallpox and measles which is the oldest reliable account of those two illnesses.

Al-Razi died in the year 925. And by that point, there were several major cities in the Islamic world that had emerged as centers of learning and scholarship. They included Baghdad and Cairo in the east and Cordoba in modern-day Spain. And by the way, I'll just use the English pronunciation of Cordoba going forward.

This was also a period during which the Abbasid rulers were starting to lose control over their vast and extensive empire. It was difficult to govern such a large area. So local rulers started to become more powerful, and the Abbasid caliphate started to fracture. That allowed Cordoba to emerge as an independent caliphate in Spain.

The Cordoba caliphate was named after its capital city, Cordoba, in southern Spain. And it had emerged as one of the most glorious cities in the Arab world and in Europe. The second caliph of Cordoba was named Al-Hakam. And he was another avid book collector. He sent men to the Near East to obtain copies of all the books they could find. As those books were brought back to Cordoba, he needed a place to put them. So he built a great library there. Some accounts say that the library had more than 600,000 books. Modern scholars doubt that number and suspect that it was probably more like a few hundred or perhaps a few thousand. But that still would have made it larger than any library in Christian Europe at the time.

Around this time, a French monk and scholar named Gerbert d'Aurillac traveled to Cordoba. He was fascinated by Arab culture and the Arabic contribution to math and science. He was especially fascinated by the use of Hindu-Arabic numerals and the abacus, which had been largely forgotten in Christian Europe following the fall of the Roman Empire. He returned to France a few years later, and he is considered by many to be the first Christian scholar to carry Arabic science across the Pyrenees into Europe. Gerbert would be an interesting historical figure based on those contributions alone. But later in his life, he had another important accomplishment. In the year 999, he was selected as Pope, and he became Pope Sylvester II. So, ironically, the math and science of the Arab world was introduced to Christian Europe by a future pope.

And I say ironically, because with a century, the Catholic Church had launched the Crusades which led to over two centuries of conflict between Christendom and Islam.

In many respects, this conflict was underway before the Crusades were formally launched. Since the Muslim conquest of Spain, Christian forces from the north had been fighting to take back control of the peninsula. This was known as the 're-conquest' – or 'Reconquista' in Spanish. This ongoing effort lasted for more than seven centuries.

In the early 11<sup>th</sup> century, the Cordoba Caliphate fractured due to infighting, and it soon broke into several smaller states. That gave the Christian forces in the north the opportunity to chip away even more at Muslim control. By the year 1085, they had captured the city of Toledo in the center of Spain. The capture of Toledo was an important event because the conquerors were stunned by the massive libraries they found there. To their credit, the new Christian rulers understood the value and importance of what they had found. They didn't pillage or destroy the libraries as might have happened in other places at other times. Instead, they preserved the libraries – and set about translating all of those Arabic manuscripts into Latin. And those Latin translations allowed all of that acquired knowledge to pass to the new universities that were starting to pop up throughout Western Europe.

Medical texts were also translated. In fact, around this time, a man identified simply as "Master Herbert the Doctor" donated 26 medical texts to the Durham cathedral in northern England. The books included several that had recently been translated from Arabic into Latin.

And speaking of medical texts, this was also a period in which many new hospices were being constructed throughout Western Europe. In London alone, several of those new hospices were

founded in the 1100s. And those new facilities soon came to be known as *hospitals* using that term that originated with the Hospitallers in Jerusalem a few years earlier.

Now I referred to those new facilities as *hospices* because they were really modeled on that hospice established by the Hospitallers in Jerusalem. Much like that hospice run by the Hospitallers, the new facilities mainly provided comfort and aid to travelers. So there was still an emphasis on hospitality. But over time, these facilities took in more and more local people who needed regular care and shelter. And as medical knowledge grew, and as medical treatments became more effective, these facilities took in more and more sick people who couldn't get treatment elsewhere. And through this process, the word *hospital* finally acquired its modern sense as a specialized center for treating sick people.

So the foundation of the modern hospital lies in both the fascination with Muslim scholarship and the war against Muslim rule over the Holy Land. That fact illustrates the complicated relationship between the Christian world and the Muslim world in the 1100s and 1200s.

Next time, we'll continue our look at developments in the Muslim world. We'll see how that golden age of Islamic scholarship gave way to the Crusades. And we'll see how Richard the Lionheart played such an important role in the Third Crusade. And along the way, we'll see how those events shaped the English language.

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