

**THE HISTORY OF ENGLISH PODCAST
TRANSCRIPTS**

**EPISODE 5:
CENTUM, SATEM AND THE LETTER C**

Presented by Kevin W. Stroud

EPISODE 5: CENTUM, SATEM AND THE LETTER C

Welcome to the History of English Podcast – a podcast about the history of the English language and the people who contributed to that history. In the last episode, we looked at how Jacob Grimm and other early linguists discovered a very specific set of rules to identify the way in which ancient Indo-European words became Germanic words. That included a set of specific sound changes which also permit linguists to reconstruct large portions of the original ancient Indo-European language.

In this episode, I want to focus on one specific set of sound changes which early linguists used to classify the Indo-European languages. And I then want to digress a bit and explore this concept of sound changes a little bit further. As you will see, some of the very same sound shifts that were identified within the original Indo-European language are still reflected in certain aspects of Modern English. And specifically, we can see this same type of sound shift in the modern English letter C which is used to identify both the ‘k’ sound and the ‘s’ sound. Have you ever wondered why we have a letter C at all? Why not just a K or an S? I will answer that question in this episode. This is the story of the Centum vs the Satem languages and the history of the letter C.

The letter C is one of the more challenging aspects of English for small children learning to read and write English - and for that matter some adult speakers of other languages who are trying to learn English. One of the first English words that children learn to spell is *cat*. And very early on, they associate the letter C with the ‘k’ sound. And they continue that association as they learn words like *car*, *cry*, *cup*, *cow* and many, many other words. But they also learn words like *city* and *face*. And especially if they are girls, they learn to love *Cinderella*. So they also learn to associate the letter C with the ‘s’ sound. And some words like *circle* and *circus* have two Cs – one that represents the ‘s’ sound and one that represents the ‘k’ sound.

So sometimes children ask what may seem like a pretty logical question, “Why do we even have a letter C? Why not just use a letter K or a letter S?” Well, if we were inventing the English language today – or at least if we were inventing the alphabet today – that may make sense. But of course, we’re dealing with a language that has been around a long time. And an alphabet that has been around even longer. So sometimes we’re stuck with these peculiar rules which are tied to the history of the language and the history of the alphabet.

One quick note before I go any further into this story. As I have noted before, this is ultimately a history podcast – not a podcast about the proper use of English or a podcast about linguistics. But in this episode, I am going to talk about one particular aspect of linguistics – a specific sound change called ‘assibilation.’ I generally try to avoid technical issues related to linguistics, but I am going to be discussing that particular linguistic concept here. I will try to do it a way that it doesn’t begin to sound like a course on linguistics. And if you stick with me through this episode, I think you will discover a lot about Modern English and specifically the reason why certain words in English are spelled and pronounced the way they are.

The story begins where we left off in the last episode. With the comparison of Indo-European languages and the attempt to reconstruct the original Indo-European language. Very early on, linguists noted a trend. And the trend concerned the word for *hundred*. You may recall from the last episode that the Indo-European word for *hundred* was reconstructed as **k'mtom* from cognates found in eight different branches of the Indo-European family tree.

After the original Indo-European word for *hundred* was reconstructed, linguists then looked at the next stage in the evolution of the word, which was the earliest versions of the word in the separate Indo-European languages. In other words, they looked at the earliest version of the word in Sanskrit, Persian, Latin, etc. And at this point, they noticed a very distinct split. The word had changed very early on such that there was a general split in the way the first consonant was pronounced. Some of the languages used a hard 'k' as the first consonant of the word just like the original Indo-European word. But other languages used an 's' sound for the first consonant. This distinction is best represented by two of the oldest Indo-European languages we have for reference. In Latin, the word for *hundred* was *centum* – spelled C-E-N-T-U-M. Keep in mind that the C was always pronounced as a 'k' in Latin. In Sanskrit, the word was *satem* – spelled S-A-T-E-M.

So these early linguists looked at the various words for *hundred* across all the Indo-European languages. And they noted that all of the Indo-European languages in which the word for *hundred* began with an 's' – like *satem* in Sanskrit – were located in the eastern part of the Indo-European-speaking world. This included Eastern European languages like Baltic and Slavic, Armenian, and Albanian, as well as the Indo-Iranian languages in Asia like Persian and Sanskrit.

These early linguists then looked at all of the Indo-European languages in which the word for *hundred* began with a 'k' sound – like *centum* in Latin. And not surprisingly, all of those languages were spoken in the west. These included Latin (obviously), Greek, Celtic and the Germanic languages. In other words, the languages of Central and Western Europe.

Now if you are saying, "Hey wait, the English word *hundred* begins with an 'h' sound, not a 'k' sound," remember back to the last podcast episode when we talked about Grimm's law. This was actually one of the examples I gave to illustrate a specific sound shift which Grimm observed. There was a later shift from the 'k' sound to the 'h' sound in the Germanic languages. So the Germanic languages are actually classified as Centum languages because very early on there was a 'k' pronunciation, but the 'k' shifted to an 'h' at the beginning of the Germanic period.

So let's stop and consider all of this for a moment. To the east, all of the Indo-European languages have certain words – like the word for *hundred* – that begin with an 's' sound. And to the west, all of the Indo-European languages have those words – like the word for *hundred* – but there they consistently begin with a 'k' sound like the original Indo-European word did.

Based upon this division, linguists concluded that there must have been a very early split among the original Indo-Europeans. Soon after this initial split or division occurred, one group evolved a sound shift in which the original 'k' sound in certain words – like the word for 'hundred' – became an 's' sound. This process is called 'assibilation' by linguists. It is also sometimes called

‘palatalization.’ Now this is not a podcast about linguistics. But let’s explore the technical aspects of this for a second.

‘Assibilation’ basically refers to a shift from one sound to a sibilant, which is a hissing or hushing sound like /s/, /z/, /j/, /ch/, or /sh/. This actually happens quite often as we will see. One quick example in English is the word ‘assibilation’ itself, or for that matter, most words that end in ‘T-I-O-N,’ but are pronounced /shun/ like ‘revolution’ or ‘abolition.’ Most of these words come from Latin where the ending was originally ‘T-I-O’ and was pronounced /tee-o/. But as these words found their way into French and eventually to English, they assibilated to the ‘shun’ pronunciation we have today. And that is what linguists concluded must have happened when this initial division of Indo-European speakers occurred. They also concluded that since this division broke down very clearly from a geographic perspective with the ‘S’-speaking Satem languages in the East and ‘K’-speaking Centum languages in the west, then we must be looking at a general migration pattern which occurred very early on. The Satem speakers must have separated from the original Indo-European speakers and traveled eastward carrying their Satem dialect with them.

This theory was later put to the test in the early twentieth century when the Hittite language in modern-day Turkey was identified as an Indo-European language and the Tocharian language in northwestern China was discovered. Based on some very technical aspects of the Hittite language in ancient Turkey, which dates all the way back to the Old Testament of the Bible, it was concluded that Hittite did not really fit neatly into either the Centum or the Satem group. Generally today it is placed with the Centum group, but the modern view is that the first speakers of the ancient Anatolian languages, which included Hittite, probably broke away from the original Indo-Europeans before the Centum-Satem split occurred. So these ancient ancestors of the Hittites in Turkey broke away first, and then sometime later the early ancestors of the Satem-speakers broke away and began their migrations. And there is other evidence to support this theory. As we will see, Hittite is considered the oldest attested Indo-European language.

The other discovery – the Tocharian language in northwestern China – also posed some questions because it was by far the easternmost discovered Indo-European language, being located in China itself, but it was not a Satem language like all the other eastern Indo-European languages. It was a Centum language like the western languages, including the languages of western Europe. This discovery surprised linguists and cast doubts on the validity of the traditional Centum-Satem distinction. But modern linguists have accounted for this discrepancy by concluding the early ancestors of the Tocharian speakers separated from the either the initial Indo-European people before the Centum/Satem split occurred, or perhaps from the Centum group after the split with the Satem speakers occurred. They believe this group of Centum speakers then traveled eastward separately from the Satem-speaking tribes. The best evidence of this theory is based upon the location where the Tocharian language was discovered. The area where the language was spoken in northwestern China lies along the famous Silk Road which was the traditional East-West trading route linking East Asia, Central Asia, the Middle East and Europe. Linguists believe that the early ancestors of the Tocharians traveled eastward more or less along the trading routes that later evolved into the Silk Road and eventually found themselves in the territory where relics of the language were eventually discovered in the twentieth century.

So at this point in the podcast, there are two things you should know. First, the Centum-Satem Division – the fact that many linguists still make a very basic division of the Indo-European languages into two separate groups based upon the way the word *hundred* was originally pronounced in those languages. And this split is believed to be based upon an early split within the original Indo-European-speaking tribes.

Second, the assibilation of the ‘k’ sound – the fact that the ‘k’ sound was observed shifting to an ‘s’ sound within the early Indo-European languages. Again, this process was called ‘assibilation.’ And this change is separate from the change which Jacob Grimm observed within the Germanic languages where the ‘k’ sound shifted to an ‘h’ sound.

Now let’s turn our attention to the Modern English letter C. In part, this is a story about the letter C and why it sometimes acts as ‘k’ and sometimes acts as an ‘s’. But this is also a story about sound shifts and how common they are and how regular they can be. Specifically, this is a story about one particular sound shift - the assibilation which we have already discussed. This shifting of sounds to an /s/, /z/, /j/, /ch/, /sh/ etc. This has happened quite often throughout history. And remember that English as much as any other language has borrowed heavily from other languages. We have words in our everyday speech that are brand new words – words like *Google*, *twitter*, *bromance*, and *podcast*. And we have words from the twentieth century, nineteenth century, eighteenth century, all the way back to the Middle Ages, the Dark Ages, and the period before the Dark Ages. We even have words that we use everyday that date back to the original Indo-European speakers over 4,000 years ago. All of these words are mixed together in our everyday speech. And many of these words have undergone tremendous changes to get to the versions we have today. So this story of the letter C will help you to see how sound changes throughout history affect the sometimes quirky rules we have in Modern English. So letter C.

As you know, when the letter C just appears as a C, it has two possible sounds – the ‘k’ sound and the ‘s’ sound. At this point you might have noticed a little connection. Yes, these are the same two sounds that we just talked about in the Centum-Satem division – the ‘k’ and the ‘s’ sounds. So you may be guessing that there is some assibilation going on somewhere, and you would be correct.

Let’s go back in time to the origin of Letter C. And it really starts with the Greeks. As you may recall from the last episode, the Greeks borrowed the alphabet from the Phoenicians who lived in and around modern-day Lebanon and Syria very early in the first millennium BC. And it is the same basic alphabet that we have today, but it has undergone a great deal of change through the centuries. The third letter of the Greek alphabet was ‘gamma.’ You’ve probably heard the phrase ‘alpha, beta, gamma.’ What you might not know is that gamma represented the /g/ sound as in the name ‘gamma.’ So the initial Greek phonemes in the Greek alphabet were /a/, /b/, /g/.

The Greeks represented the third letter gamma with a symbol that looked like an upside down capital L (Γ). Imagine a square and remove the bottom and the right side of the square. Just leave the top and left side, and you have an upside down L, which was the way the Greeks wrote gamma – the 3rd letter which was pronounced /g/.

Now shift forward a few centuries to the Romans. By the time the Romans adopted the Greek alphabet (indirectly from the Etruscans as you may recall), the sound of the third letter had eventually shifted from the 'g' sound to a 'k' sound. If you pronounce both of these sounds, you can see that they are both in the back of the throat and are very similar. Some linguists think that this sound-change occurred because the Etruscans, who were the intermediaries here, they took the alphabet from the Greeks, and the Romans took it from them. The Etruscans apparently did not distinguish the 'k' sound and the 'g' sound in their language. So the precise nature of gamma became confused during this period. And here is the key. By the time the Romans took the alphabet from those same Etruscans, they took the third letter with a /k/ pronunciation.

So the Romans inherited this letter as a 'K'-sounding letter. Where the original Greeks often wrote their letters with chisels on stone or wood, and thus had very angular letters, the Romans by this point were routinely writing with ink, so they began to change the shape of many of the letters to the more rounded forms we have today. And they changed the shape from the upside down letter 'L' to the curvy letter C that we have today. So the Romans have modern letter C with a 'k' sound exclusively. It was not used for an 's' sound at this point. The Romans used the letter S for the 's' sound.

But what happened to the 'g' sound. Since gamma became letter C with a 'k' sound, that meant there was no letter for the 'g' sound anymore. So the Romans created a new letter to represent the 'g' sound which became our letter G. And that is why the capital letter G resembles a capital letter C. They made the letter G by taking the letter C and simply adding a little line at the end back towards the center to create a 'G'.

So the Romans had letter C which represented the /k/ sound. But the Romans also had inherited the letter K with a 'k' sound from the original alphabet, but for whatever reason they rarely used it. They preferred to use C for the 'k' sound. Letter K was largely relegated to the dustbin. And that's why you rarely see the letter K in Latin words.

The next step in the story is the adoption of the Roman alphabet by the Germanic tribes. Remember that Jacob Grimm said that a lot of the 'k' sounds in the original Indo-European language and shifted to an 'h' sound in Germanic, like the English word *hundred*. But also remember that not all 'k' sounds shifted to an 'h' sound. Some of the 'k' sounds shifted to an 'h' and some kept their original 'k' sound. So therefore, we still have 'k' sounds in the Germanic languages.

Now initially, the Germanic tribes didn't bother with the Roman alphabet. Most of the early Germanic tribes didn't have writing at all. And when some of the tribes started to develop a system of writing, they used a runic alphabet which was a collection of runic symbols, which many people think may have been indirectly linked to the Etruscans as well. But the Germanic tribes – including the Anglo-Saxons – eventually adopted the Roman alphabet. This reflected the power, especially the economic power, of the Romans. It also reflects the growing power of the Church in Europe which used Latin as the official language of the Church.

When the Anglo-Saxons adopted the Roman alphabet into Old English, the letter C was used exclusively for the ‘k’ sound. Remember the Romans did have a letter K which they rarely used, so the Anglo-Saxons didn’t even bother with it. They just used the letter C. For example, the Old English word for ‘king’ was *cyning*.

So if we take a snapshot at this point in the late Roman period and in the period known as the Dark Ages or the Early Middle Ages, the ‘k’ sound was represented almost exclusively by the letter C. The Anglo-Saxons used it exclusively and the Romans used it almost exclusively.

But after the fall of the Roman Empire, during this period in which the early Germanic kingdoms began to emerge and the Latin language began to fracture into various regional dialects, a change started to occur. And it didn’t just occur with the Latin languages or the Germanic languages, it occurred throughout all of these languages.

And it is at this point that we can introduce our friend ‘assibilation.’ The same sound change that occurred within the original Indo-European language to create the distinction between the Centum and Satem languages occurred again at this point. And, as I said, it occurred within a variety of languages in Western Europe, including Old English, very early French, Spanish and Italian. And these sound changes created certain confusions in the way words were pronounced and spelled which is reflected in modern English.

And here is the key. The assibilation didn’t just happen randomly. It happened in certain very specific ways in all of these languages. And in order to understand what happened here we have to make a distinction between the various vowels. Now as you probably learned as a child, we have 5 primary vowels – A, E, I, O and U. But linguists divide these vowels into two groups – the back vowels and the front vowels. This distinction is actually very important to our story. The back vowels are the vowels which are pronounced in the back of the mouth – A, O and U. The front vowels are those pronounced in the front of the mouth – E and I. And here is why that distinction is so important.

The ‘k’ sound is pronounced in the back of the mouth – like the back vowels A, O and U. So when the ‘k’ sound preceded one of those back vowels. It stayed the same. This was true throughout all of those languages. But when the ‘k’ sound came before a front vowel – pronounced in the front of the mouth like E and I – the sound tended to shift to the front of the mouth and it tended to produce a hissing or hushing sound. In other words the sound assibilated. But the exact way it assibilated – in other words the precise assibilated sound that was produced – varied from language to language.

So let’s start with the ‘k’ sound before the back vowels A, O and U. As I said, in these cases, the ‘k’ sound remained just as it was. And we see that in Modern English words like *cat*, *cot* and *cut* – all are ‘C’ words where the ‘k’ sound was retained before the three back vowels. In fact, as a general rule in modern English, when the ‘K’ sound appears before an A, O or U in any words which were inherited from this period, the word is still spelled with its original C and it retains its original ‘k’ sound. This is the general rule which goes all the way back to the Romans.

But notice what happens in modern English when the ‘k’ sound appears before the front vowels E and I. When letter C precedes an E we get words like *cell*, *center*, *certain*, *certify*, *central* and *cease*. And when letter C precedes the other front vowel ‘I’ we get words like *circle*, *city*, *circus*, *civil* and so on. We have the ‘s’ sound. So over time people tended to move that ‘k’ sound from the throat to the front of the mouth when it appears before the front vowels E and I that are also pronounced more towards the front of the mouth. That’s assibilation and that is what was happening to many of these western European languages.

But let’s take a look at how this was happening in the various languages.

Let’s start with the Latin languages:

In Italian, before the E and I, the ‘k’ sound shifted to an ‘ch’ sound. Remember that the ‘ch’ sound is a sibilant like the ‘s’ sound. So we have that Latin word *centum* meaning hundred. That word became C-E-N-T-O in Italian, but it is pronounced /chen-toe/ with a ‘ch’ sound. Also think about the word C-I-A-O in Italian, which is pronounced as /chow/. So the ‘k’ sound became a ‘ch’ sound before the E and I in many Italian words.

Now let’s look at Spanish. Again we see this process of assibilation. Except in Spanish, the ‘k’ sound became an ‘s’ sound before the E and the I. So the Latin word *centum* evolved within Spanish and became C-I-E-N-T-O, which is pronounced as /see-en-toe/ with the ‘s’ sound. Except in Castilian Spanish where the sound shifted to more of a ‘th’ sound, which is another sibilant. So the pronunciation in Castilian Spanish is more like /thee-en-toe/.

Old French also experienced this change, and it was basically the same as Spanish. Before an E or an I, the ‘k’ sound shifted to an ‘s’ sound. So Latin *centum* becomes C-E-N-T in French and is pronounced /sont/. And remember, this was the same sound shift from /k/ to /s/ that distinguishes the Centum and Satem languages. So the same sound shift that had occurred within some of those early Indo-European tribes happened here as well.

For another example, let’s look at a word like *cancer* which can refer to either a malignant tumor or a crab (as in the horoscope sign). The link between those two things comes from the crab-like appearance of swollen veins extending from the tumor. In Latin, the word was pronounced /kan-ker/. Remember letter C was always pronounced as a ‘k’ in Latin. And we still have that version of the word in the Modern English word *canker* – as in *canker sore*. When the Latin word *canker* later evolved into French, it was pronounced /kan-ser/ in keeping with the French assibilation. The C before the A stayed the same with a /k/ pronunciation. But the C before the E shifted to an ‘s’ sound. So /ker/ became /ser/. So within that word we can see the assibilation at work. Of course, both versions of the word passed into Modern English.

And here is the real importance of this French assibilation. After the Norman Conquest of England in 1066, which was after these sound changes had been completed, we get the forced introduction of many French words. And as many of those words came into English, they came in with the French ‘s’ sound in place of the ‘k’ sound before the E and the I. So in the case of the French word for ‘hundred’ – C-E-N-T pronounced /sont/ – it becomes Anglicized to *cent* and

appears in a variety of words like *cent* (meaning 1/100 of a dollar), *century* (meaning 100 years), *centennial* (meaning 100th anniversary), *centipede* (a bug with supposedly 100 legs), and many other words.

But what about Old English itself. Well it experienced its own process of assibilation. Among the Anglo-Saxons, the ‘k’ sound, which remember was represented by the letter C, became the ‘ch’ sound before an E or I. This is actually very similar to the sound change we saw before in Italian which produced words like *ciento* and *ciao*.

So in Old English, we have the word ‘R-I-C-E’ which meant ‘great or wealthy.’ But it was not pronounced like ‘rice’ in Modern English. Instead, the ‘ch’ sound had emerged in this context and the word was pronounced /ree-cheh/. And this is actually the original version of the Modern English word *rich*. During the Middle Ages when the spelling became more standardized, the spelling of the word was changed to ‘R-I-C-H’ to reflect the pronunciation of the word. But more on this later.

So to explore this a little further. Let’s compare the Anglo-Saxon language with the Old Saxon language of their cousins which was still spoken in continental Europe at the time.

Now remember when the Anglo-Saxons made the migration to Britain during the fifth century, it appears that most of the Angles in continental Europe made this migration because there is very little record of Angles afterwards. But not all Saxons made the migration. Many Saxons remained in continental Europe. And so we actually begin to see a distinct difference in dialects. We have the ‘Anglo-Saxon’ dialect which appears in Britain. But amongst the Saxons who remained in continental Europe, there was a separate dialect which emerged which is known as ‘Old Saxon.’

So I want to compare a couple of words in the Old English – or ‘Anglo-Saxon’ dialect – and the ‘Old Saxon’ dialect. And we can see how this sound change occurred in the Anglo-Saxon dialect, but it did not occur within the Saxon dialect which remained in continental Europe.

So in the case of Old English, the word I just gave you was originally spelled ‘R-I-C-E.’ It’s the original version of the word *rich*. And that word in Old Saxon, which remember does not have the Anglo-Saxon sound shift, was spelled ‘R-I-K-I’ and was pronounced /ree-kee/ with a ‘k’ sound. But remember in Old English, it was pronounced /ree-cheh/. So it had experienced that shift from the ‘k’ sound to the ‘ch’ sound in Old English. And as I said, that is the original version of the modern word *rich*.

A similar word – at least in spelling – was a word which was spelled ‘C-I-R-I-C-E.’ So basically that same word we just looked at, but put ‘C-I’ at the beginning – so ‘C-I-R-I-C-E.’ In Old Saxon, that word was spelled ‘K-I-R-I-K-A’ and was pronounced /keh-ree-kah/, which again gives both of those consonants the ‘k’ sound. But in Old English, we have the assibilation. So that word becomes *cirice* – pronounced /cheh-ree-cheh/. And *cirice* is the original version of the modern word *church*. Again, over time that word evolved from Old English into Modern English as *church*, but we see the original version there with that assibilation.

We also have an Old English Anglo-Saxon word spelled ‘C-I-L-D.’ And the pronunciation of that word eventually evolved from its original /kild/ to /child/. And that is the original spelling of the modern word *child*. During later Middle English, and then into Modern English, the spelling of the word ‘C-I-L-D’ is changed to ‘C-H-I-L-D’ to reflect the change in pronunciation.

So even though the ‘k’ sound generally shifted to a ‘ch’ sound in Old English before the E and the I, it didn’t always make this change. And this is actually very important. Sometimes the ‘k’ sound was retained.

So in Old English we have the word ‘C-Y-N-I-N-G.’ Now the letter Y has essentially the same characteristics here as the letter I. But we did not get a sound shift there. It did not become /chee-ning/. It remained /kee-ning/. And *cyning* is the original version of the modern word *king*. And so you still see that original spelling – ‘C-Y-N-I-N-G’ – in old texts. But again it retained its ‘k’ sound. It did not shift to a ‘ch.’

Also, the original Old English version of the word *keen* was originally spelled ‘C-E-N-E’ in Old English. Again, for some reason, it retained its original ‘k’ sound.

So now let’s flash forward to the Middle Ages and Middle English after England was invaded by the Norman French.

If we look at Middle English, and specifically this issue of the C before the E and I, what we see is a hodge-podge of the rules which we just talked about.

In a lot of the native Old English words, the C was being pronounced with a ‘ch’ sound to reflect the assibilation which Old English had experienced. So a word like ‘R-I-C-E’ was being pronounced as /ree-cheh/. But sometimes the C was still being pronounced as a ‘k’ sound. So that word ‘C-Y-N-I-N-G’ – the original version of the word *king* – was still being pronounced as /kee-ning/ with the original ‘k’ sound. So in some cases that C had shifted to a ‘ch’ sound, and in a few other cases it had retained its original ‘k’ sound. But then there were all of those words which had come in through French. where the C was now pronounced as an ‘s’ sound under the French assibilation – words like ‘C-E-N-T’ which were being pronounced as /sont/ and eventually Anglicized to *cent*.

So at that point, there were really three different pronunciations for the C. It could have the original ‘k’ sound. It could have the Old English sound shift and be a ‘ch’ sound. Or it could have the French sound shift and be an ‘s’ sound.

Now in everyday speech, this wasn’t really a problem. Words were just pronounced as words. But for those increasing number of people who were literate, and the scribes who had to write down and read these words, it was problem. If you came across an unfamiliar word where a C preceded an E or an I, how did you pronounce it? Was it a ‘k’ sound, a ‘ch’ sound or an ‘s’ sound? If you didn’t know the origin of the word – and very few people did – you had to guess at it.

So it was during this period that scribes began to adopt certain rules to deal with these issues. And they are basically the rules we have today.

Remember that at this point in history, a C before a back vowel (A, O, U) didn't change. It remained a 'k' sound just as it had always been, and just as it remains today. So we see that in words like *cat, cot, cut, carry, car, cap*, and on and on. So whenever we have a C before an A, O or U, we are looking at the oldest use of the C with its original 'k' sound – the same way the Romans and the original Anglo-Saxons used it. So in those cases, the letter C was retained because in this context – before the A, O and U – all of the languages had retained the original 'k' pronunciation. So it was clear how the C was pronounced in those cases. The C was left in place, and it continued to represent the 'k' sound.

But what about the C before the front vowels E and I? This is where it became much more complicated in Middle English, because there were three different possible pronunciations – /ch/, /k/ or /s/.

Middle English attempted to sort out this hodge-podge. And they did it by adopting certain spelling rules. So let's look at those rules.

First, for many of the Old English words which had developed the 'ch' pronunciation, Middle English scribes assigned the letter combination 'C-H' for the sound. So 'R-I-C-E' (pronounced /ree-cheh/) came to be spelled 'R-I-C-H,' and thus our Modern English word *rich*. The word 'C-I-R-I-C-E' (pronounced /cheh-ree-cheh/) was reinvented with the letter combination 'C-H' and eventually became our modern word *church*. And the word 'C-I-L-D' became 'C-H-I-L-D' to reflect its pronunciation, and thus became our modern English word *child*. So the scribes were reflecting the sound change which had occurred in these Old English words where the 'k' sound had evolved into the 'ch' sound. And they did it by simply spelling the words phonetically using the letters C-H to reflect that 'ch' sound.

So what about those words where the C had either the 'k' sound or the 's' sound. Well, to reflect the way those words were pronounced, the Middle English scribes adopted the French rules which the French scribes had been using to deal the same issue in France. This also reflects the overall power and influence of French at the time.

So since the French were pronouncing the C as an 's' sound before an E or an I, the Middle English scribes went along with that rule and retained the C where it was being pronounced as an S. So *cent* retains its French spelling – 'C-E-N-T.' And the vast hoard of French words which contained the letter C before an E or an I were brought into English, and English retained the letter C to reflect this French pronunciation of the 's' sound. And this is still the default pronunciation rule for C in Modern English. A C before an E or an I is generally pronounced as an 's.'

But what about those words where Old English had retained the 'k' sound before an E or an I. Remember that a word like *cyning* – the original version of the word *king* – was spelled C-Y-N-I-N-G. Well, remember Old English only used a letter C. They didn't have the letter K in Old

English. And the standard French rules of pronunciation would suggest that if you put the C at the beginning of that word – C-Y-N-I-N-G – it should be pronounced as an ‘s’, but it wasn’t. I mean England was ruled by a *cyning*, not a /see-ning/ or a /chee-ning/. It is at this point that the Middle English scribes resurrected the largely forgotten letter K from the dustbin.

Remember that the K had not been used Old English and was rarely used by the Romans. But the French had been using it. In fact, the French had to deal with their own assibilation issues. When the ‘k’ sound switched to an ‘s’ sound in French before the front vowels, the French had to find a way to distinguish those words from the words where the ‘k’ sound was being retained. So they began using the letter K to indicate the ‘k’ sound before those letters.

So the French-influenced scribes did the same thing in Middle English. They assigned the letter K in instances where a C retained its original ‘k’ sound before the E or the I. So Old English ‘C-Y-N-I-N-G’ became ‘K-I-N-G’ with a brand new K at the beginning. Remember the K was inserted to eliminate any confusion as to the proper pronunciation. So today in Modern English when the ‘k’ sound appears before an E or an I, we still typically use the letter K to make that clear. So think about words like *kite*, *king*, *kettle*, *keg*. All of these words have a K at the beginning instead of a C. And the reason it has that K is to make it clear to the reader that those words are pronounced with a ‘k’ sound, whereas if a C was inserted there, the tendency would be to pronounce it with an ‘s’ sound.

It should be noted that K is also sometimes used before the other vowels – A, O and U, but this usually represents words that have been borrowed into English from other languages, especially Scandinavian languages. Sometimes also words that come from other sources. Think of the word *kangaroo* which comes from Australian aboriginal languages.

So there you have it, all you need to know about the letter C and assibilation. Hopefully, you find that interesting. But even if you don’t, the real point of this discussion was to illustrate how common sound changes are, and how common certain sound changes are among various languages. These sound changes often reflect mechanical aspects of speech that are a product of the human mouth and vocal chords, and they’re not necessarily unique to any particular language. Again, they’re just a product of our human biology.

In our next episode, we will turn our attention back to the original Indo-European language. To this point, we have discussed how the original Indo-European language was at least partially reconstructed. In the next episode, we are going to look at the reconstructed language itself. And based upon those reconstructed words, we will try to figure out who those original Indo-Europeans were. Today, linguists are reasonably certain that they know where and when these people lived. And based upon the archaeological evidence, we can learn even more about them. And from there, we look at how those people spread around the world, and specifically how they spread into western Europe and led to the eventual creation of the Greek, Latin, Celtic and Germanic languages – including of course English.

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