

**THE HISTORY OF ENGLISH PODCAST
TRANSCRIPTS**

EPISODE 181: HEAVEN AND EARTH

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Welcome to the History of English Podcast – a podcast about the history of the English language. This is Episode 181: Heaven and Earth. This time, as we continue the chronological story of English, we’re going to look at two important historical events which shaped the world and the English language in the early 1600s. The first is the completion of the King James Version of the Bible, also known as the Authorized Version. We’ll look at how that important work was composed and how it influenced the development of English. The other major development was the invention of the telescope and the realization that the view of the universe that had been generally accepted for nearly two thousand years was wrong. This event marked the beginning of, or at least laid the foundation for, the scientific revolution. Though these two developments were sometimes in conflict with each other, they occurred simultaneously. And this time, we’ll see how they shaped the language we speak today.

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

Last time, we looked at the first permanent English settlement in North America and the early British settlement in northern Ireland. As we saw, the English language was on the move in the early 1600s as English speakers started to migrate to new areas. Well, this time, I want to pick up where we left off in that episode – and conclude our look at the first decade of the 1600s.

Now modern historians tend to classify the early 1600s as the ‘early modern’ era, but in many respects, it was still more like the Middle Ages than the modern world we know today. And I don’t just mean in terms of the lack of modern technologies. I mean the overall world view was still very reminiscent of the Middle Ages. It was a time when almost everyone was ‘God-fearing’ – literally ‘God-fearing.’ They feared divine retribution and punishment, and they believed that most disasters were a punishment from God. Plague, drought, famine and flooding were thought to be caused by mankind’s wickedness and sin. Some of these ideas are still preserved in our language – even in our formal, legal language. A natural disaster that disrupts a contract is still sometimes called ‘an act of God.’ By the way, that term ‘act of God’ is first recorded in English around the current point in our overall story of English in the early 1600s. Again, it was originally a legal term, and still survives in that context.

Natural disasters were accepted on earth because earth was the domain of humans, and it was thought that humans were prone to sin and temptation and un-Godly behavior. So earth could be a very dangerous and hostile place. But while the earth was imperfect, the heavens above it were the opposite; they were perfect in every way. Earth was the accepted center of the universe, and the planets and stars circled around it. That included the Sun as well. Everything moved around the Earth. And since the heavens were perfect, they were unchanging – always existing in a divine state. And this actually provides the connection between the two meanings of the word *heaven*. It’s an Old English word that originally referred to the sky, a sense that still exists when we refer to ‘the heavens’ above us. But since the sky is the realm of God, the word *heaven* also acquired a separate divine sense.

The ancient Hebrew religion and later Islamic religion believed in seven different heavens or seven levels within heaven, with the seventh being the most exalted of all. This led later English speakers to refer to a state of ultimate bliss as ‘seventh heaven,’ as in “He was in seventh heaven.”

The idea that the heavens were perfect and unchanging was reflected in the everyday observation of the sky and the every ‘night’ observation of the sky. The Sun, the Moon, the stars and the five planets that people could see with the naked eye moved through the sky each day and night in a regular pattern. Other than those regular movements, nothing really changed. Stars didn’t come and go. The Sun and Moon didn’t refuse to move from time to time. Those celestial objects were always there, and their movements were regular and permanent.

In fact, since the time of the ancient Greeks, it was accepted that the Sun, the Moon, and each of the five known planets traveled along on their own separate spheres which were invisible from Earth. And all of the distant stars occupied their own separate sphere which moved around the Earth – so that all of those stars moved together as one throughout the night.

And since all of those celestial objects moved in a circle, it was thought that circular motion was the natural motion of the heavens. But like everything else, the rules were different on Earth. On Earth, natural motion was in a straight line. After all, if you dropped something, or if an object fell, it traveled straight down to the ground. In other words, Earth wasn’t part of the heavens, and it didn’t operate by the same rules as the heavens.

These ideas were based on common-sense observations. They had been around for thousands of years, the many of these ideas had been adopted by religious authorities. This cosmological view was reflected in certain passages of the Bible and it was the accepted view of the Catholic Church. To question it was to question the Church itself.

Now as I noted, people noticed that the stars moved across the sky at night, but they all moved together. They never changed their position relative to each other. But the planets moved separately from the stars. Each planet moved across the sky from night to night. Sometimes people noticed that a natural disaster or other tragic event occurred while a particular planet was in or near a particular constellation. So maybe there was a flood while Jupiter was near the constellation of Taurus. Well, they knew that Jupiter would continue to move across the sky and would eventually find its way back to the same constellation. The idea started to take root that when that planet reappeared at that same location in the sky, something bad would happen again. It was the idea that the movement of the planets and stars provided clues about the good events or bad events that were to come. Of course, this came to be known as astrology, and it was considered a completely legitimate and essential area of study all of the way up to the current point in our story in the early 1600s. Almost every major ruler had one or more court astrologers who observed the alignment of the planets and the stars to help guide the making of policy. There was no effective distinction between astrology and astronomy at the time. But as we’ll see, that split started occur around this point in our story.

Astrology was such an important part of people's lives for so many centuries that the concepts associated with astrology became an integral part of their languages, and those concepts are still reflected in the words we use today.

We find it in the word *disaster*. The '-aster' part of *disaster* means 'star.' It's related to the 'astro-' part of *astrology* and *astronomy*. A 'dis-aster' was an event that was literally 'ill-starred' or due to a bad alignment of the planets and stars.

The Latin word *sidus* referred to a star or constellation. If you observed or studied the stars at night, you were outside 'with' them. If you added the Latin prefix *con-* meaning 'with' to the word *sidus* meaning 'stars,' then you were 'con-sidus,' or 'with the stars.' Today, we know that word as *consider*. If you study or contemplate the stars in astrology, you are 'considering' their impact on world around you.

The word *desire* has the same root meaning 'star or constellation.' It combines the prefix *de-* meaning 'from' with that root word *sidus*. Thus, *desire* is literally 'from the stars.' If you hoped that you would receive good fortune 'from the stars,' then you had a 'desire' for something good.

The word *influence* is also derived from astrology. It's related to the word *fluid*. It was thought that the stars had certain powers that flowed down on Earth, and thus, they 'influenced' human events. Sometimes that influence was good and sometimes it was bad. The bad influences included disease and plague and epidemics. Well, the Italians applied their version of the word *influence* to a particular outbreak of sickness which they attributed to the influence of the stars. The Italian version of the word was *influenza*, which we still have with us today. Of course, we usually use the shortened version of that word – *flu*. But ultimately, *flu*, *influenza* and *influence* all relate to the impact of the stars.

The word *opposition* is a common word today. It comes from Latin and French, but it was originally used in English in relation to astrology. If two stars or planets were located directly across from each other in the night sky, they were said to be in *opposition* to each other. That's how the word was first used in English in the 1300s and 1400s.

If you were thought to be under the influence of Jupiter, that was good thing. It usually meant you were in a good mood. As you may know, the Latin root of Jupiter is *Jovis* or *Jove*. So in that case, Jupiter's influence made you *jovial*. That word also appeared around the current point in our story in the first decade of the 1600s.

If you were *mercurial*, you were under the influence of Mercury. It usually meant you were volatile and subject to rapid changes in mood.

English also had the word *saturnine* meaning you were under the influence of Saturn. It was common in the 1600s, but isn't used as much today. It meant you had a gloomy or grim demeanor. That reflects the distance and isolation associated with Saturn, which was a distant planet.

So as you can see, we still have a lot of words associated with astrology, and that's because astrology was once a fundamental part of everyone's life. It was part of this larger view that the heavens were part of the divine and could be studied to determine the will of God.

For centuries, astrology and Christianity had co-existed. Church authorities rejected the idea that a person's fate was determined by the stars, but otherwise, astrology and Christianity both accepted that the heavens were God's domain and that the celestial bodies moved in a continuous circular motion around the Earth.

But around the current point in our overall story of English in the early 1600s, a handful of scholars throughout Europe were starting to view the universe in a different way. They didn't deny the existence of God, but they thought that much of the universe operated on a set of natural laws that existed on their own. And they thought that those laws could be identified by observing the world closely and testing their ideas in an objective and verifiable way.

One of the scholars who developed those ideas in the early 1600s was an English statesman named Sir Francis Bacon. By this point in our story, he had been a member of parliament, a legal advisor to Queen Elizabeth, and Solicitor General after James became king. One of the reasons why he is still remembered today is because he played an important role in the creation of what became known as the 'scientific method.' He believed that true knowledge came from observation and experience and logic and reason. When studying the how natural world worked, he preferred empirical evidence over general assumptions based on tradition, or based on religious or astrological beliefs. This idea was somewhat radical in the early 1600s, and as we'll see, others who held similar views would pay the price for challenging the conventional view of the universe which had been in place for centuries.

In 1605, Francis Bacon composed a work that outlined some of his views in this regard, and provided a preview of a new world view that was starting to take shape. The book was called 'Of the Proficiency and Advancement of Learning Divine and Human,' but it's generally known today by the abbreviated title 'The Advancement of Learning.' In the book, he was skeptical of learning that came primarily from the assumed knowledge of earlier generations. He encouraged people who were curious about the world to use direct observations and experimentation. By relying on empirical evidence, he thought it was possible to make basic assumptions about the forces at work in our daily lives, and to test those assumptions. And if those observations conflicted with traditional beliefs, well then, so be it. Again, this was a revolutionary idea, but it was starting to take root throughout western Europe. [SOURCE: *Rebellion*, Peter Ackroyd, p. 26-7.]

These ideas were fundamental to the development of modern science, but it wasn't called *science* at the time. *Science* in the sense that we know it today didn't exist yet. But the word *science* was around – and had been around in English for a couple of centuries. The word came from French and Latin, but up to this point, it simply meant 'knowledge' or 'learning.' So you might speak of a person's 'science' of a particular matter meaning their 'knowledge' of the matter. Of course, English already had the perfectly good term *knowledge*, which is a native English word, so people didn't really need that word *science*, which meant the same thing. Because of its Latin

roots, the word *science* was popular among academics and scholars and other people who tended to use Latin and French terms to accentuate their speech. It was basically just a fancy term for ‘knowledge.’

That original sense of the word *science* as ‘knowledge’ still survives in Modern English if you look for it . If you study ‘political science’ or another one of the ‘social sciences,’ you’re not really using the scientific method. So why are those called *sciences*? Well, again, those terms use the word *science* with its more traditional meaning as ‘knowledge’ or ‘learning.’ Interestingly, that term *political science* is first recorded in English around the current point in our overall story in the first decade of the 1600s.

That old meaning of *science* is sometimes hidden within other words. When you spell the word *conscience*, you may have noticed that it looks like *con* plus *science*. Well, there’s a reason for that. It’s a Latin word that literally means ‘with knowledge.’ The ancient Greeks had used that construction to express inner knowledge or understanding. They called it *syneidesis*, which literally meant ‘with knowledge.’ So the Romans just translated that term into Latin with the Latin equivalents. They used the prefix *con-* meaning ‘with’ and added it to the original form of our word *science* meaning ‘knowledge.’ And the word *conscience* was born – literally meaning ‘with knowledge.’

By the way, the word *prescience* has a similar construction. It just uses the prefix *pre-* meaning ‘before.’ So *prescience* – or ‘pre-science’ – is prior knowledge of an event. Similarly, the word *omniscience* uses the same construction with the prefix *omni-* meaning ‘all.’ *Omniscience* – or ‘omni-science’ – is literally ‘all-knowing.’ And it’s another word that is first recorded in English around the current point in our overall story of English.

So the word *science* had this much broader meaning in the early 1600s – a sense that still survives in some terms. It took a couple of centuries for the word to acquire its modern specialized meaning as a field of study that uses the scientific method.

So if you were alive in the early 1600s, and you were interested in the natural world around you, and you observed it and studied it, people would not have called you a *scientist*. The term *scientist* didn’t appear until the 1800s. Instead, people would have likely referred to you with the general term *philosopher*. An attempt to understand the world and mankind’s place in it was *philosophy*. And a specific attempt to understand the natural world around you was called *natural philosophy*. So the people who we often refer today as early ‘scientists’ like Galileo and Isaac Newton were actually known as ‘natural philosophers’ as the time. I mention that because the scientific method was starting to emerge during this period. And with that method, various scientific disciplines also started to develop. And as those disciplines developed, an entirely new lexicon had to be invented for this new way of studying the world. And we’ll see some of those first efforts at creating a new lexicon in this episode.

Now even though people like Sir Francis Bacon were starting to re-think the way people thought about the world around them, that wasn’t necessarily true for clerics and the religious authorities. They were firmly rooted in tradition. And during this same period, the leaders of the Anglican

Church were working on a project that relied heavily on tradition. And it was a project that would have a major impact on the English language. Of course, it was a new English translation of the Bible which came to be known as the King James Bible, also known as the Authorized Version in many parts of the British Isles. I'll just refer to it as the 'King James Bible' or the 'King James Version' going forward.

Of course, the translation is named after King James because he had authorized the translation in 1604. I talked about that development back in Episode 179. Well, shortly after he authorized the new English translation, religious scholars from Westminster, Oxford and Cambridge were appointed to work on the project. There were fifty-four persons designated as translators. The new translation began by dividing the Bible into six different parts. And then two groups of scholars from Westminster, two groups from Oxford, and two from Cambridge were selected. That was six groups in total, and each group was assigned one of the six sections of the Bible to translate. So each of the smaller groups worked on a specific part of the Bible.

But they weren't left to their own devices. They had very specific guidelines that they had to follow. First of all, they were to rely mainly on the existing Bible that was being used by the Anglican Church called the 'Bishop's Bible.' They were to retain the language of that Bible where it was appropriate. But for passages that needed to be revised or updated, the translators were given the freedom to look beyond that specific translation to earlier English translations to determine the best wording. Those earlier translations included the bibles known as the Geneva Bible, Coverdale's Bible, Matthew's Bible, and William Tyndale's translation from the early 1500s. So rather than coming up with a completely new translation, the scholars were encouraged to use the wording that had been used previously if possible. [*SOURCE: In the Beginning, Alister McGrath, p. 175.*] And this is an important point because it explains why the language of the King James Bible sometimes seems old-fashioned with its *thee*'s and *thou*'s, and its *begat*'s, and its older sentence structures.

Each of those Bibles I just mentioned was largely based on the translation that came before it going all the way back to William Tyndale. I talked about Tyndale's translation back in Episode 150. And as we saw in that episode, much of Tyndale's original wording was retained in those subsequent translations all the way through to the King James Version. In fact, some estimates suggest that about 80% of the language of the King James Bible comes from Tyndale's version. And now, we can start to see why so much of that older language was retained. The guidelines issued by King James and the Anglican Church required the six groups of scholars to rely on the language of the earlier English Bibles as much as possible, and those bibles were all derivative of Tyndale's version. And now, that process was about to be repeated with the King James Version. So again, a lot of that older vocabulary and a lot of those older sentence structures were retained even though the English language had evolved quite a bit over the century since Tyndale lived. So in that regard, much of the language of King James Bible can actually be dated to the century before it was published. So the language was about a century out of date when it produced. In fact, as we'll see a little later in this episode, the language of the King James Bible was considered somewhat archaic when it was first published. It preserves many older features. In fact, Shakespeare had already abandoned many of those features, even though he was writing at the same time.

And speaking of Shakespeare, he was in the twilight of his writing career around this time. While many of his plays from this period are revered and still performed today on stages around the world, they are not his most well-known plays. Some of them are difficult to date, but it appears that the plays *Coriolanus*, *Timon of Athens* and *Pericles* were all composed around the years 1607 and 1608. Because those are not some of his more popular plays, they haven't had much of an impact on the English language, so I'm not going to spend any time analyzing them here.

There is also another Shakespeare play that appeared around this same time in 1608. In May of that year, a play called *Antony and Cleopatra* was entered in the Stationer's Register. It was sort of a sequel to *Julius Caesar* and followed Marc Antony's exploits with Cleopatra, the queen of a Greek kingdom in Egypt. For our purposes, it is notable because it contains the first known use of the phrase '*to beggar description*' meaning that 'it is difficult or impossible to describe something.' It's a phrase that probably survives in the language due to the popularity of this play. At the time, the verb '*to beggar*' was quite common. It was based on the noun *beggar*. So '*to beggar*' was 'to make a beggar of someone.' Since beggars were poor and deprived, '*to beggar*' often meant 'to be deprived of something.' So '*to beggar description*' meant 'to be deprived of the ability to provide a description,' or to put it in more simple terms, it meant 'indescribable.' This old verb survives in this particular phrase and the phrase '*to beggar belief*.' But other than those phrases, we don't really use the verb 'to beggar' much these days. But, of course, the noun *beggar* is still common.

Antony and Cleopatra also contains another passage which is notable for our purposes. In an early part of the play, Antony's rival Pompey delivers a line in which he dismisses any threat from Antony since Antony is in Egypt. Pompey says, "I shall do well. / The people love me, and the sea is mine. / My powers are Cressant, and my Auguring hope / Sayes it will come to th'full." (End-quote) Now I mention that passage specifically for Pompey's use of one particular word – the word *cressant*. He says that his powers are 'cressant.' That meant that his powers were increasing. That was the original Latin meaning of the word *crecent*. The sense still survives in the word *crescendo* from the same Latin root.

Well, the Romans also observed the phases of the moon. And they noticed how the moon phases progressed from a new moon to a full moon. It began completely dark, then a slight sliver of light along the side of the moon would appear, and each night after that the light would continue to expand until there was a full moon. Well, as the visible portion of the moon grew or increased each night, the Latin root word *crecere* was applied to those early phases of the moon. And it ultimately gave us the modern sense of the word *crecent* as the curved-shape of the moon in its early phases when only part of it is visible.

In later centuries, French bakers developed a type of pastry that was shaped like a crescent moon, so they started to refer to it with the French version of *crecent*, which of course was *croissant*. So *crecent*, *crescendo* and *croissant* are all derived from the same Latin word meaning 'to increase or grow.'

Shakespeare's use of the word *cressant* in its original sense of 'increasing' shows that the word had both meanings in English at the time. It could be used to describe the shape of the moon or it could be used in a more general sense of 'increasing or growing.'

Well, speaking of this particular play and the moon, around the same time that this play was registered with the Stationer's Company in 1608, a Dutch lensmaker created an instrument that allowed humans to look at the moon in a completely new way. His name was Hans Lippershey. He had a shop in the Netherlands where he made eyeglasses or spectacles. Now if you know a little bit about the lenses used in eyeglasses, you probably know that the lenses are cut in a specific way depending on whether you are nearsighted or farsighted. It is cut in a concave manner (so the lense is thicker around the edges and thinner in the middle) if you want to see better at a distance. And it's cut in a convex manner (so the edges are thin and the middle part is thicker) if you want to see better close up.

Well, according to one version of the story, one day Lippershey was holding each type of lens in his hands, and he held them up with one behind the other so that he looked through both of them at the same time, and he noticed that when the two lenses were put together in this way, it magnified the objects at a distance. He then had the idea to arrange them in the same way in a tube so that when you looked through one end of the tube, it made the objects you looked at appear to be much closer than they really were. Now, it's possible that other people had made the same observation before this point and had designed a similar tool, but Lippershey is the first person to seek a patent for his device, so he is generally given the credit for inventing what we know today as the telescope in 1608. But the word *telescope* had not been coined yet because this was a new device. So Lippershey had to decide what to call his invention. He decided to call it a *kijker*, which was a Dutch word that meant 'looker' or 'viewer.' But as we'll see, that early name didn't stick.

Lippershey initially thought that the military might have an interest in his new invention, so he offered it to the Dutch government with that in mind. But word about the new device quickly spread to various parts of Europe. And since it was a relatively simple invention, a lot of other people started making their own version of it. And they quickly realized that it was a good way to get a better look at the moon, and the planets, and the stars. [SOURCE: *Connections, James Burke, p. 134*] We'll encounter one of those telescope builders in a moment, but first, let's turn our attention back to England because, around this same time, the new English translation of the Bible was nearing its completion. As we saw earlier, six committees had been appointed to work on different parts of the translation, and during the year 1610, two men from each committee met at Stationer's Hall in London to go through the work of the various groups. According to the surviving accounts, the assembled men met daily for nine months. Each day, one of the men would read from the new translation while the others followed along with copies of the Bible in Latin, Greek, French, Spanish or Italian. They would interrupt the person reading if they objected to any of the wording. Otherwise, the reader proceeded through each chapter and verse. [SOURCE: *'Bible: The Story of the King James Version,' Gordon Campbell, p. 61. and 'In the Beginning,' Alister McGrath, p. 187*]

Now this is interesting because it appears that there was a focus on the way the translation sounded when it was read out loud. After all, most people would hear it read out loud at church. So the translation was intended for listeners as much as readers. It is also interesting that the other men followed along with translations in other languages.

Now I mentioned that this group met at the Stationer's Hall. That was a building in London that the Stationer's Company had recently acquired. The Stationer's Company was the official guild of writers, illuminators and printers. And as I've noted many times during the episodes that covered Shakespeare's career, each work had to be registered with the Stationer's Company before it was published. And those registration dates help modern scholars to determine when many of Shakespeare's plays were completed. Of course, not all of the plays were registered because not all of them were published. But for the ones that were published or were intended to be published, the Stationer's Company records are a goldmine.

Now in the same year when the Bible translators were meeting at the Stationer's Hall in London, the Stationer's Company itself made an important agreement with Oxford University. Over the prior few decades, the library at Oxford had been neglected and had significantly declined. The Protestant authorities had deemed many of its works to be pro-Catholic and removed them. Other works were lost or in poor condition. By the early 1600s, only a few books remained.

Around the turn of the century, an English diplomat named Sir Thomas Bodley offered to support the library to help rebuild it. It then became known as the 'Bodleian Library.' Thanks to his support, the library started to be restocked with books, but most of them were written in Latin and Greek. The library had relatively few books written in English. So at the current point in our story in 1610, the person in charge of the library contacted the Stationer's Company and asked if they would agree to send a copy of every registered book to the library when it was published by the authorized printer. The Company agreed, and from that point on, the library received a copy of every book published in England. And most of those books were composed in English. Largely due to that agreement, the Bodleian Library became the largest library in the country, and it effectively became the national library as well. Its status was eventually supplanted by the library at the British Museum, which became the British Library in the 1970s. But the Bodleian Library remains the second largest library in England, and this agreement in 1610 laid the groundwork for a library that contained most, if not all, of the important works in the English language.

So we find ourselves in the year 1610 with the Stationer's Company agreeing to send books to Oxford to create what was essentially the first national library of the English language. And at the same time, in the same building, a group of religious scholars were finalizing what would become the most read book in the English language – the King James Bible.

But now, we need to turn our attention to the south to Italy because events there around this time were about the change the view of the universe which had been accepted for thousands of years. The person largely responsible for this change was a teacher of geometry and astronomy at the University of Padua. His name was Gaileo Galilei – known to history as simply Galileo. He had heard about Hans Lippershey's looking device a few months earlier, and he had built his own

version. His initial version wasn't very strong, but he kept working on it and improving the design. By the early part of 1610, he had built a version that had a magnification of about 30 times, which was far more powerful than any known telescope at the time. [*SOURCE: The Invention of Science, David Wootton, p. 215*] By making it so powerful, he effectively turned Lippershey's 'looker' into a scientific instrument. Then he turned it to the heavens.

First, he pointed it at the Moon. With the naked eye, the Moon appeared to consist of darker and lighter colors, but now, Galileo could see why. The face of Moon was comprised of craters and valleys and mountains. It wasn't the perfectly smooth sphere that people had assumed.

After studying the surface of the Moon for a few days, he turned his device to look at Jupiter. He got a good view of the planet, but he noticed something very unusual. He saw a tiny dot on either side of Jupiter. The next day, he looked again, and there were three dots on the right side of Jupiter and none on the left. The next day, there were two dots on the left side and none on the right. As he continued to monitor Jupiter, he noticed the dots continued to change. He realized that he was actually looking at moons orbiting around Jupiter. And that wasn't supposed to happen. Everything was supposed to revolve around the Earth, but Jupiter clearly had moons revolving around it. [*SOURCE: The Clockwork Universe, Edward Dolnick, p. 110-1.*] If Jupiter could have moons revolving around it while it was in orbit, then why couldn't Earth be the same way. Why couldn't Earth be in orbit around the Sun while having its own moon revolving around it. Jupiter's moons didn't prove that to be case, but it raised the possibility.

Galileo then turned his telescope to observe the Sun. He saw sun spots that changed their shape and position each day. That directly contradicted the accepted belief that the heavens were perfect and never changing. In actuality, the heavens did change sometimes, just like Earth. [*SOURCE: A History of Knowledge, Charles Van Doren, p. 200*]

Galileo then began to focus on Venus. He observed it over the summer and fall of 1610, and he noticed that it appeared to change shape like the Moon. It went from crescent to full and back to crescent. It had phases just like the Moon. But the key was that at one point it was fully lit as a complete circle. Well, everyone agreed that Venus was closer to Earth than the Sun. But if that was the case, how could Venus appear as a full circle? If Venus was closer than the Sun, that meant that the Sun was on the opposite side Venus. And that meant that people on Earth saw the dark side of Venus. If Venus was always backlit, we could see it as partially lit from one side or the other, so crescent or half-shaped. But we should never be able to see it fully lit. But Galileo WAS able to see it fully lit as it went through its phases. That meant that Venus had to be on the far side of the Sun at some point. And that meant that Venus was orbiting around the Sun, not the Earth. With these discoveries, the old Earth-centered view of the universe was falling apart. [*SOURCE: The Invention of Science, David Wootton, p. 224*]

Now to be fair, the traditional view of the universe had started to crumble a few years earlier. In the mid-1500s, a Prussian mathematician named Nicolas Copernicus published the first account that suggested that the Sun was the center of the solar system. He has studied certain irregularities in the movements of the planets, and he said that the irregularities could be explained mathematically if the Earth and the planets all moved around the sun. He knew this

idea contradicted the teachings of the Church, so he only allowed his work to be published on his death bed. It was a groundbreaking work, but for the most part, it wasn't taken literally by the Church or by scholars. They treated it as a theoretical mathematical model to make the math work better, even though Copernicus himself actually believed the sun was at the center of the solar system.

Then, around the same time that Galileo was observing the heavens with his telescope, a German astronomer named Johannes Kepler studied the orbits of the planets and concluded that they weren't perfect circles. They were actually elliptical. And the planets slowed down in their orbit when they were far away from the Sun, and they sped up as they approached the Sun. So no perfect circles and no constant, unchanging speeds. So when combined with those other discoveries, Galileo's observations essentially put the nail in the coffin of the traditional view of the universe. There were no invisible spheres. Change occurred everywhere, even in the heavens. Celestial motion wasn't always consistent, it wasn't always circular, and it wasn't centered around the earth. And most importantly, the earth wasn't separate from the rest of the universe, it was a part of it, and really just a very small part of it.

In fact, these discoveries suggested that the universe itself was much larger than had been imagined, perhaps even infinite in size. And if that was the case, it raised the possibility that there might be life on other planets. These ideas fascinated people in the 1600s. Today, we probably assume that science fiction began in recent centuries in the 1900s or perhaps the 1800s, but, believe it or not, it began shortly after Galileo's discoveries.

Within a couple of decades after these discoveries, an English writer named Francis Godwin wrote a book called 'A Man in the Moone.' It was an account of a voyage to the moon where the narrator meets inhabitants called Lunars who speak a language consisting of musical sounds. It is generally considered to be the earliest work of science fiction composed in English. [*SOURCE: The Invention of Science, David Wootton, p. 231*] By the end of the 1600s, the idea that there might be life on other planets was no longer a novelty. And that raised questions about the position of human beings in the universe.

These changes were largely brought about thanks to the looking device that Galileo and others had been using in 1609 and 1610. But it still wasn't called a *telescope*. Remember that Hans Lippershey had called his invention a *kijker*, which was a Dutch word meaning 'looker' or 'viewer.' In its earliest English references in 1610, it was called a *trunk*. The word *trunk* could be used for various tube-like objects, like a 'tree trunk' or an 'elephant's trunk.' Even the term 'swimming trunks' uses the word in that tube-like sense. Well, initially, the word *trunk* was applied to this new looking-device. Sometimes the word was qualified with other terms, like a *trunk-spectacle* or a *trunk-glass* or a *perspective trunk*. Galileo had his own terms for the instrument. In his writings, he referred to it as a *perspicillum*, an *organum*, an *instrumentum*, and an *occidale*. Johannes Kepler referred to the device as a *conspicillum*, a *specillum*, and *penicillium*. Then, in the following year (1611), the head of an Italian Academy named Federico Cesi wrote a letter to Galileo in which Cesi coined the word *telescopio*. It combined the Greek word *tele* meaning 'far' and *scope* meaning 'watcher' or 'seer.' So a *telescopio* meant a 'far watcher.' Galileo picked up the word and used it himself in a separate letter the same year, and

that was the word that stuck, ultimately giving us the anglicized version *telescope*. [SOURCE: *Oxford English Dictionary (Online Digital Version) and QPB Encyclopedia of Word Phrase Origins, Robert Hendrickson, p. 711*]

Now that's thirteen distinct terms that was used to refer to the same instrument in the immediate aftermath of its appearance. And there were probably other terms as well. And that is a good example of how these early scientists were trying to formulate a new lexicon for their areas of study in the 1600s as this new scientific method emerged. Sometimes they used native words in a new and unique way. Sometimes they used a Latin or Greek word. But what they often settled on was a new term formed from Latin or Greek root words. Over the following few years, other terms coined from such roots began to appear, like *microscope*, *thermometer*, and *barometer*.

Sometimes an existing word was brought into use in one of the new areas of scientific study. The word then acquired a new meaning, which often became the primary meaning of the word. That's what happened with the word *satellite*. It was an old Latin word that meant 'an attendant, a body-guard or a courtier.' So it referred to a person who usually hovered around a noble or a monarch. Well, when Johannes Kepler wrote about the dots of light that circled around Jupiter, he had to come up with a word for them. Galileo had referred to them as 'stars' or 'planets' in his Latin texts. But they weren't actually stars or planets. So Kepler took that old Latin term for someone who hovered around a prominent noble, and he used it to refer to the celestial bodies that were hovering around Jupiter. And that gave us the modern sense of the word *satellite* as an object in space that orbits or hovers around a larger object. Within a few decades in the mid-1600s, English scholars started to apply the Old English word *moon* to these objects. Previously, the word had been limited to the Earth's moon. That was the only moon that people knew up to this point. But as they came to realize that some other planets also had moons of their own, the term was extended to any moon-like object hovering around a planet.

With the application of the scientific method, astronomy became distinct from astrology over the course of the 1600s. The same thing happened with alchemy and chemistry. Up to the current point in our story, there was no real distinction between the two. In fact, *chemistry* is just a variation of the word *alchemy*. Alchemy was the study of substances to determine their properties and how they interact with each other. The objective was to come up with a way to turn basic substances into gold or some other valuable mineral. A person who practiced alchemy was an *alchemist*. And then sometimes, the practice of an alchemist was said to be *alchemy*. So *alchemy* and *alchemy* both meant the same thing. And then, around the current point in our story in the early 1600s, the word *alchemy* started to be shortened to *chemistry*. It still meant alchemy, but by the end of the century, the words started to be distinguished with *chemistry* referring to the study of matter pursuant to the scientific method.

Another existing term given a new meaning was *gravity*. The word *gravity* has been around in English for about a century. It's a French loanword, and it simply meant 'heavy, serious or solemn,' like when we refer to the 'gravity of the situation.' But now, as these early scientists studied the motion of the planets and the moon, they started to understand that they weren't moving on invisible spheres in the sky. They were actually being held in place in their orbit by a force emanating from the object they were orbiting. The meaning of the word *gravity* was

extended to that pulling force. In the same way that something heavy is pulled to the ground, a planet or moon can be pulled toward a larger celestial body around it. It was Sir Issac Newton a few decades later who proved that both motions were the product of the same force – gravity.

Before the concept of gravity was fully realized over the course of the 1600s, it was initially thought that the pulling force might be some type of magnetism. And **magnet** is another example of a common word that was given a new scientific meaning during this period. The word **magnet** had been around in English since the 1400s, but its meaning was limited to lodestone, which is a specific type of mineral that is naturally magnetic. The term **lodestone** was formed within English, but Old French called the substance **magnete**. So English borrowed that term as well. Again, whether you used the word **magnet** or **lodestone**, you were referring to the same naturally-occurring substance. The word **magnet** can be traced from Latin back to Greek because supposedly the ancient Greeks mined the substance in a place called Magnesia in modern-day Turkey. **Magnet** came from the name of that city – Magnesia.

Well, in the year 1600, an English physician named William Gilbert wrote a book about magnetism called ‘De Magnete.’ He determined that the earth itself behaved like a large magnetic bar. He coined the term **magnetic pole**. He thought the force that held the moon in place around the earth was a type of magnetism. Of course, it isn’t magnetism that holds the moon in its orbit. It’s gravity. But as I noted a moment ago, that revelation came later in the century. [*SOURCE: The Chronology of Words and Phrases, Linda and Roger Flavell, p. 142.*]

Gilbert’s book changed the way people thought about magnetism, and people began to think about objects other than lodestone having similar magnetic properties. And they began to figure out how to transfer magnetic properties to substances other than lodestone. Gilbert wrote in Latin, but his concepts soon made their way into English. And at the current point in our story in the year 1611, we find the first use of the word **magnetic** in the English language. It referred to the attracting qualities associated with lodestone, whether found in lodestone or any other object or substance. And two years later, we find the first use of the word **magnet** to refer to any substance with magnetic properties, not merely lodestone. As this meaning expanded beyond lodestone in this way to refer to any magnetized substance, the modern meaning of the word **magnet** emerged around the current point in our overall story in the early 1600s.

Now magnetism and electricity are actually related to each other. Together, they form a force called electromagnetism. In the early 1600s, people still thought of them a distinct and separate forces, but there were obvious similarities in the way electricity and magnetism behaved. For example, they both had the ability to cause an object to attract other objects around it. Again, in the early 1600s, people didn’t fully understand how it all worked, but they did have a basic concept of electricity, and they understood that it sometimes had a physical force that was similar to magnetism. And in fact, that explains where the word **electricity** comes from.

In that same text where William Gilbert wrote about magnetism, he also wrote about electricity. Specifically, the static electricity produced by amber. And amber is really the key to understanding the source of the word **electricity**.

For centuries, people had known that there was something unusual about amber. If you rubbed it with wool or fur, it would attract lighter objects like hair, and feathers and bits of straw. It turns out that the friction produces static electricity in amber, and that static electricity attracts lightweight objects around it similar to the way a magnet attracts certain metals. Well, the Greeks used amber for jewelry and other decorative purposes, and they were also aware of this unusual aspect of amber. And the Greek word for amber was *elektron*. And that Greek word eventually passed into Latin, where it became *electrum*. But again, that was just a common word for amber. [SOURCE: *The Chronology of Words and Phrases*, Linda and Roger Flavell, p. 141-2]

Well, that takes us back to that text on magnetism by William Gilbert. In that same text, he talked about the static electricity produced by amber, and he described those characteristics as *electricus*, using that Latin and Greek root word for amber. And in doing so, he really gave us the modern sense of the word *electric*. From that point on, the word started to describe those electrical features of amber more than the substance itself. Remember that Gilbert wrote in Latin, which is probably why he used that Latin word for amber. But the word *electric* soon popped up in English. In fact, the word *electrical* is recorded for the first time in English just five years after the current point in our overall story. It is found in a document from 1616, where it was distinguished from magnetism. So the modern meaning of the word appeared in the first couple of decades of the 1600s.

So a word for amber gave us the term *electric*, and a word for lodestone gave us the term *magnet*. I mention these examples to show how a new lexicon was being created in the early 1600s to deal with this new realm of study and investigation. And that is really the important point here. New terms were being coined in English, often by taking an existing English term and giving it a new meaning as we saw with the examples of *gravity* and *moon*. But this new scientific research was being conducted throughout Europe by people who spoke many different languages. So there was a general desire to use the traditional languages of scholarship that were common throughout Europe. Of course, those languages were Latin and Greek. So in most cases, new scientific words were culled from those languages. Sometimes a traditional Latin or Greek term was given a new scientific meaning, which is what happened with words like *electric* and *magnet*. But more often, an altogether new word was coined by combining Latin or Greek root words to convey the intended meaning. That's what happened with terms like *telescope*, and *microscope*, and *thermometer*. Over the course of the 1600s, as the Scientific Revolution got under way, hundreds of new terms entered the English language to explain the concepts that were being studied and revealed. By way of further example, in the just first half of the 1600s, we find the first use of other scientific terms such as *fossil*, *decimal*, *synthesis*, *logarithm*, *interstellar*, *acid*, *botany* and *botanical*, *data*, *formula*, *apparatus*, *atmosphere*, and *component*, just to name a few.

Now many religious leaders rejected Galileo's discoveries because they appeared to conflict with several passages of the Bible, specifically those that stated or implied that the Earth was stationary. In the Protestant north of Europe, many religious leaders objected, but didn't really interfere with the ongoing research. But in the Catholic parts of Europe, especially in Italy, the position of the Catholic Church was more definitive. Galileo ran afoul of the Catholic Church authorities, and his conflict with the Church dragged on for years. Unlike some other early

scientists who tip-toed around the religious implications, Galileo was more assertive and wasn't able to satisfy the authorities when they objected. Some 23 years after his initial discoveries with the telescope, he was placed on trial and found guilty of offenses against the Church. He was forced to recant his assertion that the Earth moved around the sun, and he was placed under house arrest for the rest of his life. It was an important development because Italy had been home to the new learning associated with the Renaissance going all the way back to the pre-scientific work of people like Leonardo de Vinci a century earlier. But after Galileo, Italy's role in the development of science declined, and most of the important discoveries over the following couple of centuries tended to be concentrated in other parts of Europe.

It's easy to look back to these events with modern hindsight and say that an age of ignorance was replaced with an age of enlightenment, but at the time, the scientific revolution hadn't happened yet, and all of the knowledge that would eventually stem from that revolution and all of the ways that it would impact our lives were unknown. For many people at the time, all they had ever known about the universe and the way it worked was being challenged. The basic foundation of their knowledge was being torn down and ripped apart. And people weren't sure what to think and where it would all lead.

That concern is captured in a poem composed by the English poet John Donne in 1611 – as the first news of Galileo's discoveries was spreading across England. The poem concerned the death of his patron's daughter who had recently passed away. It is known as "An Anatomy of the World," and the overall mood of the poem is gloom and uncertainty. He equates the girl's death with the fall of man and the destruction of the universe. In one part of the poem, he refers to the "new philosophy." As we saw earlier, *philosophy* was basically the word for science at the time. So he is specifically writing about the new science, or the new discoveries that had called so much into question. He wrote:

And new philosophy calls all in doubt,
The element of fire is quite put out,
The sun is lost, and th' earth, and no man's wit
Can well direct him where to look for it.
And freely men confess that this world's spent,
When in the planets and the firmament
They seek so many new; they see that this
Is crumbled out again to his atomies.
'Tis all in pieces, all coherence gone,
All just supply, and all relation

This poem reflects the widespread uncertainty that many people felt in 1611, which happened to be the same year that the new English translation of the Bible appeared. At this time, officially-sanctioned Bibles could only be published with the approval of the monarch. And the final text of the translation was sent to the king's official printer in 1611. The printer's name was Robert Barker, and his was the first publication of the translation that we know today as the King James Version – or the Authorized Version. [*SOURCE: In the Beginning, Alister McGrath, p. 198*]

Even though this Bible is sometimes called the ‘Authorized Version,’ there was never any formal proclamation declaring it to be the official ‘authorized’ version of the king, as least no such proclamation that survives. But the title page declared that it was “Appointed to be read in the Churches.” And the fact that the version was printed by the king’s official printer indicates that it had the sanction and approval of the king, who was of course the head of the Church. So from that, we can reasonably conclude that it was in fact ‘authorized,’ despite the lack of a formal proclamation. [SOURCE: *A Visual History of the English Bible*, Donald L. Brake, p. 202]

Now, as I noted earlier in the episode, the translation was largely derived from earlier English versions of the Bible going all the way back to William Tyndale’s version about a century earlier. So the language of the King James Version was largely that of the mid-1500s, rather than the language of the early 1600s. Let me give you some examples of that older language that was preserved in the new translation.

The King James Version retained the older second person pronoun forms that were already on their way out. As I noted a couple of episodes back, pronouns like *thee* and *thou* and *thy* had already been replaced with the more generic *you* and *your* in common everyday speech. But some conservative writers and texts continued to use the older forms. Shakespeare tended to use them, and the translators of the King James Bible also used them probably because they were used in the earlier English translations. The fact that this particular Bible and Shakespeare’s plays are the most well-known works from this period has created an impression that most people still used *thee* and *thou* and *thy* in everyday speech. While some people still did, the evidence suggests that were becoming archaic at the time, especially around London.

The King James Version also retained the old distinction between *ye* and *you* when referring to more than one person. *Ye* was used as the subject of the sentence, and *you* was used as the object. Again, this old formal distinction was already lost in most ordinary speech at the time, but conservative writers would occasionally used the older form *ye*. The King James Bible kept the old pronoun *ye* – as in “ye of little faith.” [Matthew 8:26] Another good example of this old distinction appears in the Book of Matthew, Chapter 5, Verse 11, which reads in part, “Blessed are ye, when men shall revile you, and persecute you, and shall say all manner of evil against you falsely . . .” So there we have a passage that used both forms of the pronoun.

The new translation also preserved older verb endings like the ‘-st’ ending used in second person and the ‘-th’ ending used in third person. So when God confronts Adam and Eve, He says, “Who told thee that thou wast naked? Hast thou eaten of the tree, where I commanded thee that thou shouldest not eat?” And we hear the ‘-th’ verb ending in this passage from Proverbs: “As the door turneth upon his hinges, so doth the slothful upon his bed.”

Also, notice something else about that passage. It begins, “As the door turneth upon his hinges . . .,” not ‘upon its hinges.’ You might recall this feature from Episode 176 where I talked about the use of the word *his* instead of *its* during the Elizabethan period. *Its* didn’t really exist as a possessive pronoun until the late 1500s. Instead, the pronoun *his* was used for both males and for random objects that don’t have a gender. So you would have said ‘the door turns on his hinges’ or ‘the tree lost his leaves.’ The word *its* had emerged during the Elizabethan period, and it

quickly became the norm, but the King James Bible preserves that older grammatical form with *his* because the new pronoun form *its* was probably considered too modern at the time.

The King James Version also uses relative pronouns like *which*, *that* and *who* in ways that are different from current usage. Those pronouns are often used to introduce a clause in a sentence. Sometimes the information provided by that clause is essential to the meaning of the sentence, and sometimes it's just some extra supplementary information. Under the modern rules, we use the word *that* if the information contained in the clause is essential. That type of clause is sometimes called a 'restrictive clause' or an 'essential clause' or a 'defining clause.' So if I say, "Steve gave me the book that he was reading," I use the word *that* because 'that he was reading' is essential information in the sentence. It defines or specifies the book that Steve gave me. He gave me the one 'that he was reading.' But if I say something like, "Steve gave me his favorite book, which I really enjoyed." In that case, I used the word *which* because the final part about enjoying the book was just some extra supplemental information. It didn't actually define or specify the book that Steve gave me. It could have been any book. I just happened to like it.

But now, let's assume I am adding some additional non-essential information like that, but the information is about a person rather than a thing like a book. In that case, I would use the word *who*. So I might say something like, "I got this book from Steve, who I hadn't seen in almost a year." Again, I used the word *who* because the essential part of the sentence is that I got the book from Steve. The extra part about not having seen him in a year is extra information that doesn't really define who Steve is.

Now those are technically the modern rules for the use of *which*, *that* and *who*, but the reality is that most English speakers don't follow those rules very closely. We often use *that* when we should use *which* or *who*, and vice versa. I certainly mix them up from time to time in the podcast. And that's because those rules are somewhat artificial. They weren't really formulated until the late 1800s and early 1900s, and they were based on general usage trends at the time. But prior to that, we find a much looser use of *which*, *that* and *who* because there weren't any strict rules to distinguish them.

That's why we find the beginning of the Lord's Prayer rendered in the Book of Matthew as "Our Father which art in heaven, Hallowed be thy name." Many more recent translations will change that line to "Our father who art in heaven" to match current English usage. But in the early 1600s, you could still refer to a person – or in this case God – with the pronoun *which* instead of *who*.

By the way, just so you know, in Old English and Early Middle English, the word *that* was the somewhat generic form that was used in those situations. Of course, the structure of the language was different back then, but *that* was the common pronoun form to introduce a clause like that. Then the word *which* came into play in the late Middle English period, and was used to introduce clauses alongside *that*. Then, in the 1500s, the word *who* started to be used to introduce clauses relating to people. Even though the use of *who* was common in the early 1600s, we once again see that the King James Version preferred the older approach and often used *which* or *that* in situations where we would use *who* today. From this point forward, the way in which those

various forms were used, and the context in which each one normally appeared, tended to fluctuate from one period to the next. As I noted, the modern rules tried to capture and formalize the tendencies that were common in the late 1800s and early 1900s. But in ordinary speech, those fine distinctions have rarely been more than general tendencies.

The King James Bible also used older verb forms that aren't common anymore. So whereas today we would say that someone *spoke*, the King James Bible says that someone *spake*. And we find the older form *digged* instead of the modern form *dug*. As I've noted, Shakespeare also tended to be a bit conservative in his grammar. Even though he is considered to be an innovator of the language, his pronoun and verb forms tended to be very traditional. But even so, he was still more modern than the King James Bible. For example, the old past tense form of *break* was *brake* ('b-r-a-k-e'). So "I brake the window yesterday." The word *broke* was emerging during this period, and it was the form that Shakespeare used. According to research by David Crystal, the word *broke* appears 83 times in the First Folio of Shakespeare's works. But it never appears in the King James Bible. The Bible only uses the older form *brake*, and in fact, it uses it 73 times. So for example, in the Book of Mark, we find a verse that reads in part, "Jesus took bread, and blessed, and brake it, and gave to them . . ." [Mark 14:22] [SOURCE: *The Stories of English*, David Crystal, p. 275-6]

Linguists have also noted that the translators preferred simple English words over Latinate words. Unlike John Wycliffe's original English Bible back in the 1300s which used very Latinate language, the King James Version relied heavily on simple single-syllable words that had been around since Old English. According to one study, about 93% of the words used in the King James Version are native English words. And most of the Latin and Greek words used in the translation were common words that had been around since the Middle English period and were familiar to most speakers. [SOURCE: *In the Beginning*, Alistair McGrath, p. 262] That suggests that the language was intended to be simple and familiar to the average English speaker, not just to the educated elite.

This also helps to explain a familiar change to the Lord's Prayer. There is a line that Tyndale had rendered as "And forgive us our trespasses, even as we forgive our trespassers." The King James translators apparently didn't like those three-syllable Latinate terms *trespasses* and *trespassers*. They preferred the simple words *debts* and *debtors* used in the earlier Coverdale Bible. So in the Book of Matthew, we find this familiar version: "And forgive us our debts, as we forgive our debtors." [Matthew 6:12] [SOURCE: *Wide as the Waters*, Benson Bobrick, p. 244] Again, simple English words.

We find a similar change in Psalm 23. The Bishop's Bible, which the Anglican Church had been using, had the first verse as follows: "God is my shepherd, therefore I can lack nothing." The King James translators apparently didn't like those multi-syllable words *therefore* and *nothing*. They also apparently didn't like the somewhat awkward phrasing of "I can lack nothing." So they changed that verse to a shorter, pithier and more memorable version. The result was "The Lord is my shepherd, I shall not want." So from "therefore I can lack nothing" to "I shall not want." [SOURCE: *Bible: The Story of the King James Version*, Gordon Campbell, p. 80.] So

even though the language of the new translation was older and more conservative, it was also more direct and frankly, more English, than most earlier versions.

Now given the popularity of this translation in later centuries, you might assume that it was big hit when it appeared in 1611. But that wasn't really the case. It appears that its reception was a bit underwhelming. As I noted earlier, there was no grand proclamation when the translation was published. There is no evidence of any formal statement declaring it to be the new 'authorized' version. In fact, the surviving record is generally silent about the new translation. There doesn't appear to have been much fanfare at all. Some religious scholars who had not been invited to take part in the translation actually criticized the language of new version. Of course, they had an ax to grind since they had been left out of the process.

The Puritans still preferred their Geneva Bible with its marginal notes which made it easier to read and understand. You might recall that King James had demanded that the new version not have any marginal notes, except as needed to explain any Greek or Hebrew terms that were used.

Acceptance of the King James Version was also hampered by printing errors in the early versions. Of course, that was inevitable for such a massive work as the Bible, but some of the mistakes are eye-popping. In one infamous edition from 1631, two separate errors caught everyone's attention. In the Book of Deuteronomy, the beginning of Chapter 5, Verse 24 was supposed to read in part, ". . . the Lord our God hath shewed us his glory and greatness . . ." But instead, the line read, ". . . the Lord our God hath shewed us his glory and his great *asse* . . ." At the time, the word *ass* was limited to a donkey. It didn't refer to a person's backside yet. But it was still a shocking error for many readers. But not as shocking as a separate error in the Ten Commandments. In Exodus, Chapter 20, Verse 14, the word *not* was omitted from the commandment against adultery. So the verse read, "Thou shalt commit adultery." [SOURCE: *Bible: The Story of the King James Version, Gordon Campbell, p. 109-111.*] This version of the Bible became known as the 'Wicked Bible.' Most of the copies were destroyed by the religious authorities.

Remember that the printer of the King James Bibles during this period was the royal printer, Robert Barker. Modern scholars have noted that he was involved in litigation at the time with some of his former business partners, and there is some speculation that the errors were an act of sabotage by the disgruntled partners or by some of the workers in the print shop. Barker was heavily fined for the errors in the publication. He was already in massive debt, and he eventually ended up in debtor's prison, where he remained until he died. His rights to publish the Bible were eventually transferred over to the Stationer's Company. [SOURCE: *Bible: The Story of the King James Version, Gordon Campbell, p. 109-111.*]

Despite the general lack of enthusiasm for the new Bible in its early years, it gradually gained acceptance. Over the course of the 1600s, the Bishop's Bible that had been used in English Churches was gradually replaced with the new King James Version. And after 1644, the Geneva Bible that the Puritans preferred was no longer printed or imported from the continent. So the King James Version started to acquire a bit of a monopoly in English churches and households. [SOURCE: *Bible: The Story of the King James Version, Gordon Campbell, p. 125.*]

Many Puritans kept their old copies of the Geneva Bible and didn't really embrace the new King James Version. But ironically, the Puritans are largely responsible for the ultimate triumph of the King James Bible. After the English Civil War in the mid-1600s, a republic was established. The Puritans took control of the new government and instituted very severe and unpopular policies. When the monarchy was restored a few years later, there was such a backlash against the Puritans that the Geneva Bible they preferred lost favor, and in its place, people embraced the 'authorized' version that King James has sanctioned earlier in the century. From that point on, the King James Version became the 'standard' Bible throughout England and the English-speaking world.

It would, of course, become the most widely-read book in the English language. People poured over the stories and sermons contained in the Bible. And the wording of the passages became so familiar to English speakers that many of the idioms and turns of phrase contained in the book passed into general usage. And that's what scholars point to when they say that the King James Bible had more influence on the English language than any other book in the history of the language. It's really the common idioms, and proverbs and sayings that have become part of common English.

If we took all of the sayings and phrases attributed to Shakespeare or popularized by Shakespeare in all of his plays put together, they still wouldn't come close to the total number of common sayings that can be traced back to the King James Bible. I could probably spend the next ten or fifteen minutes listing many of those phrases, but I'm not going to force you to listen to all of that. But I do want to give you some examples. So here is a list of some of the more common idioms and sayings that can be traced back to the King James Bible. Some of these may have appeared in earlier translations, but it is really the King James Version that delivered them into the modern language. And also, some of these phrases are derived from earlier Hebrew and Greek phrases that were translated more or less directly into English, while others were coined within English to translate certain passages. So we have:

'to fall flat on his face' [Numbers 22:31]
'a man after my own heart' [1 Samuel 13:14]
'to pour out one's heart' [Psalm 62:8]
'the land of the living' [Job 28:13 / Psalm 27:13]
that's 'sour grapes' [Ezekiel 4:10]
'from time to time' [Ezekiel 4:10]
'pride goes before a fall' [Proverbs 16:18]
'the skin of my teeth' [Job 19:20]
'to stand in awe' [Psalm 4:4 and 33:8]
'to put words in his mouth' [Exodus 4:15, 2 Samuel 14:3 and 14:19]
'like a lamb to the slaughter' [Isaiah 53:7]
'to see the writing on the wall' [Daniel 5:5]
'a fly in the ointment' [Ecclesiastes 10:1]
'a drop in the bucket' [Isaiah 40:15]
'The salt of the earth' [Matthew 5:13]
'to give up the ghost' [Mark 15:37 and John 19:30]
'the powers that be' [Romans 13:1]

‘it came to pass’ [Mark 1:9 and many more]
 ‘Be fruitful and multiply’ [Genesis 1:22, 28, etc.]
 ‘Land of milk and honey’ [Exodus 3:8]
 ‘Stranger in a strange land’ [Exodus 2:22]
 ‘How the mighty have fallen’ [2 Samuel 1:19]
 ‘An eye for an eye.’ [Matthew 5:38]
 ‘to (not) see eye to eye’ [Isaiah 52:8]
 ‘There is no new thing under the sun.’ [Ecclesiastes]
 ‘To every thing there is a season.’ [Ecclesiastes]
 ‘To escape by the skin of your teeth’ [Jon 19:20]
 ‘At their wit’s end’ [Psalms 107:27]
 ‘Out of the mouth of babes’ [Psalms 8:2]
 ‘My cup runneth over’ [Psalms 23:5]
 ‘holier than thou’ [Isaiah 65:5]
 ‘to put your house in order’ [Isaiah 38:1]
 ‘The blind leading the blind’ [Matthew 15:14]
 ‘The signs of the times’ [Matthew 16:3]
 ‘to fall from grace’ [Galatians 5:4]
 ‘Fight the good fight’ [1 Timothy 6:12]
 ‘to suffer fools gladly’ [2 Corinthians 11:19]
 ‘better to give than to receive’ [Acts 20:35]
 ‘a good Samaritan’ [Luke 10:33]
 ‘Seek, and ye shall find’ [Matthew 7:7]
 ‘Love thy neighbour’ [Leviticus 19:18]
 ‘Vengeance is mine’ [Romans 12:19]

Again, that’s just a small sample. Also, even a basic story that like of Adam and Eve has generated numerous terms and phrases in English. It’s the source of ‘forbidden fruit,’ ‘I don’t know him from Adam,’ and ‘He is as old as Adam’ and even the term ‘Adam’s apple,’ which comes from a legend that a piece of the Biblical apple lodged in Adam’s throat and caused the bulge that appears there.

I should also mention a specific linguistic term that has its origins in the Bible. It’s the word *shibboleth*, which refers to a word or saying or particular use of language that is associated with a specific group of people. It can also be used in a broader sense to refer to any custom or habit associated with a specific group. The word comes from a story in the Book of Judges. The Ephraimites were one of the twelve tribes of Israel. They found themselves at war with the Gileadites, who were a different Israelite tribe. So both groups spoke Hebrew, but they had slightly different accents. The Ephraimites didn’t have the ‘sh’ (/sh/) sound in their dialect. They only had the ‘s’ sound. So Gileadites used that linguistic difference to identify the Ephraimites. If the Gileadites encountered someone they thought was an Ephraimite, they would make the person say the word *shibboleth*, which was a Hebrew term that could refer to either a flood or the part of a plant that produces grain. Well, the Ephraimites couldn’t pronounce the ‘sh’ sound at the beginning of *shibboleth*, so they pronounced it *sibboleth*. That mispronunciation identified them as Ephraimites, so if they spoke that way, they were executed on the spot. That story gave

us the word *shibboleth* in English to refer to a saying or pronunciation or other characteristic that identifies someone as part of a specific group. And it shows how accent and dialect differences have been used to distinguish people for thousands of years.

As I noted, the overall linguistic influence of the King James Bible on Modern English is so vast that it overshadows any other single source, even the collected works of Shakespeare. But it is interesting that the King James Bible and the works of Shakespeare are contemporaneous. It shows how much the English language was shaped by the literature of the late 1500s and early 1600s. And even if some of the grammatical features were on their way out, the idioms, and proverbs and common phrases used in those works are part of our everyday speech today.

It is also interesting that the King James Bible, which is the source of so many word and phrases in Modern English, appeared at the same time that modern science was being established, which required its own lexicon to explain the new way of looking at the world. Though science and religion would sometimes be in conflict going forward, they found harmony within the English language. The language we speak today preserves both influences. Even in the field of linguistics, which is the scientific study of language, the Old Testament word *shibboleth* is used to describe an identifying linguistic feature. I think the ultimate lesson to take from all of this is that Modern English isn't very discerning. It embraces words from all sources. And new ways of looking at the world only contribute to the diversity and the expressive nature of the language.

I'm going to wrap up this episode on that note. I should mention that there were some interesting developments in North America during the time frame covered by this episode. But rather than trying to cram those events into this narrative, I have elected to cover them next time. So next time, we'll look at the some notable events in North America as we continue to work our way through the 1600s.

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