# Stories Told in Wax

#### Danny Bottino 00:00

[Music fades in] The earliest way of putting your name onto a document was not signing it, but putting the image of a seal on it. And this goes back, of course, to ancient, ancient Sumer, where we see the first seals, which were put stamped into the wet clay that they used.

# Kanisorn Wongsrichanalai 00:24

[Intro music begins] This is Kanisorn Wongsrichanalai.

#### Cassie Cloutier 00:40

This is Cassie Cloutier, and this is The Object of History, the podcast of the Massachusetts Historical Society. Since 1791, the MHS has sought to collect, preserve, and communicate the building blocks of history. Each episode examines an object, document or set of items from society's millions of manuscript pieces and artifacts. We take you on a behind the scenes tour of our stacks to explore the incredible stories held within our collections. On this episode of The Object of History, we are looking at wax seals, and learning all about these beautiful and often overlooked components of deeds, letters, and other types of paper documents. We sit down with Danny Bottino, a PhD candidate at Rutgers University to learn about his dissertation project. Along the way, we introduce Danny to Peter Drummey, the Chief Historian and Stephen T. Riley Librarian at the MHS and to Dr. Sara Georgini, the series editor of the papers of John Adams at the MHS.

#### Kanisorn Wongsrichanalai 01:49

The Massachusetts Historical Society houses approximately 14 million manuscript pages and counting. Our collections continue to grow annually. Most researchers visit the MHS to consult these documents and pay particular attention to the words written on them. Danny Bottino, however, is looking for something different. We sat down with Danny to learn more about his project.

### **Danny Bottino** 02:17

Suppose the origin of this project would be my interest in material culture. And looking at a textual source as more than just the text on it. Of course, I study 17th century, 18th century history. And when you look at a document from this time period, it's quite different from a modern document from a document from the 21st century or even the 20th century, 19th century, in that it's not an ordinary piece of paper as we think of it. Instead, the paper is quite different. And there's these other elements to it, which have fallen out of use. Of course, the paper is folded in different ways that we would fold it nowadays, sometimes that paper is parchment, right, of course, that always strikes people because that is certainly not an ordinary type of paper, it's quite visible. But then there's other more subtle elements. And of course, the wax seal and wax in general from the usage of seals on these documents. I always saw it when I was reading through these documents. But as I think most people who study these documents, I simply noticed it, but I didn't have the time, or the that was not my purpose to specifically focus on those seals. Eventually, I started studying 17th century Maine specifically, which is the main focus of my PhD. And I wanted to understand how these early colonists of Maine understood the landscape that they lived in. And in order to do so I studied deeds. And that's the best source we have for understanding how people claimed land and how people bounded the land, how these very early colonists did that. And for Maine we have 1000s and 1000s of these 17th century deeds, and as I read through them over and over, of course, almost every single deed ends with a phrase similar to and on this day, I so and so have set my hand and my seal to this to this deed, or will or other legal document. And so, I then began to realize that this was a critical part of making these deeds was the setting of their hands. So signing their name or making a mark if they were not literate or if they simply were literate but didn't want to sign and of course, putting their seal and a deed or will or other document could not be valid if this was not done and as I delved deeper into these documents, I realized that the deed was much more than a written text, especially in the 17th century, due to the simple fact that more than half of the colonists in Maine throughout the 17th century, were not fully literate people. Many of them were not literate in any way. Some of them were able to read, but not able to actually write, and there were varying levels too, but more than half these people were not fully literate. And so, in the deed,

we see it nowadays, as solely a written text when we read the text, this is we think this is everything. This is just, this is it. But I realized that there was so much more to how these 17th century colonists thought of the deed and the action and the power of the deed, what this document was doing. And the critical part of this was the actions, the words spoken and the physical actions that were done in order to make the deed valid. And of course, putting your seal on it was probably the most critical of these actions. And so that led to my project on wax seals.

# Kanisorn Wongsrichanalai 06:15

Why is the signature insufficient?

# **Danny Bottino** 06:19

That's a good question. And to answer that, briefly, we have to go back to the way back in time to the earliest history of signing and putting seals on documents. The modern seal is directly I think, can be directly traced to those ancient seals, most of which are over 6,000 years old. And in the Middle Ages, in Europe, you have in the early Middle Ages, of course, there are not too many documents, and documents, such as deeds and wills and charters are only used by the highest by the most powerful people, the bishops and the kings, and the highest-ranking nobles. And in the Anglo-Saxon period, you start seeing the first seals used. And so, these kings and bishops are signing, but they're also sealing. And the signs that they make, even though they are literate are not their names, but their rather marks. So, they're usually the mark of the cross, which is the most as a Christian is the most powerful image that you can, you can draw saying, I swear by this cross that what I'm doing is true and that this document is valid.' Seals at first are just images of the people who own them. And so, it's for bishops, it's usually standing image of the person of the bishop. And then for monarchs, it's usually the image of monarch or the noble on a horse. Usually, that's the most common seal type. So, this is the very early history of seals in Europe in the Middle Ages. But as for your questions, somewhat tricky. Why were seals seen as needed, in addition to signing your name, or making your mark? I don't think I've ever seen any scholar adequately answer that question. It's something that that just happened in these early documents is that we see the first usage of seals next to people signing their names. Of course, seals were used in the ancient world, as I mentioned, too, but as in many things, there's a gap after the end of the classical era and beginning of the early Middle Ages.

### Kanisorn Wongsrichanalai 08:34

Is this where we get 'seal the deal'?

# Danny Bottino 08:37

Yes. You know, definitely yes, I think there's quite a few idioms with the word seal in them. And simply because it was such a common thing for people as just a part of everyday life up through the 19th century, but starts to fade out of everyday life, I'd say, by the mid-18th century, what I found in my research here thus far.

### Kanisorn Wongsrichanalai 08:59

Why do you suppose there was this change at that time?

#### Danny Bottino 09:02

That's a good question. I would say that with every decade of the 18th century, you have more and more people in general, of course, in the British colonies, and you have more and more documents. You have more and more people taking part in these legal documents, deeds, wills, and so on. And so simply, more and more people, if they are to seal these documents, they need to either to get their own personal seal or borrow someone else's seal. Or of course, if you don't have one, you would put your fingerprint down into the red wax. And I think eventually there must have reached a tipping point when there were so many people who didn't have seals that it was realized that it would be easier probably just to have one seal that was there in the legal office, right, for everyone to use, and eventually, the value of owning your own personal seal, then I think faded out, especially with the rise of these fingerprint seals are something that I've been tracking. So, I don't see fingerprints seals in the documents I've seen in my research here thus far in the 17th century. The earliest fingerprints seal that I found is from 1715. Every decade you see more and more fingerprint seals, until by the 1740s, 1750s, they're the most dominant type, and then they fade out. And by the

1760s, 1770s, almost all seals are covered up. And that's something also starts in the 18th century is that seals are covered up by these little paper tabs,

### Kanisorn Wongsrichanalai 10:52

Which is the seal? Is the stamp the seal, or is the imprint that's left on the wax the seal?

### **Danny Bottino** 10:58

So, the matrix is the tool used to make the seal. The seal matrix is the stamp or any other type of item is signet ring, right? That's the seal matrix is the image that's carved into that tool. And then when you make an image with it in wax, or in paper or through any means, then that is the seal. And that's why of course, as I mentioned on these documents, it says, I have signed and sealed and or set my seal. So, the image in wax that's left on these documents is the seal.

#### Kanisorn Wongsrichanalai 11:36

And you say that it's likely that seals fell out of use because fewer people had them or more people were literate. But how many people would have had them at the height of their use? How popular was this? Are there people they would go to help create a stamp for them? What are these people called?

### Danny Bottino 12:00

These are difficult questions because I think they it was so obvious to people of the 18th and 17th centuries, that it was never written down. And it's just something that if you time traveled back to Boston, 1730 ask these questions, you get better answers than I or anyone else could give you now. But I would say that technically, everyone who was taking part in the legal processes of the time would have needed to own their personal seal, or at least have means of accessing a personal seal. And the point of the personal seal is that it's different from everyone else's seal. So, someone can look at that seal on the document and say, so and so made the seal, and no one else did. Of course, seal forgery was an issue that I think people worried about. And in the Middle Ages, certainly you do see cases in England in the Middle Ages, where someone is thought to have stolen someone

else's seal or seal matrix and then seal documents with it. And then this goes to court. And it's proven that the seal is actually the seal of a dead person that then this guy was able to get his hands on and started sealing documents with it. So, seal forgery wasn't a real issue. And of course, if someone in Boston say was walking on Boston Common and they found a seal of someone had dropped, which we know happened as there are lost ads for these lost seals. Then they could have used it and said that this is not me, but this is someone else and so they could use it for criminal purposes. So technically everyone then should have owned their own personal seal. And the seals from the lost ads that I've mentioned, we know that many of these seals were carved out of precious metal. So, we see that someone says in the lost ad, I've lost my seal which is carved out of gold or carved out of silver. And so, I would say that the seals are probably made by goldsmiths, silversmiths, jewelers in general probably made most of the seal matrices I think is plural actually. And so, for more middling type person working class person, perhaps they may not have had the money to buy their own personal gold or silver seal, but they may have used other less precious metals. I think there was a lot of seal borrowing going on, a lot of seals passing back and forth between family members and between friends in general. I see on documents in which a married couple puts their seals. They almost always have the same seal. Almost always, perhaps not every time but I can say confidently almost always the husband and wife have the same seal image. Now, sometimes you see a whole family selling something in the deeds I've been looking at and usually, so this is sometimes parents and their children, sometimes cousins, and they often have the same seal image. So perhaps each one of these people had their own personal seal. But at the ceremony of sealing the document, perhaps one person said, 'This is my seal. I think we should just all use this one seal,' and then they passed it around and sealed. That probably was easier than just everyone taking out or everyone bringing their own personal seal.

# Kanisorn Wongsrichanalai 15:30

This gets very confusing.

#### **Danny Bottino** 15:31

Oh, yes, it's a lot of there's a lot of stuff going on that wasn't written down, we can only get at it through the clues that are left. Sometimes they're very subtle clues.

#### Cassie Cloutier 15:45

While Danny was visiting the MHS, we asked Peter Drummey, the Massachusetts Historical Society's Chief Historian and Stephen T. Riley Librarian, to do what he loves most, show a document to a researcher. On this day, Peter showed Danny an interesting piece of New England history.

### Peter Drummey 16:06

This is a letter from William Bradford, the governor of Plymouth colony, to John Winthrop, the governor of Massachusetts Bay Colony. It's dated April 11th, 1638. So, it's a large piece of paper folded once, so it has the letter, the text of the letter is all on a single front page. And then because even though these are heads of two separate colonies, the most important people in these two separate colonies, Plymouth and Boston are only 40 miles apart, but there would be some time delay and delivery and his reply. So, he takes, he has this large sheet of paper with writing on the first page, but a blank second, third page and then an address on the back the fourth page of it. So, he opens it up. And he writes a memo, not really a copy of his letter, but a memo so that he can remember what his reply to this letter is. So, on that memo takes up half of the back page, the fourth page of the document, and on the other part of the last page is where the letter is addressed before it's folded up to make a little package out of it. I like showing this because you get you could argue two most famous men in early New England, writing in some respects, at least the line or two about the two most famous women because it starts out with Bradford inquiring about Anne Hutchinson. And she doesn't mention her by name, but one of Anne Hutchinson's adherence before later she became a Quaker was Mary Dyer. And so, you have William Bradford and John Winthrop, writing about Anne Hutchinson and Mary Dyer. And it's pretty much the trifecta for early New England all there on one sheet of paper.

#### Kanisorn Wongsrichanalai 18:12

Danny then took a look at the accompanying wax seal and described it for us.

### **Danny Bottino** 18:18

This is Governor Bradford's presumably personal seal. And it is about the size of a dime, perhaps a little bit larger, which is pretty typical for the personal seals of the 17th and, and 18th century. It is made of red wax, which is also quite typical. Almost all seals of this time period were made of the same color and type of sealing wax, and it is circular. In fact, you can see on the edges, the edge of the seal matrix, not all the way round, but most parts of it. So, this was a circular matrix or a stamp that Governor Bradford used. Perhaps it was a handheld stamp. If it was a signet ring, which is possible, it would have been a rather large signet ring, and he stamped it down into the hot wax. And the image on it is a mythological creature. It seems to be the creature known as the griffin. And so it's the body of a lion and the head of an eagle and it's quite well stamped and many seals I've seen are not well stamped and so the image is blurry or vague. Governor Bradford did a very good job here. He stamped it very forcefully. And it's very detailed and of course, even though it's quite old, one of the oldest seals that I've seen, oldest seal in this archive that I have seen. It is in perfect shape. There are no parts of it missing, which is very common. There are no, it's not broken into fragments or into pieces, which is also very common. I would guess that perhaps there is a part on top of the griffin, which may have broken off. But we can't be certain unless we look at other seals that Governor Bradford perhaps or there are other seals, they, he has stamped other documents. So, there may be a part of it missing. But I would guess that the seal that we have now has looked like this, really since it was stamped on this letter in 1638.

# Peter Drummey 20:31

My recollection is often these seals that accompany official documents are often attached to the document but have a like in a thin metal case to protect them. So, they'll remain intact. And as that have that emblematic value, and of course, everything that they did to sort of preserve that and preserve an intact seal complicates the storage and the retention of those by all the people have held records, either personally or institutionally since a sealed document is by its very nature, more three

dimensional than most of the documents preserved in archives. And I think it's I don't want to say tragedy because for your work, it certainly is. But I think that sometimes that there's been a lack of awareness of the importance of this, this would look like almost like a decoration upon a document rather than something intrinsically valuable in terms of thinking about that document and the authenticity of it. And I think that's where these wax seals are, which have a relatively low rate of survival. It's, in some respects, a misfortune, because I don't think there's enough of them that survive, for us to fully realize what was going on. And especially, because paradoxically, we have this pink stain that often comes from them. So, we have like the evidence of them, but the seal itself is essentially gone.

### Danny Bottino 22:15

Oh, yes, the ghost, yeah, I've seen quite a few of those pink stains on letters, but on deeds to where the seal has been taken or has fallen off. So, it was there, of course with letters another paradox is that the seals were meant to be broken.

#### Peter Drummey 22:31

Exactly and my suspicion is that even opening them through the era of envelopes well into the 19th century, you are getting not the we think of essentially letters as flat pages that sometimes folded. But when you got your letter in the 18th century, or before, you got like a little parcel that had a seal holding it all together as almost like a little three dimensional package. And that breaking the seal and opening it must have had a kind of a resonance itself apart from what was.

#### Danny Bottino 23:11

Breaking the seal has become a sort of idiom, too, I think it's entered the language, just as many of the legal phrases in these legal documents, most notably deeds, have become ordinary idioms.

#### Peter Drummey 23:27

Signed, sealed and delivered.

#### Danny Bottino 23:29

Signed, sealed, exactly that that is the big one because those were the physical actions that were needed. The three physical actions that were most critical to making the deed valid was so big a part of the culture of the early modern period that it's entered into the English language.

#### Peter Drummey 23:45

Well, thank you for your work. I'm certainly going to pay a lot more attention to the seals where I find them. And I think that there are, while, as I say the survival across large collections is small. It's interesting that there's I think it's paradoxically, if someone holds a significant position, John Winthrop, certainly, then people have been careful about the preservation and protection of his correspondence, essentially going back to his own life that doesn't guarantee their survival, but it probably because of his personal correspondence represents a measurable percentage of all the correspondence we have from that founding generation of European settlement. It's really important, but also, I suspect that it has a higher survival of surviving seals or fragments of seals, just because people have been more careful with it a longer for over a longer period of time.

#### Cassie Cloutier 24:52

During his trip to the MHS, we had to take the opportunity to show Danny the wax seals on one of the most consequential documents we hold in our collections. And for such a special occasion, we asked the series editor of the papers of John Adams, Dr. Sara Georgini, to join us.

# Sara Georgini 25:11

So, we had to show you a little bit of national treasure since you're here at the Adams papers. And I think probably in a quarter of a million manuscript pages, this might be my favorite document to show, and it's got seals aplenty. I was so fascinated to think about seals as you describe them as kind of cultural wallpaper that leave us little queues to help people do business, but also to think about the documents that they live on. Often in the Adams papers, we have a sad little descriptive note, we write some loss of texts where the seal was removed. And we're always trying to piece out the rest of the letter. But you're right, we should be looking at the seals too. One really good example, I

always think of the seals that we have. And there's all kinds of heraldic devices that the Addams' play around with as a family is on the definitive Anglo-American Peace Treaty signed and sealed September 3rd, 1783, just about eight o'clock in the morning, at the Hotel d'York in Paris. And the seals that you are about to see have a little bit of a story behind them. And the example I'm going to show you is right here. So, we're looking at a couple of kind of eight by 14 manuscript pages of text, really beautiful, flowing script, but list out the articles defining what's going to be a pretty difficult piece to uphold, between Great Britain and America ending the Revolutionary War. And so, we see the American Peace commissioners, we see John Adams' seal, Benjamin Franklin, John Jay. We see Richard Hartley, who's the British peace commissioner. And whenever I show this document to schoolchildren, they say it looks like bubblegum, those seals, it looks like something I could make with bubblegum, and we've done that it's pretty fun. So, what do you think of those seals? What's your first impression, if I may?

#### Danny Bottino 27:15

Well these seals are, I would say they're bigger than the seals that I usually see on 18th century legal documents. The personal seals that I usually see on these deeds are about dime sized, sometimes little bigger, and sometimes a little smaller, but the average is about dime size. And these are much larger, these are, say quarter sized, maybe a little bit bigger. But besides their size, they are the color of the wax, the red sealing wax is quite typical. It's exactly the same color that I've seen in hundreds of other seals. Sometimes I see seals made in black wax, sometimes green wax, that's probably the rarest. Black wax, I think is usually used for mourning purposes. So, I've seen letters sealed with black wax and when I read the letters, it's usually about someone close to the letter writer died. There's saying that 'Oh, I'm writing this letter because my father died.' And then you have a black seal. But these are typical red seals. And then as for the images on the seals, they all seem to be heraldry. And that is a very common type that I've seen. I would categorize the seals that I've been seeing as either heraldry type of seals with coats of arms on them. And all four of these seem to have variations of that. But then I also have seen animal type seals with no coat of arms, rather simply some sort of animal. Taking a closer look at the heraldry all four of these seals are heraldry seals, but they're all different. So, this shows, of course, that these four men were each

using their own personal seal. And my question, I suppose, would be we have John Adams at the top there. Is this a seal that he uses on other documents?

### Sara Georgini 29:13

Diplomacy has a very distinct choreography and a culture of symbols that goes along with it. Few people, I think, understand this, like the American peace commissioners because they are supposed to be revolutionaries overturning an empire and a monarchy and yet they need to burnish their credentials on the world stage. Part of that means inventing or broadcasting their lineage in a very acceptable way. So, when Benjamin Franklin is at Passy and he operates a printing press he has to come up with some kind of coat of arms to issue passports. John Adams when he arrives in France discovers the same thing. He has to sort of MacGyver together some kind of impressive family tree which he has on his mother's side more probably than his father's side at this point that will persuade the French of his diplomatic acceptability and his legal prowess. So, the first seal that he really uses is something that cues us to his own way of reinforcing New England interests on the international stage. When he first shows up, and he starts work on the preliminary peace treaty that signed November 30th, 1782. He is focused on a couple of issues that have not quite been settled. We have with the preliminary peace treaty, the understanding that Britain now recognizes in the United States as a sovereign nation. We have an explicit understanding that this new nation's boundary ends, right, Mississippi River, nothing else has really been settled. And he is focused on a few things, the settlement of the northern boundary, Newfoundland fishing rights, and kind of where our boundaries will move to. So, he has a seal made that communicates what he does next with the preliminary treaty. It's a pine tree, a deer, and a fish with an arc of 13 white stars. And this is the first seal that he uses on the preliminary peace treaty. He's very proud of his intervention and his partnership with John Jay. And this seal really communicates to the British. And because we might think of a treaty as a letter to the world about an agreement to the broader globe, exactly where America is headed. So, this is the first seal he uses. But then for this definitive peace treaty, he uses a totally different seal. And what he uses is the Boylston family arms. These are his mother's arms on what is probably the most famous document that he will affix his actual name and seal to he uses his mother's coat of arms, which show a lion passant holding a cross, I think, in its dexter

paw, later on, he'll tweak the seal a little bit, he'll add in some fleur-de-lys. This seal will go through a number of edits as seal sometimes do, right? And they're meant to not only lay down and communicate that family lineage on the world stage. But the seals then become and I wonder if you've seen this before, a place to reflect accomplishments in the family or the seals kind of change over time, which is a really interesting sort of archival mirror and I think speaks exactly to what you're doing.

# **Danny Bottino** 32:39

Yes, definitely. I'm really struck by the fact that this heraldry image on John Adams' seal is what we could say perhaps a real heraldry image. And that can be traced down through his own family. This is not something that he just went to a jeweler and said, I want to have a seal. I want to have this heraldry on it,' and just made it up or had someone make it up for him. This was what something that only perhaps the highest-ranking 18th century colonists could do is that they had a family history of arms in their family, and then they could use this to put on their personal seals. And as I've mentioned, there are so many heraldry type seals that of course, the question is, were most of these coats of arms just made up? How many of them had a real history, right? Of course, at some point, all coats of arms were made up, right? But how many of these colonists, some of whom were rather humble people who, nevertheless, have quite a fancy shield, and sometimes they have very intricate images on this shield. How many of these actually have a two-family history? And of course, for Franklin, I know that Benjamin Franklin was quite interested in his own family's history. And as a printer too, it's just a thought that's something I've just I've just thought of the art of sealing must have been something that was close to him, or is this quite different from printing books, however. And I suppose my question to you is, when Adams was writing personal letters, did he use seal, or did he use a different seal?

#### Sara Georgini 34:24

So, we know that he used the pine tree, deer and fish seal to his friend William Gordon, a British correspondent who actually complimented him on how beautiful the device was that he used to seal his letter and then wouldn't you know, he ripped the manuscript so I don't have a full image of it.

In any event, he used that seal he passed it on to his grandson John Adams, the second it's since been lost and a replacement was made by John Quincy adding in Horace, epistle. I think it's from the first book line about hunting, fishing, continuing the story when he moved to sign the Treaty of Ghent. We do know that one other person used the Boylston family seal as well. And that was Abigail which she wrote to him at least once when he was enroute to Europe. So, was there more than one device that they have at home? Was it something where they traded back and forth? She certainly didn't send it to him. But they always called this the treaty seal. So, the family seal, his mother's arms became known as the treaty seal. But everyone had literally a hand in using the seal, which I think is quite interesting. Do you see that a lot, where whole families just kind of share a seal around like that?

### Danny Bottino 35:38

Yes. We were just talking about that earlier. In fact, that's very, very common. And going into my fellowship work here, I had thought, based on the fact that we call these personal seals. So, in theory, each person is meant to have a different image. But when I see a married couple sealing a deed, which is very common, almost always, they have the same, the same seal. Actually, I've just found a deed which has about a large number of seals on it about eight seals, maybe usually on these deeds, I see three or four seals maximum. But this one has a large number, and they're all one family that selling property, and everyone seals with the same seal. And this is normal. And I think that what was going on here was that this was seen as a family seal. And so, who was selling this property was not each of these individual people, but rather the family as a whole. So even if these other people had their own personal seals that perhaps they use when they were writing private letters or selling land, or making their own will and it was just them right, then they use their own seal. But when the family is making a sale in this deed here, then just one seal is used, I think to emphasize the unity of the family. And so, they'll probably take the seal matrix and pass it around, so probably someone stamps and they pass it to the next person and so on. And as for whether there were multiple matrices of the same seal, I think that that was quite likely too within the family. I think that perhaps for a married couple, they probably each owned their own seal stamp with the same image on.

#### Cassie Cloutier 37:37

Despite being a staple in the legal practices of the 17th and 18th centuries, and an important element of colonial culture, the world of wax seals, and the devices used to make them are long in the past. But thanks to researchers like Danny Bottino, we are able to get a glimpse into this culture of rituals and representation in wax. And we are even able to understand what remains of this culture with expressions that we still use today.

# Kanisorn Wongsrichanalai 38:16

[Outro music begins] You can learn more about Danny's research by visiting the Beehive, the MHS blog. We shall add some links to Danny's posts in the show notes. And, of course, to look at some of the wax seals discussed in today's episode, visit our show website at www.masshist.org/podcast

#### Cassie Cloutier 38:41

The Object of History was produced by the research department at the Massachusetts Historical Society. We would like to thank Danny Bottino, a PhD candidate at Rutgers University, Dr. Sara Georgini, the series editor of the papers of John Adams at the MHS, Peter Drummey, Chief Historian and Stephen T. Riley Librarian at the MHS and Alyssa Machajewski, Podcast Producer at the MHS. Music in this episode is by Dominic Giam of Ketsa Music and Podington Bear. See our show notes for details. Thank you for listening