Sidedoor Season 5, Episode 2: The Last Man Who Knew It All

[MUSIC]

Lizzie Peabody: This is Sidedoor, a podcast from the Smithsonian with support from PRX. I'm Lizzie Peabody.

[MUSIC]

Lizzie Peabody: Once upon a time, there was a sweet, little girl. This little girl was a little like Lisa Simpson. She always wore the same outfit. It was a bright red cape with a hood and this personality quirk earned her a nickname, Little Red Riding Hood. One day, Red's Grandma gets sick. Her Mom cooks some soup and makes a list of favorite podcasts, and sends Red into the woods to bring this care package to her Grandmother's house. But once Red is in the woods, she tells a wolf where her Grandmother lives.

[MUSIC]

Lizzie Peabody: And the rest, as the Grimm brothers tell it, is a horrifying nightmare.

[MUSIC]

Dr. Hans Sues: I was always amazed at Red Riding Hood would mistake a wolf for her Grandmother. (Laughs). Even dressed up, a wolf is still a wolf. (Laughs).

Lizzie Peabody: (Laughs).

[MUSIC]

Lizzie Peabody: It's a story Hans Sues grew up with in Germany. Today, he's a Paleontologist at the Smithsonian's National Museum of Natural History.

Dr. Hans Sues: These are all wonderful tales that go way back. I mean, the Brothers Grimm just compiled those tales, some of them date back to the early Middle Ages, some possibly even earlier.

[MUSIC]

Lizzie Peabody: And Hans says it's not an accident that the story gets a little hairy once Red enters the forest.

[MUSIC]

Dr. Hans Sues: Forests always were a place of mystery. So, there has always been some mixture of fascination and fear about forests. So that's why, like, even in Germanic and Celtic mythology, forests have always had a very important position.

Lizzie Peabody: These attitudes about forests persisted for centuries, well into the era where Europeans crossed the ocean to colonize America's east coast.

Dr. Hans Sues: They were very religious people. And of course, they saw the forest as the potential domain of Satan and witches and you know whatever you have, so a place of danger, something that you actually had to somehow conquer.

Lizzie Peabody: Because American colonists had to cozy right up to the edge of the forest, they felt they needed to tame it.

Dr. Hans Sues: They thought about nature in that sort of Biblical sense that nature was out there to be exploited, basically made man's domain.

Lizzie Peabody: And this idea of, "making nature man's domain" prevailed in America, even after the country gained independence. Until one man held a mirror up to the young country and said, "this wilderness is part of who you are."

[MUSIC]

Lizzie Peabody: That was Alexander von Humboldt.

[MUSIC]

Lizzie Peabody: This time on Sidedoor, we tell his story, the man, who used science to show us that every part of the natural world is connected, from wolves to grandmothers, to lichen and squid. And who helped us, people in the United States, form a national identity around a radical new idea: that nature is not to be tamed, but to be cherished.

[MUSIC]

Lizzie Peabody: Back in the late 1700s, when the forest still held a bit of black magic, a young Alexander von Humboldt was growing up, and he loved the woods! Here's the National Museum of Natural History's resident Humboldt historian, Hans Sues, again.

Dr. Hans Sues: Young Alexander from Humboldt would go out in the forest to look at things. So, that there was always sort of a magical realm away from civilization, yet accessible in most places

Lizzie Peabody: Humboldt grew up in Prussia, an 18th and 19th century kingdom that included chunks of modern-day Germany, Denmark, Poland and Russia. His family was minor nobility. They had lots of money, fancy houses, and the best tutors. Young Alexander's favorite things to learn about were the plants and animals around him But, with that type of upper-crust life, came certain expectations. Prince Harry knows what I mean.

Dr. Hans Sues: His mother had high hopes that he would become a Prussian government official because that's what you did in those days. But clearly, it wasn't the thing that sort of made him get up in the morning.

Lizzie Peabody: Young Alexander was a tinkerer, his mind always working. One of his first jobs was as a mining official. And even in a job he didn't love, he was driven by curiosity.

Dr. Hans Sues: He was the first one to develop a safety lamp for the mines. He tried to think about respiratory equipment, because in those days, there were absolutely no regulations

regarding mining safety. You know, you were lucky if you got out of your mine at the end of the day.

Lizzie Peabody: Hmm.

Dr. Hans Sues: And if it didn't happen, people would just shrug their shoulders. You know, it was part of the job.

[MUSIC]

Lizzie Peabody: When Humboldt wasn't saving the lives of miners, he indulged his real passion: studying plants and animals. He took trips to London to speak with botanists who had sailed around the world and seen plants from places he fretted he'd never see. This was the stuff that got him out of bed in the morning. And someday, he hoped to be on a ship to see them firsthand. And these talks gave Humboldt an idea, one he wanted to test. As he studied plants at home and read reports from afar, he gained this sense that plants, animals and climate, all around the world, were interconnected. When Alexander was 27, his mom died. He inherited piles of cash, and more importantly, freedom from her expectations. He would not be a bureaucrat forever! Humboldt could finally chase his dreams.

[MUSIC]

Dr. Hans Sues: He thought like, I'm done with all this government official stuff. I just want to see the world.

[MUSIC]

Lizzie Peabody: Liberated from expectations and flush with cash, Humboldt was free, but finding a place he could visit was surprisingly hard.

Dr. Hans Sues: He wanted to go to India. That didn't work out because of all the colonial wars there. He tried to go to Egypt, but this was around the time that Napoleon was fighting in Egypt.

Lizzie Peabody: Eventually, Humboldt set his sights on Spain's colonies in South America.

Dr. Hans Sues: I think a lot of people thought he was plainly insane to even attempt to do this.

Lizzie Peabody: In 1799, people didn't just casually visit the Amazon. It wasn't like Humboldt could just book a ticket; he needed special permission from none other than the King of Spain.

Dr. Hans Sues: But somehow Humboldt could really sweet talk people and, to put it nicely, bamboozled his way... (Laughs).

Lizzie Peabody (Laughs).

Dr. Hans Sues: ...into the Spanish royal house and got permission to travel those countries.

Lizzie Peabody: Since Humboldt's excellent adventure was a self-funded scientific journey to prove his radical notions, he needed to collect a lot of data while he was in South America. And to do that, he needed a team. He couldn't survive Venezuela's jungles alone. Here's Eleanor Harvey. I think of her as a historian, but she insists she's an art curator.

Eleanor Harvey: I am absolutely an art curator. I happen to be a historian because, in order to be an art curator, you have to know the history, the language, the music, the religion, the politics, the political cartoons; otherwise, the art doesn't make much sense.

Lizzie Peabody: Harvey is Senior Curator at the Smithsonian American Art Museum and has created a new exhibition on Humboldt, who in the summer of 1799, was on a ship headed for South America.

[MUSIC]

Lizzie Peabody: And he made sure he didn't forget anything.

[MUSIC]

Eleanor Harvey: He brought 42 different instruments, each one in a velvet lined mahogany box...

Lizzie Peabody: What?!

Eleanor Harvey: ...that was carried by assistants and porters. He had sextants and thermometers. He had the ability to gauge temperature, humidity. He had multiples. He had a favorite barometer, which shows up in a number of his portraits.

[MUSIC]

Lizzie Peabody: After 41 days at sea, Humboldt and his many, many instruments disembark in Venezuela. And the first thing Humboldt does when his feet touch South American soil is take the temperature. A steamy 99.8 degrees Fahrenheit. And in this way, Humboldt starts exploring this continent largely unknown to European science. And it's almost as if he doesn't even know where to start.

[MUSIC]

Eleanor Harvey: He is measuring everything that he can, but from the atmosphere to the climate to the altitude. He is gathering plants. He is collecting samples. He is writing up everything. He's talking to all of the local indigenous people because he knows they know more about the landscape than the Spanish colonial overlords who were there.

[JUNGLE SFX]

Lizzie Peabody: It's worth mentioning: HumboldIt is a European, exploring ideas about nature that he developed with the best information he had in Europe. The indigenous people who already lived in the Americas, they had their own ways of seeing nature, which Humboldt was curious about.

[JUNGLE SFX]

Eleanor Harvey: He's tasting river water, trying to taste the difference between the Amazon and the Orinoco. He's actually licking the bark of trees because he hears that the local Indians can actually distinguish tree types based on the sap and he's very disappointed that he is not able to differentiate.

Lizzie Peabody: There are stories about how Humboldt tested the power behind electric eels by grabbing them from the water. Nothing escaped his curiosity. And for the next few years, he traveled South America.

[JUNGLE SFX]

Eleanor Harvey: Sailing, walking, reading, licking, writing, drawing, sailing, walking, reading, licking...

[JUNGLE SFX]

Lizzie Peabody: Humboldt was particularly interested in the relationships between plants and their surrounding environment. And to prove his theory, Humboldt and his team went to some extreme lengths or extreme heights, I guess. Because in pursuit of data, he decided to climb what was then thought to be the world's tallest mountain: Mount Chimborazo.

Eleanor Harvey: Chimborazo was believed to be the highest peak on the planet at the time, close to 21,000 feet.

[MUSIC]

Lizzie Peabody: And Humboldt decides, "In the name of science, I will conquer this mountain." It was June, 22nd, 1802, almost three years to the day after he left Spain. By this time, Humboldt had climbed plenty of volcanoes, but he hadn't ever tried climbing anything like Chimborazo, and he wasn't just climbing.

[MUSIC]

Eleanor Harvey: Humboldt, employed a number of guides who were willing to help carry his equipment up the mountain, so that he could stop periodically to take measurements to collect samples.

Lizzie Peabody: At first, things went fine. But 15,000 feet up, the climb got sketchy.

[MUSIC]

Eleanor Harvey: You're talking about crevasses and glaciers and wind driven snow. Their gums are bleeding.

Lizzie Peabody: Oh!

Elanor Harvey: Their feet are bleeding. Their eyeballs are bleeding.

Lizzie Peabody: (Gasps).

Eleanor Harvey: It's not very pleasant.

[MUSIC]

Lizzie Peabody: Humboldt's guides quit, but through the bloody feet and gums, Humboldt continues collecting data and taking notes. Just below Chimborazo's summit, they get to an impassable crevasse; otherwise, known as a huge crack.

[MUSIC]

Eleanor Harvey: And so, they realize at 19,413 feet, they can't get to the summit, but it is a mountaineering record that stood for 30 years.

Lizzie Peabody: And Humboldt came out of this with more than just bragging rights.

Lizzie Peabody: So, through all of this climb up Chimborazo, he was collecting data. What did he do with that information?

Eleanor Harvey: He pulled that information into the core of the Naturgemalde.

Lizzie Peabody: That's Naturgemalde or, as Hans Sues would say...

Dr. Hans Sues: Naturgemelde. A nature painting literally. (Laughs).

Eleanor Harvey: His picture of nature, half watercolor, half didactic information, columns of information on either side. It was an infographic that in essence summed up four years of travel in South America and Mexico correlated, against 10 years of travel and study in Europe.

[MUSIC]

Lizzie Peabody: Okay, we're going to take a moment to describe this nature painting that Humboldt made because it's really important to understanding his biggest idea. Imagine a page divided into three segments and in the center, Naturgemalde shows Mount Chimborazo.

[MUSIC]

Dr. Hans Sues: You see the mountain itself, snow covered at the top, and then sort of gradually grading down into greener and greener areas, until it's down here in the rain forest.

[MUSIC]

Lizzie Peabody: On the mountain's right half, it's been sliced open and Humboldt has filled the space with names of the plants he found at different altitudes.

[MUSIC]

Dr. Hans Sues: It has all kinds of words and things listed on it.

[MUSIC]

Lizzie Peabody: This single illustration offered Humboldt's audience a brand new way to understand the planet and all life on it.

[MUSIC]

Dr. Hans Sues: Humboldt realized that you can't see plants just in isolation, if you want to understand the environment. So, he actually started looking what species co-occur. How is this occurrence influenced by climate?

[MUSIC]

Lizzie Peabody: His goal was to show how mountain ecosystems all around the world have similar plants at similar altitudes. The image also argued that altitude and latitude mirror each other.

[MUSIC]

Eleanor Harvey: He extrapolated that if in going from sea level at the equator, up 19,000 feet close to the top of Chimborazo, that he would see the same kind of changes as if you walked from the equator to the North Pole. And if you think about it, you would go from tropical zones to temperate zones, to taig to tundra to permafrost to year-round glaciers.

[MUSIC]

Lizzie Peabody: Naturgemalde was an illustration that showed how all plants were connected. Humboldt called his idea, "the unity of nature."

[MUSIC]

Dr. Hans Sues: So basically, he was the father of plant ecology. He's the first real ecologist.

[MUSIC]

Eleanor Harvey: And Humboldt is one of those natural historians who understands that art and science need to work hand in hand. And what he's really doing in 1805 is throwing down the gauntlet for the rest of his life, he will be amplifying the concept that is anchored in this picture. This is the foundation of everything else Humboldt does.

[MUSIC]

Lizzie Peabody: Coming up after a quick break, Humboldt visits a young country that is working to establish its own national identity. That's right! He comes to the United States and plants the seeds for, "the best idea America ever had," the National Parks system.

[MUSIC]

Lizzie Peabody: Welcome back! So, what you need to know is this: at the beginning of the 19th Century, a young man named Alexander von Humboldt was traveling around South America, studying his idea that all plants and ecosystems around the world are connected. He called it, "the unity of nature."

[MUSIC]

Lizzie Peabody: Now, right around this time, in 1803, America's own polymath, President Thomas Jefferson, bought the huge chunk of turf now known as the Louisiana Purchase and it doubled the country's size. But nobody in the Eastern states really knew what was out there.

So, Jefferson sent two military guys named Meriwether Lewis and William Clark on an expedition to go find out. Meanwhile, Jefferson was desperate to earn the young country some respect from Western Europe, but that continent's philosophers, scientists and other thinkers kept making fun of us! They said everything in America was worse than in Europe. They even called American people and its wildlife degenerate. Eleanor Harvey told me!

[MUSIC]

Eleanor Harvey: Robust Europeans, who come to live in the United States, become smaller and weaker as a result of the bad climate here.

[MUSIC]

Lizzie Peabody: No!

[MUSIC]

Eleanor Harvey: Yes.

[MUSIC]

Lizzie Peabody: Huh! Personally, I'm feeling a little insulted here and so was Thomas Jefferson. So, with all this going on, Jefferson hears that this little-known, wealthy Prussian explorer, who has been running around Spanish America, wants to meet him. And Jefferson says, "Why not?"

[MUSIC]

Eleanor Harvey: He and Jefferson get along like they are twins separated at birth.

[MUSIC]

Lizzie Peabody: Like the best of friends, Humboldt and Jefferson talked about their interests and their anxieties. Jefferson complained to Humboldt that he couldn't get any respect from these Europeans! Humboldt told him, "Forget those guys!"

Eleanor Harvey: So, Humboldt has been all over South America, refuting this right and left going, "No, the Carib Indians are basically like men of iron and this is stronger and this is bigger and I found mastodon teeth in the Andes and this is all poppycock."

Lizzie Peabody: Poppycock! Humboldt really drives this point home that America is rich in natural beauty. Old forests and dramatic nature that Europe can't compete with! He tells all of this to Jefferson.

Eleanor Harvey: There's a sense perched here in the United States, early in the 19th century, that we're surrounded by wilderness. We have a chip on both shoulders that we're not considered sophisticated enough or politically strong enough in order to hold sway on the world stage. What Humboldt does is encourages us to believe that the pilgrimages you would make to Cathedrals in Europe have their moral equivalent in that therapeutic value of a walk in the woods.

Lizzie Peabody: They had Notre Dame, we had Niagara Falls!

Eleanor Harvey: We have created a national identity grounded in our landscape. It starts with Jefferson. It is given a huge boost by Humboldt and that is what carries us through the middle decades of the 19th Century.

Lizzie Peabody: It's this idea that the Europeans, who originally came to North America to settle, had been fundamentally changed by the wilderness that surrounded them. Humboldt encouraged Americans to lean into this difference.

Eleanor Harvey: So, instead of cultivating gardens, we go for a walk in the woods. We learn to find God in the wilderness, not the devil.

Lizzie Peabody: After Humboldt's time with Jefferson, he returned to Europe and became a prolific writer. He published 36 books and wrote more than 25,000 letters to scientific collaborators all around the world.

Dr. Hans Sues: If you were even halfway educated, you would have definitely known him and likely read at least one of his works.

Lizzie Peabody: Humboldt was a star, especially back in the U.S.

Eleanor Harvey: It's like a Humboldt fan club in the United States that permeates American education and American literature and will bleed straight into American art, which brings us to our boy Fred.

Lizzie Peabody: Yeah! Freddie! That's Frederic Church, to you.

[MUSIC]

Lizzie Peabody: Who is Frederic Church?

[MUSIC]

Eleanor Harvey: Frederic Church became the single most influential American landscape painter of the 19th century. I think I can get away with saying that. Um...

[MUSIC]

Lizzie Peabody: You're the curator!

Eleanor Harvey: I'm the curator

[MUSIC]

Lizzie Peabody: You're the boss.

Eleanor Harvey: Exactly.

[MUSIC]

Lizzie Peabody: The single most influential American landscape painter of the 19th Century was himself influenced by Humboldt. Although he was born more than a half century after Humboldt,

Church idolized him. He especially appreciated Humboldt's idea that art is better if it's scientifically accurate.

[MUSIC]

Eleanor Harvey: There's actually a really cool quote where Humboldt basically says, you know, "you can marvel at the stars as they twinkle in the sky, but they move in their orbits in mathematical precision," and he's equally happy with both of those ideas. And I think it's that that he conveys to Frederic Church, which is, learn your world, do the hard knowledge, bother to sweat the details, and then step back and marvel at the fact that we live in a place that has given us this much visual beauty in the service of nature.

Lizzie Peabody: Church and a close friend who happened to be an independently wealthy Humboldt fanatic named Cyrus Field. They decided to recreate Humboldt's trip to South America. And I mean, almost literally.

Eleanor Harvey: And so, for seven and half months, Church and Field are basically on a Humboldt reunion tour.

Lizzie Peabody: And as Church hunts for hints of Humboldt around South America, he also studies the trees, rivers and rocks, taking his own detailed notes. He noted their shape and color, so that he could paint these landscapes down to the smallest flower.

Eleanor Harvey: So, this is a moment when Church is absorbing Humboldt's ethos. He will become known as the painter whom Humboldt so longs for, basically the American Humboldt in American art.

Lizzie Peabody: Even when Church returns home, he filters everything through Humboldt's eyes. And to help my eyes see Church's work, Harvey and I walked over to the Smithsonian American Art Museum.

Lizzie Peabody: We looked at one of Church's paintings titled, "Cotopaxi," which is the name of a mountain in the Andes. The painting shows a snowcapped volcano, that's Cotopaxi. And a little farm sits in a clearing in this rugged wilderness.

Eleanor Harvey: That hacienda is actually the same one Humboldt stayed in 55 years earlier when he was near Cotopaxi.

Lizzie Peabody: It's a big natural landscape. And Harvey says it's easy to see Humboldt's influence in the detailed nature.

Eleanor Harvey: They're all of the little flowers in the foreground, the, the little red flowers and the yellow flowers, the trailing vines, the bromeliads, the trees, his brushwork is so exquisite. It's so small scale and yet you can see every leaf flipping in the breeze. He's got that acuteness of vision. He picks up on all of the little details. He does not generalize and that's what sets him apart.

[MUSIC]

Lizzie Peabody: Alexander von Humboldt died in 1859. By this time, his influence was everywhere, not just in visual art, but literature and poetry; all of which steeped following

generations in Humboldt's ideas. If there's a knock on his legacy, it's just that he refused to focus on anything for very long, but Hans Sues says this helped Humboldt make connections across the scientific spectrum.

[MUSIC]

Dr. Hans Sues: In some sense, Humboldt was one of the last people who kind of knew everything that there is to know about science because this was in the period long before any kind of specialization. Obviously, the body of knowledge in those days was much, much smaller, but because he had this broad exposure to different areas of science, he was able to sort of combine things that probably most modern scientists could no longer do, you know. We're just way too specialized and to get sort of a whole picture, we now need basically a group of people.

[MUSIC]

Lizzie Peabody: When Humboldt found something cool, he'd send it to someone who was an expert. And then...

[MUSIC]

Dr. Hans Sues: ... off to the next thing, you know. Oh, look at that orchid over there (Laughs), or that mountain!

[MUSIC]

Lizzie Peabody: Humboldt's curiosity was his superpower, but it was also the thing that prevented him from making discoveries on his own. His expert friends looked out for him though because they kept naming things after him.

[MUSIC]

Voice: The scientific name is the Dosidicus gigas, which means the giant who abides by the law, but the common name is Humboldt Squid.

[MUSIC]

Voice: The Humboldt penguin is named after Alexander von Humboldt.

[MUSIC]

Voice: Hacienda de Humboldt is a place in Chihuahua.

Voice: We were talking about the Humboldt River that runs across the state of Nevada!

[MUSIC]

Voice: If you can imagine the Humboldt crater, like a cup.

[MUSIC]

Voice: Humboldt neighborhood, Portland, Oregon.

Voice: The Humboldt Caracas.

Voice: Humboldt County, California.

Voice: Humboldt University in Berlin

[MUSIC]

Voice: Humboldt squirrel monkey.

[MUSIC]

Lizzie Peabody: And many more!

[MUSIC]

Lizzie Peabody: Ten years after he died, one of Humboldt's students made a speech in Boston where he said, "every school child in America has been taught by Humboldt, but nobody knows his name."

Eleanor Harvey: So even by then, what had happened is all of Humboldt's really interesting ideas had been adopted and built on by a generation of scientists. We now know their names. Humboldt is not considered the founder of any one of the professional sciences, but he influenced the foundation layer of research in each of those areas.

Lizzie Peabody: It doesn't help that shortly after the turn of the 20th Century, the United States and its allies fought back-to-back wars against Germany. So, Americans became suspicious of anything that looked or sounded German.

Eleanor Harvey: German language books came off the shelves in American libraries, street names were changed, towns were renamed, Humboldt celebrations, which had been happening every 10 years since 1859 stopped and he just faded out.

[MUSIC]

Lizzie Peabody: Harvey and Sues agree that although Humboldt's living memory as a person was erased in this country; his ideas haven't gone anywhere.

[MUSIC]

Dr. Hans Sues: I think Humboldt's most enduring legacy is that he inspired a great many people to think about the conservation of nature, that people were in nature, not out of nature. And that was something that was really influential in the development of our national park system.

[MUSIC]

Lizzie Peabody: The National Parks, land set aside for "the enjoyment of future generations" have been called, "America's best idea," but that idea might not have taken root, without the hyperactive Prussian explorer and his favorite barometer.

[MUSIC]

Eleanor Harvey: In 1957, Wallace Stegner, I think put it really well when he said, essentially, "we aspire to build a culture to live up to our scenery." What it culminates in really is the development of the national park service and that is really Humboldt's legacy.

[MUSIC]

Lizzie Peabody: You've been listening to Sidedoor, a podcast from the Smithsonian with support from PRX.

[MUSIC]

Lizzie Peabody: The exhibition that Eleanor Harvey spent the last six and a half years curating is called, "Alexander von Humboldt and the United States: Art, Nature and Culture." It will open at the Smithsonian American Art Museum in Washington, D.C. soon. Check their website to find out when.

[MUSIC]

Lizzie Peabody: If you want to see Frederic Church's painting, "Cotopaxi," the one we describe in the episode, subscribe to our newsletter at si.edu/sidedoor. We'll also share some facts about Mastodon teeth that just didn't fit in this story, but are weird and interesting. And definitely follow us on Twitter and Instagram @Sidedoorpod!

[MUSIC]

Lizzie Peabody: Also, if you're new to the show, or even if you aren't, leave us a review in Apple Podcasts. We love reviews! And it helps new audience members find us. Special thanks to Eleanor Harvey, Hans Sues, Laura Baptiste, Tina Tennessen, Meriah Miracle, William Gilly, Andrew Offenburger, Micha Webley, Boris Nietzshe, D'Ette Mawson, Patrick Kiger, Rory Wilson, Harald Heisinger and Ashley Hall.

[MUSIC]

Lizzie Peabody: We also want to shout out Andrea Wulf's book called, "The Invention of Nature: Alexander von Humboldt's New World." It was critical in the reporting of this episode.

[MUSIC]

Lizzie Peabody: Our podcast team is Justin O'Neill, Nathalie Boyd, Ann Conanan, Caitlin Shaffer, Jess Sadeq, Lara Koch, and Sharon Bryant. Episode artwork is by Greg Fisk. Extra support comes from John, Jason and Genevieve at PRX. Our show is mixed by Tarek Fouda. Our theme song and other episode music are by Breakmaster Cylinder.

[MUSIC]

Lizzie Peabody: If you want to sponsor our show, please email sponsorship@prx.org.

[MUSIC]

Lizzie Peabody: I'm your host, Lizzie Peabody. Thanks for listening!

[MUSIC]

Lizzie Peabody: For not a historian, you sure know a lot about history. You've got, I would say, arguably the most Humboldtian approach to your work.

Eleanor Harvey: I would love to be Humboldt when I grow up, but I'm eight languages behind and it's not gonna to happen.

Lizzie Peabody: (Laughs).

Eleanor Harvey: But um, you know!