the acoustic world of Elizabethan England.

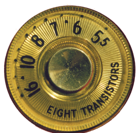
The Isle is full of noyses,sounds, and sweet aires, that give delight and hurt not: Sometimes a thousand twangling instruments will hum about mine eares; and sometime voices, That if I had then wak'd after long sleepe will make me sleepe again…

(Caliban. The Tempest)

by:
Chris Brookes
Alan Hall
Paolo Pietropaolo

length: 52.27

Production:



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Co-production:

Falling Tree Productions

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Summary:

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Four centuries ago... did people listen in a different way than we do now? How different were the sounds that they heard? And can we tune into their auditory world?

The inhabitants of Elizabethan England were gripped by sound far more strongly than we are today, and their understanding of sound was shaped by then-current notions of anatomy and physiology. They not only listened differently, but they heard different sound, and listened to a wider variety of it than we do with our modern ears. Their acoustic matrix was more complex, their "heard horizon" further away, and in terms of acoustic ecology more "populations" of sound existed before later industrial society threatened many of those sound "species" with extinction.

The feature attempts a kind of acoustic archaeology, tracking down some ancient sounds that still exist, evoking others which have become extinct, and building a soundtrack to help us imagine the noises of Elizabethan society through the ears of those who listened four centuries ago.

The program was inspired by Bruce Smith's book *The Acoustic World of Early Modern England*, and coproduced by **Battery Radio** and **FallingTree Productions.**

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A shorter version of this programme has been broadcast on BBC Radio 3, and a longer version on CBC Radio 1.

MUSIC: *"Hark! Hark! Hark!" (Ravenscroft: The Country Cries)*

JOHN DREW: It was a different world then. It's all changed now.

SOUND: *Telephone rings*

CHRIS BROOKES: Recording....

SOUND: *Telephone rings*

PAOLO PIETROPAOLO: Recording…

SOUND: *Telephone rings*

ALAN HALL: Recording…

SOUND: *telephone picks up*

PHONE MAN: Hello, hello, hello?

BROOKES: Hello! Could I ask you to do me a favour with that telephone for about 30 seconds?

MAN: Go on.

BROOKES: I'm collecting the sounds all around London, so would you just hold the phone up in the air so I can record the sound at that payphone location?

MAN: Okay.

BROOKES: What exactly is the location?

MAN: Leicester Square.

BROOKES: All right. Just hold it up in the air, would you?

MAN: All right. Thirty seconds?

BROOKES: Yes.

SOUND: *Leicester Square sounds*

MAN: Is that okay?

BROOKES: Lovely. Thank you.

MAN: Thank you. Bye.

BROOKES: Bye.

MUSIC: *Anthony Rooley plays The Frog Galliard (Dowland)*

SMITH: I'm Bruce Smith, I'm a professor of English at the University of Southern California, and I was reading somewhere that every sound that had ever been made within the earth's atmosphere still exists somewhere, however faint those frequencies are. And that if we just had the right kind of technical equipment, we could hear

the voice of, perhaps, Shakespeare himself playing the ghost in Hamlet. And I asked myself then: are the sounds of the past gone forever?

SOUND: *Footsteps*

BROOKES: Good exercise.

STEEPLEKEEPER: It's excellent exercise, absolutely. Just under 200 steps al the way to the top. And we'll have done them all by the time we go, don't worry.

SMITH: All of us live in a distinctive soundscape, whether we pay attention to it consciously or not.

BROOKES: You do these every day, I presume?

KEEPER: I don't, fortunately.

SMITH: We're part of a sound world. I think what's changed is our awareness of those sounds and our lack of acuity in being able to hear what is out there for all of us.

SOUND: *Footsteps pause, door opens. Outdoor atmosphere.*

KEEPER: We're on the top of the tower at St. Mary le Bow, in London. The sort of things you can see from here are… that church there is St. Michael's Corn Hill…

BROOKES: That place with the dome?

KEEPER: No, it's the tower just up to the left of the dome. That's St. Michael's Corn hill

BROOKES: Oh yes.

SMITH: When we look at something we feel as if we're casting our gaze, that it's starting with us, and it's moving toward an object that's out there. You know, actually in Shakespeare's time there were still many people who thought that's exactly what happened when you look. That light beams were actually sent out from your eyes and touched the object that you were looking at, and then came back to your eyes.

KEEPER: …and off in the distance you can see Canary Wharf, right in the distance…

SMITH: I feel very much in control of what I see.

BROOKS: …That's that tent-like structure there, that's Canary Wharf?

KEEPER: Right out in the distance, so behind the cranes there…

BROOKES: Yes, yes…

SMITH: Hearing works the other way around. When we listen to something, we're locating the source of the sound not in ourselves but in the object that's making the sound. So it's an exact reversal.

BROOKES: Would you close your eyes, and tell me each sound that you hear?

KEEPER: Okay. I can hear a helicopter in the distance. I think I can hear an air conditioning unit. I think I can hear a bus…

SMITH: Hearing is not linear. It's like a sphere.

KEEPER: …certainly the brakes of a bus. An aeroplane somewhere in the distance…

SMITH: We're surrounded by sound.

KEEPER: …and certainly lots of traffic…

SMITH: Sound is above us, below us, behind us, to our right, to our left…

KEEPER: …and I can't hear any people or any birds, or any bells…

SMITH: Sound is totally enveloping experience.

KEEPER: It's… predominantly it's the aircraft and the traffic noise that you hear.

SMITH: We're immersed in the sound.

SOUND: *atmosphere begins to swirl*

BROOKES: What do you imagine you would have heard four centuries ago, up here?

KEEPER: I know you wouldn't have hard any aircraft, for certain, or any vehicles of course. So I suspect from up here you would have heard horses, I suspect. You might well have heard a lot more conversation. I suspect you'd have heard a lot more birds. So I think it would have sounded very, very different. Perhaps you'd have heard a lot more boats on the river. There are boats on the river, but you don't hear very much of them from here You can't actually see the river from here. Whereas then I suspect with the buildings being lower, you'd have actually seen the river, and you'd have seen a lot more boat traffic and you'd have heard a lot more of what was going on around the port of London

I don't hear people. Very much it's the internal combustion engine.

I don't hear people.

I don't… hear… people…

I…don't…heeeaaarrr…peeooopleee…*(voice is stretched)*

SOUND: *Atmosphere swirls, then footsteps walking.*

O'DONOHUE: This is hard compacted earth. Now we go onto much lighter gravel.

PAOLO: Recording.

SOUND: *recording beep*

O'DONOHUE: So this is our foley theatre, and I'm Robin O'Donohue, head of post-production sound for Pinewood and Shepparton Studios in London. We have some heavier beach-type rock…

SOUND: *he walks on beach rock*

O'DONOHUE: And a bit of sand just next to it.

SOUND: *walks on the sand*

O'DONOHUE: And these surfaces, we have many, many surfaces. I'm going to walk around just to give you an idea. We have hard tarmac, which wasn't used in *Shakespeare in Love…*

SOUND: *walks on the tarmac*

ALAN: Recording…

SOUND: *recording beep*
Film soundtrack: "I say a plague on both their houses…"

O'DONOHUE: Over here we have hollow wooden boards, which we would have used probably for the upstairs of Joe Fiennes's house. When he's writing his play in *Shakespeare in Love*, when he ran upstairs this is the sort of stuff we would have used.

SOUND: *He runs on the wooden boards, cuts to:*

Film soundtrack: (feet on boards) "Ow! Will, I am a dead man, and buggered to boot. My theatre is closed by the plague this twelve weeks! My actors are forced to tour the innyards of England, while Mister Burbage and the Chamberlain's Men are invited to court!

PAOLO: Recording…

SOUND: *recording beep*

O'DONOHUE: There's a scene where Joe Fiennes is being chased through the streets of London. As he runs, we have footstep artists who will physically run in time with his feet…

SOUND: *foley footsteps*

O'DONOHUE: …This foley artist will start off on flagstones, and then…

SOUND: *foley jump*

O'DONOHUE:… onto the street, which is compacted earth and stones, and run in time with Joe Fiennes.

SOUND: *foley running*

O'DONOHUE: He's being chased. So we will now record the soldiers chasing him…

SOUND: *foley two more people running*

O'DONOHUE: Probably we'll do two or three of those together, so we'll have two foley artists running…

SOUND: *foley feet running*

O'DONOHUE: Their clothes, are they wearing chains that would make a noise? Well, maybe a sword or a harness or something. So we'll jingle a bit of that. So now we have their running feet and we have some sound of their clothes…

SOUND: *foley metal clanking with footsteps*

O'DONOHUE: He runs through some chickens at one point, so we have the chicken sound…

SOUND: *chickens squawking*

O'DONOHUE: And they will scatter everywhere, so we will pan that sound of chickens off to the right, off to the left…

SOUND: *chickens scatter off to left and right*

O'DONOHUE: And you can slowly start to see how the whole soundscape starts to build up.

SOUND: *running, swords jangling, chickens scattering, film crowd sound bounces back & forth*

O'DONOHUE: We realized the sound of London at that period. No cars, no traffic, no planes. So we, not invented a soundtrack, but we had to imagine what it would have been like then.

SOUND: *film soundtrack: "Romeo and Ethel, ha ha ha, who wrote that? Nobody, you were writing it for me! I gave you three pounds a month…"*

O'DONOHUE: We would look at the period it is set in, and the images we see on the screen are London, with muddy streets, small amounts of paved areas…

SOUND: *film soundtrack: "Mister Henslow. Will you lend me fifty pounds?"*

O'DONOHUE: This is not through research. This is really, to be quite frank, looking at what we see on the screen.

SMITH: I feel very much in control of what I see.

O'DONOHUE: The production designer, the man who built the sets, the man who built what we see on the screen, would have researched it to make sure it looked correct.

SOUND: *film sound, cuts off*

O'DONOHUE: But his is a visual thing, you see. You can see it from paintings, from archive footage, from written notes, and also from drawn images, you can see…

SMITH: See..

O'DONOHUE: …see what London looked like.

SOUND: *film sound bite, cuts off*

O'DONOHUE: Sound is… it's impossible.

SOUND: *film soundtrack: "Will you lend me fifty pounds?"*

O'DONOHUE: There are no recordings of that period. We can only assume. And I've read lots of novels – but not for this film, I mean I read, I quite like historical novels -- and you get an impression…

SOUND: *film soundtrack bite*

O'DONOHUE: I mean no one knows really, what London really sounded like at that time. I mean, there's horses of course, animals…

SOUND: *pigs squeal*

O'DONOHUE: So I don't know if it's documented what it sounded like then. Probably quite noisy in a different way,.

SOUND: *film soundtrack bite*

O'DONOHUE: You can't, there's just no recording of that period. That's just a fact, so we'd have to use, you have to imagine it.

SOUND: *film soundtrack bite*

O'DONOHUE: You use common sense, really.

SOUND: *film soundtrack bounces back & forth*

O'DONOHUE: You'd have to imagine it imagine it, imagine it.

SOUND: *Bell, decays artificially*

Chickens clucking, horse neighs

SUE MAY: Hmmm. I don' suppose you'd hear a lot of noise, because people lived together more. More of a community. That's how I imagine it. So therefore you'd have noise of people cooking and talking.

SOUND: *sheep baaa*

SUE MAY: You might have heard sheep. Pigs, I'd have thought more in those days than sheep.

SOUND: *startled chicken*

SUE MAY: and… probably a dog, ha ha.

SOUND: *car passes*

SUE MAY: Not the traffic. Definitely wouldn't have heard traffic. You know. And that's about it, I think.

SOUND: *sheep in field, birds*

COMPUTER VOICE: Thirty… decibels.

SOUND: *London underground, carriage door opens*

COMPUTER: Eighty… decibels.

SOUND: *underground train arrives*

COMPUTER: Ninety… One hundred…

SOUND: *train noise cuts off*

COMPUTER: One hundred and twenty… decibels

SOUND: *train noise continues, train arrives, another leaves*

COMPUTER: One hundred and ten. One hundred. Ninety. One hundred. One hundred and ten… ninety… eighty… decibels…

SMITH: The loudest sound that a person in Shakespeare's time could have heard turned out to be the sounds of cannon being fired off on certain occasions in the Tower of London.

SOUND: *underground station atmosphere, whistling*

ANTHONY ROOLEY: But aside from that, which was a very special effect and very short-lived, the loudest wound would be iron-rimmed wheels on a cobblestone street. Which is very defined, because it passes. That's the nature of it. Of course, in one of the small streets where a market was gathered, there'd be quite a hubbub. People selling in the streets, they'd each have distinctive cries for selling their particular wares. But that is all at a human level, and so utterly different from the soundscape we're used to.

SOUND: *whistling*

SMITH: Shakespeare and his contemporaries were operating in a much quieter world than the world we inhabit.

BROOKES: You're a damn good whistler.

WHISTLER: Thank you very much! It's funny you should speak to me now. This is my second, the week of my second anniversary on the Underground, but I've been busking for 14 years around the country.

BROOKES: And where are we? What's this tube stop?

WHISTLER: This is St. Paul's

BROOKES: Lovely. Thank you very much.

WHISTLER: Okay, my friend. No problem.

SMITH: The loudest sounds that they could hear were only one-third as loud as the sounds that surround many of us who live in cities all the time. We are absolutely surrounded by the noise made by the machines that we ourselves have made.

SOUND: *Underground announcement*

SMITH: And that has the effect of muffling the sound. In visual terms it would be as if we were always looking at the world through a fog.

SOUND: *Underground station atmosphere becomes 'muddy'*

SMITH: Without this kind of fog of sound, if I can put it that way, individual sounds become much much more distinct.

SOUND: *Underground announcement "Stand Clear of the Doors, Please!"*

SMITH: And once they strike your ear with that distinctiveness, you are able to focus on them with a kind of intensity that is difficult in the kind of aural fog that I've been talking about.

SOUND: *horse*

SMITH: *(distantly)* Distinct…distinctiveness…

SOUND: *horses galloping in field*

TRUAX: I'm Barry Truax, the author of *Acoustic Communication.* There's a whole story about every sound.

SOUND: *horse, sheep.*

TRUAX: So in your neighbourhood for instance, just think: how many sounds would you identity with complete context?

SOUND: *sidewalk voices*

TRUAX: Who it is, what their relationship is to you, what they were doing, is this their normal pattern, is this their abnormal pattern, what does that mean, is this a special event? You know, could you distinguish all of these things just by ear?

SOUND: *Sue May calling chickens*: *"Good morning my treasures, good morning! Out you come! Come on! Chook chook chooks, come on! Oh! Not you, Maisie!"*

TRUAX: Today, we tend to have these broadband sounds that are just simply there. They're meaningless, they're dull. They're uninteresting.

SOUND: *interior of a London Underground carriage*

TRUAX: Acoustically, if you just listen to our soundscape it's actually simpler, if I can use the ecological terms: fewer dominant species dominate everything, and there are fewer small-scale variety sounds. We just take for granted reproduced sound coming out of speakers, but everything of course prior to the technology was established by its source, by its context.

SOUND: *air conditioner exhaust*

TRUAX: So of course you would listen differently.

SOUND: *air conditioner noise stops.*
horse walks on pavement

TRUAX: Of course, that's not to say, we're not aesteticising, that they're saying "Oh, how delightful it was to hear the blacksmith doing… you know, it was information.

SOUND: *gate opens*

TRUAX: It was information. It was something you needed. If you needed a delivery, well then, you would listen for the cart that would be coming with its horses, you know, and you'd know the kind of sound that you'd be listening for.

SOUND: *horse clops past*

TRUAX: The large energy sounds that are larger than human scale start dominating, and then we stop listening because they are no longer on the human scale.

SOUND: *gate closes.*
air conditioner starts

TRUAX: This is our complex modern world for you. It's not complex at all. It's disgustingly simple, and uninformative, and bland and uninteresting, right? There's no information here, other than that… the information is that there's no information. That's the message, is that we're nowhere. Compared to what it would have been

like if we were in England in the 16th century, right? You couldn't have experienced this boring environment that we're in. We're nowhere.

SOUND: *Bell*

TRUAX: Most of us have, in fact, because of the pressures of modern life, learned not to listen. And we have to re-learn it.

SOUND: *telephone rings, picks up.*

MAN ON PHONE: Hello, Joe speaking.

BROOKES: Oh, hello. Uh… I'm not sure where I'm calling…

MAN: Uh, sorry? Who are you calling? Where are you calling from?

BROOKES: We're collecting sounds from all around London, and I'm wondering if you could just hold the telephone up so I could record 30 seconds of the sound…

MAN: There's only… you're only in a small office here, mate. There's…

BROOKES: That's fine, that's fine. Where exactly is it?

MAN: We're at Waterloo. In London.

BROOKES: All right. Would you just hold the phone up for 30 seconds?

MAN: Yeah, no problem.

SOUND: *people talking in office*

MAN: You all right, mate?

BROOKES: Lovely. Thank you very much.

MAN: No problem. *(hangs up)*

MUSIC: *Anthony Rooley plays Earl of Wessex Galliard (John Dowland)*

SMITH: Listening, for Shakespeare and his contemporaries, was a much more visceral, direct, much more physical contact with the world. And it's not just because there were no automobiles and there were fewer machines to alienate individuals from the natural world. That's not really what I'm talking about. I'm talking about an attention to the process of listening, in which you realize intensely your physical relationship to the world in which you exist. In our own time and place, we tend to think of our bodies as being chemical-electrical machines. That sound strikes our eardrums…

SOUND: *distorted voice: "sound strikes our eardrums…sound strikes our eardrums…" increases in pitch*

SMITH: And that it sets up an electrical current in our nerves which carries that sound to our brains, where we interpret the sound, and often fix it by giving it a verbal name.

SOUND: *Hello, Joe speaking?*

SMITH: Things were much more fluid in Shakespeare's time. The story that they told themselves was a very old story that went all the way back to Aristotle and to Galen in ancient Greek.

MUSIC: *Anthony Rooley plays Chamberlain's Galliard (Dowland)*

SMITH: The idea was that any sensation was transmitted through your body through an airy liquid called *"spiritus"*.

SOUND: *deep ticking*

SMITH: And that when you heard a sound, it went to a faculty in your brain called Common Sense. Not common sense in terms of practicality, but common sense in terms of all the senses being common. So that the sound that you heard would be fused with what you were seeing, what you were smelling, what you were touching. It would also be fused with memories, and in that form it would be delivered to the heart, where you would have a visceral reaction to what you were hearing. And your heart would either dilate in enjoyment of what you were hearing, in a desire to know more about it, to embrace it, or it would contract in fear or anxiety.

SOUND: *clock tower bell strikes*

MUSIC: *Chamberlain's Galliard continues*

SMITH: The result of these dilations or contractions of the heart would be felt all over the body, as this inner communicating system of *spiritus* went from the toes to the head, to the fingertips, all through the body. And that any hearing experience would be a whole-body experience. It's a different story from the one that we tell ourselves. Even though the story we tell ourselves may to our lights be more true to the way flesh, nerves, and electricity operate, it may not be delivering us up to the world with quite the openness to experience that that older story, that story that Shakespeare and his contemporaries knew, can manage for us.

MUSIC: *Chamberlain's Galliard ends*

SOUND: *sniffing. grunting.*

HADLEY: Hello pigs! Hello piggies! Mrs. Pig and Bernard. Are you recording now?

SOUND: *recording beep*

HADLEY: I'm Di Hadley, Diana Hadley. I've lived at Middle Watchbury Farm all my life. And the village, Barford, Warwick, you know, obviously an agricultural community since certainly Elizabethan times and before.

SOUND: *pig grunts*

HADLEY: He's a bit slow. He can't see very well because his ears are over his eyes, and he can't hear very well because his ears are over his earholes. He's a Gloucester Old Spot. And they're a well-known old breed. Right, Mrs. Pig, do you want your tea? Teatime! Piggy pigs!

SOUND: *pigs squealing. Then pigs eating*

HADLEY: Instant… it's like getting an instant reaction, isn't it?

SOUND: *water pours from bucket, iron latch closes*

ALAN: Recording…

SOUND: *recording beep*

MUSIC: *The Country Cries (Ravenscroft): "Oh Jack, rise and serve the cattle and the sheep! Oh when I've had me breakfast, oh oh I'm fast asleep. Cheep cheep cheep cheep cheep, cluck cluck cluck cluck, piggy piggy piggy piggy, etc…"*

SOUND: *outdoor atmosphere*

HADLEY: I can hear sheep in the background baa-ing. Lambs looking for their mothers, because they've wandered off. I can hear pigs snuffling around eating. I can hear hens, probably nicking the pig's food. Um… in the background that's the last of the rush-hour traffic on the M-40. I can hear, background, I can hear an aeroplane there. That's it.

BROOKES: And what do you imagine you would have heard four centuries ago, right here?

HADLEY: Right here? Birdsong…

PAOLO: Recording…

SOUND: *recording beep*

Birds

DREW: We used to call it the dawn chorus. Thousands of birds, hundreds of birds. You'd hear them. You don't now. I think it's through this type of farming today; it's got rid of them.

I'm John Drew, I'm a Kenilworth, Warwickshire man, I have written 15 books on Kenilworth and Warwickshire. In those days you see, the farming was of a different nature to what you get today, and I think that's why you had so many. I mean, for example, thousands of starlings and different blackbirds like that. Absolute thick clouds of them, going from north to south. Of course there was a wood on the castle estate. But they've all gone!

TRUAX: There was a period before clocks and bells regulated the life of Europe, when it would have been the seasonal sounds, you know, the dally sounds. When the birds came, and it would change. The idea that nine o'clock was the same everywhere at every time of the year is of course ridiculous, right? Nine o'clock in the morning might be pre-dawn, the dawn chorus might be already over, it might not even have happened yet, you know. So the sense of time… I mean, sound obviously exists in time, but that's our conception that sound is <u>in</u> time. But what it does is, it actually creates time, through rhythm, through cycles, through patterns.

It creates your sense of flow.

SOUND: *bell, birds*

MUSIC: *Crier's Song of Cheapside (Ravenscroft): "Oyez! Oyez! Oyez, is anyone…"*

ROOLEY: My name's Anthony Rooley. I specialize in music of earlier times.

O'DONOHUE: Come and buy my fish! Best fish! Best fish!

ROOLEY: People selling in the street, in a busy street market, they would each have distinctive cries for selling their particular wares…

SMITH: Cherry ripe, ripe, ripe! Cherry ripe, ripe, ripe!

ROOLEY: … and so you'd have people selling fresh flowers and they'd be calling out the names of flowers that were in season…

SINGER: Won't you buy my sweet lavender, my sweet scented lavender…

ROOLEY: So you'd actually have a sense of time as well, you know, the passing of the year would be embedded in the sounds of the cries. This is embodied actually in song. There were a few composers of the time who enjoyed to bring in normal strands of life – not art music as such, but embodying the love of folklore and traditions and well-known sayings and epithets and so forth – all into a musical effect. So you have a kind of musical soundscape.

MUSIC: *Crier's Song of Cheapside*

ROOLEY: And the most famous of these is Thomas Ravenscroft. He's really quite a master. *The Crier's Song of Cheapside* takes us right into the centre of London. East end of London, 1600.

MUSIC: *Crier's Song of Cheapside*

O'DONOHUE: But there's no recording…

ALAN: Recording…

O'DONOHUE: …of that period. You have to imagine it.

SUE MAY: Imagine it.

SOUND: *recording beep*

MUSIC: *Crier's Song of Cheapside ends.*

SOUND: *Bell tolls.*

ROOLEY: Why were the ears so important? Why was sound so important, as indeed it certainly was? Because…

MUSIC: *Theatre of Voices sing The City Cries (Gibbons)*

…it was a means of addressing the soul. It was the way of the external world entering the internal world of the individual.

SMITH: The famous fugue-ings of *Street Cries* by Orlando Gibbons and others – we know that they had something to do with the actual street cries because cherry-sellers are presented in Gibbons with the same cadences as in Dering, for example: "cherry ripe-ripe-ripe! cherry ripe-ripe-ripe!" appears to be the way that cry actually sounded in the streets.

MUSIC: *The City Cries: "Lily-white mussels, new! New mackerel, mackerel, mackerel!…Sweet periwinkles…"*

SMITH: But these fugue-ings of London street cries were put together as music. So I suppose we might think of them as being like postcards that we buy when we travel. A lot of things have been washed out: the smells, any of those things that might have been part of our actual experience in visiting the site, have been

prettied-up. They've been removed. And I suppose that we need to think about Gibbons' and those other street cries in that way.

MUSIC: *The City Cries "…want kitchen-staff, have ye maids?…"*

SMITH: There's a satire by William Baldwin called *Beware the Cat* that was printed in 1584, and I have to chuckle because he really has done this amazing job of cataloguing all the sounds. Now, this is totally made up, I guess, because it's supposed to be the sounds that this man Geoffrey Streamer heard when his ears were miraculously opened. And he could hear not just the sounds that were right around him in his room in the city of London, but everything up to a hundred miles away.

MUSIC: *"New Oysters! New Oysters! New oysters, new!.." (Ravenscroft)*

SOUND: *bell tolling*

SMITH: Barking of dogs, grunting of hogs, crawling of cats, rumbling of rats, gaggling of geese, humming of bees, mouthing of bucks, gagging of ducks…

ROOLEY: Listening to the lyrics set by all of these wonderful composers of this extraordinary period…

SMITH: …cackling of hens, scrabbling of hands…

ROOLEY: …and you're aware of the nature of the sound of the English language.

SMITH: …of toads in the bogs…

ROOLEY: So wonderfully varied.

SMITH: …chirping of crickets, shutting of wickets…

ROOOLEY: So much variety.

SMITH …shrieking of owls, skittering of fowls…

ROOLEY: But how many words are actually born in onomatopoeic colouring and desire?

SMITH: …routing of knaves, snorting of slaves, farting of churls, fizzling of girls, ringing of bells, counting of coins, mounting of groins, whispering of lovers, springing of plovers, groaning and spewing, baking and brewing, scratching and rubbing, watching and shrubbing, with such sort of commixed noises as would deaf anybody to have heard.

SOUND: *telephone ringing, picks up*

TELEPHONE MAN: Eup!…

BROOKS: Hello?

MAN: Hello?

BROOKES: Hello. We're recording the sounds of London through the telephone. Would you mind holding that phone up in the air just for 20 seconds so I can record the sound on the street there?

MAN: Sure.

BROOKES: All right. Where is it exactly?

MAN: Earl's Court, mate.

BROOKES: All right. Would you mind?

MAN: Yeah. Go on!

SOUND: *Earl's Court Road traffic, café voices*

MAN: What, you done?

BROOKES: Yes, lovely. Thank you.

MAN: Euh! G'bye! *(hangs up)*

ROOLEY: I think one of the most important things about Elizabethan England is sound of the English language at the time. Today, it's not uncommon to have people talking and staying at the same intonation the whole of the time, and they just…

MAN: Hello…

ROOLEY: …and they might change the speed…

MAN: …sure…

ROOLEY: …and not often that either. It can sometimes get really, really, weary because…

MAN: …hello…

ROOLEY: …they're just digging in, and staying on a monotone.

MAN: …hello…

MAN #1: …uh…Leicester Square…

MAN #3 …euh…

MAN #2: ..You're only in a small office…

MAN #3: ...euh!…

MAN #1: ..thank you…

MAN #3: …euh!…g'bye…

ROOLEY: This would have been impossible in Elizabethan England. In Elizabethan England, a wide variety of speaking pitches was expected!

SOUND: *(actress in rehearsal:) " Come gentle night, come loving, black-browed night. Give me my Romeo, and when I shall die…"*

ROOLEY: A good speaking voice would be about six tones in its speech.

SOUND: *(actress): "Give me my Romeo, and when I shall die…"*

ROOLEY: That's from quite high, to quite low. And this was expected in speech.

SOUND: *(actress): "Oh, I have bought the mansion of a love but not possessed it, and although I am sold…"*

ROOLEY: So if you were a good orator you would use this full range of sounds from top to bottom.

SOUND: *(actress): So tedious is this day, as is the night before some festival to an impatient child that has new robes but may not wear them."*

SMITH: Shakespeare was writing for a theatre in which voices and hearing were at least as important, and maybe more important, than seeing and looking.

SOUND: *deep ticking*

SMITH: In Shakespeare's time, only about 25 percent of the population could read, which meant that information was conveyed person to person, and being conveyed person to person it was conveyed from mouth to ear.

SOUND: *(actress): "Give me my Romeo, and when I shall die…"*
Smith distant voice: "From mouth… to… ear."
Deep ticking stops

ROOLEY: The very word Hark, I think, is an interesting example. Because the "r" sound is regarded as the fundamental sound of creativity. The "ha" gives it a beginning, the aspiration, but the "arrk!" – the "r" would have been more rolled in Elizabethan England than we do today. We say it today: "Hark." They would have said "Harrrrk!" So, "Harrrk!" is truly onomatopoeic. It commands attention, and it brings us – "k!" – to an exclamation mark which is into silence. Hark, listen to this because it's worth listening to!

MUSIC: "Hark! Hark! Hark!" *(The Country cries)*

SOUND: *door opening*

BELLKEEPER: Right, I'll just take you up…

SOUND: *footsteps climbing*

KEEPER: You see the carvings on the walls are from 1722 there, and all sorts of things scratched into the walls…

SMITH: You know, I said that the sounds of the past could be recovered if we had the right kind of technical equipment…

KEEPER: …excuse the bird debris…

SMITH: …but many of the sounds are recoverable, including the sounds of church bells. If the same bells are hanging in the belfry, you would be hearing the same sounds that one could have heard in Shakespeare's time.

KEEPER: We're at St. Peter's Church, Barford. I'm Michael Ashton, the tower captain. So in that corner there, that's the oldest bell. That came from a redundant church at Appleston-on-Stour. I think that's 13th-century.

SOUND: *he taps the bell*

BELLKEEPER: Yes… this is the tenor, the heaviest bell in the tower.

SOUND: *bell sound repeats and extends*

KEEPER: Right, shall we do some rounds of call changes? Right, okay. Look to it! Treble's going… she's gone!

SOUND: *bells begin ringing together*
a different voice calls out; "Look to it! Treble's going!"
Second larger set of bells begins ringing, superimposed on first set.

MEYER: "Oranges and lemons" say the bells of St. Clemens,
"You owe me five farthings," say the bells of St. Martins,
"When will you pay me?" say the bells of Old Bailey,
"When I am rich," say the bells of Shoreditch
"When will that be?" say the bells of Stepney,
"I do not know," said the great bell of Bow.
And all those churches are churches of London.

SOUND: *Voice calls "Treble to two, too late…"*

MEYER: I'm Simon Meyer, I'm the steeple-keeper of St. Mary le Bow, and we're currently standing in the ringing chamber of St. Mary le Bow Church. And actually, if you look the picture on the wall over there, that is line drawings of all the churches in the nursery rhyme.

SOUND: *voice: "…Treble to three!…"*

MEYER: The sort of ringing that we do is what we say is 'English style' ringing, and it's quite different to what you might see on the Continent -- France, Germany, places like that. There, the bells just sort of hang mouth downwards, and just swing backwards and forwards a little bit. When we ring the bells, we actually ring them mouth upwards, all the way around 360 degrees to mouth upwards, and back again.

SOUND: *voice: "…treble to four!…"*

MEYER: And by doing that, when they're mouth upwards there's a little bit of balance there, there's a little bit of control. So whereas the Continental way they just sort of jangle together, we can actually get some regular patterns of ringing.

SOUND: *bells ringing 12-pattern*

MEYER: I mean, change ringing started around late 1500's, early 1600 was the time, and as I say, Bow had a peal of bells then. There weren't many places that had bells at that stage, or had competent teams of ringers. London had a number of places, and initially the numbers of bells that were rung were small numbers, and if you look back to that era there were maybe five bells in the tower here. So bells have been here in St. Mary le Bow for a very long time. And there were various records of things that happened at that sort of time.

MUSIC: *choir: "Ding, dong, bells… Ding, dong, bells… Ding, dong, bells…"*

SMITH: Let me just look in the book here… I think that was… yes, here we go. It's Phillip Gershow who visited London in 1602; his first impression was how noisy the city was. So here is what Gershow has to say on September 12th, 1602:

ALAN: Recording…

SOUND: *recording beep*

MUSIC: *choir: "..Oranges and lemons say the bells of St. Clemens…"*

SMITH: "On arriving in London, we heard a great ringing of bells in almost all the churches going on very late in the evening. Also on the following days, until 7 or 8 o'clock in the evening. We were informed that the young people do that for the sake of exercise and amusement, and that sometimes they lay considerable sums of money as a wager who will pull a bell the longest, or ring it in the most approved fashion. The old Queen is said to have been pleased very much by this exercise, considering it as a sign of the health of the people.."

MUSIC: *choir: "..when will you pay me, say the bells of Old Bailey.."*

MEYER: That probably would have been the beginning of change ringing, and in those early days there were a lot of competitions between different teams of ringers. Competitions for prizes, for money, for beer. Ringers are very well connected with beer, but it's thirsty work. You ring for a long time, you need something to quench the thirst afterwards. And of course we have very good beer here, so it's any excuse.

MUSIC: *choir: "…I do not know said the great bell of Bow."*

SOUND: *Bow bell strikes, close up*

MEYER: This is the Great Bell of Bow in front of us. That's 2 tonnes of bell

SOUND: *he hits the bell once*

MEYER: Because they're a modern casting, all the harmonics are beautifully tuned in there and the hum goes on, and on, and on.

SOUND: *lighter Bow bell strikes three times*

MEYER: To be a Londoner was to be born within the sound of Bow bells. The sound would have traveled three-quarters of a mile, or a mile or so, so London was very much defined as a mile around Bow. And that was a true Londoner, that was a Cockney. That's possibly unique, because I can't think of anywhere else where the boundary of the community was defined by how far the sound of bells traveled.

SOUND: *bell strikes again*

MEYER: And they were relatively large bells even then – a lot smaller than we've got now, but still relatively large – and I suppose that's why they became the great Bow bells, the Great Bell of Bow, because they were big for any church. But it was a church right in the centre of London, and of course they were rung for the curfew as well, to tell people that it's the end of the day, and sometimes in the morning, and things like that. So they were actually used as a signal then, to tell people to get up and go to work, work's finished, go home. And they were said to have called Dick Whittington back to London. He was leaving London very disheartened, and he's said to have heard Bow bells about a mile away, and he felt they were calling him back. Which would have been quite feasible in those days because cities weren't as noisy as they are, for a start. So it would have been quite feasible that he did hear the bells from here, but the biggest problem you have now is: it's surrounded by relatively tall buildings and I suspect they would absorb the sound. But you don't really hear these bells – yeah, you go down the street now, you don't hear them that much because the streets just block it all out.

SOUND: *street laneway, passersby voices, feet walking close, Bow bells very faintly in background.*

hammer dulcimer being played

PASSERBY: I can hear an extractor fan, ha ha. I can hear that instrument playing, it's very nice.

MUSICIAN: I'm Thomas Brenwood and I'm a busker playing the hammer dulcimer. And we are on the south bank of the Thames and we're under Southwark Bridge. I always go for either Blackfriars Bridge or this bridge just because the acoustics really, yeah, it works. You get the atmosphere. And there would have been players of this very instrument in the Globe Theatre as well, which is just up there.

SOUND: *hammer dulcimer again*

PASSERSBY: Greek music, we hear! And sirens. Silence is… what did we read, what was that?… Oh gosh… that proverb we read, the Jewish proverb? If silence cost a penny… No, no: "if words cost a penny, silence would cost two." Yes…

ROOLEY: We tend to talk about sound and forget silence. I think the Elizabethan world was infinitely more aware, conscious, of the value and importance of silence. In fact, philosophically they regarded that sound, music particularly, could be seen to be simply a decoration of silence. Because where does it start from? It comes from silence, it emerges, it comes to its full height, tension, there's a resolution of the tension, and it returns to silence.

SMITH: Silence is something that a lot of us in our own time find it difficult to tolerate.

SOUND: *recording beep*

PAOLO: …recording…

SOUND: *telephone ringing*

SMITH: Can we tolerate silence? It seems to me that we live in a time where silence has become frightening.

SOUND: *telephone picks up. Sound of street through telephone*

BROOKES: Hello!… Hello!… Hello?

SOUND: *telephone receiver makes noise, then line goes silent*

BROOKES: Hello? Hello, have I got somewhere in London? Hello…

SMITH: Silence is like the frame around an aural picture. You've got to have the silence before you can really hear.

MUSIC: *Anthony Rooley plays Lachrimae Antiquae (John Dowland)*

ROOLEY: The concept of the music of the spheres was actually a standard part of everybody's awareness -- even the uneducated – in Elizabeth's time. Looking at the heavens, you see the planets are moving. Anything that moves has to make a sound. When John Dowland chooses to make a silence in all four parts, in that chink of silence we hear the music of the spheres.

MUSIC: *a pause between phrases in the music*

ROOLEY: It was understood that these great planets moving in the heavens, each one made its own particular and individual sound. Burt the sound was so great, and so permanent, that we couldn't hear it! The physical music, when it becomes silent, allows the human mind to hear an echo of that greater sound. And that's the only time when we can experience the music of the spheres, because its sound is there with us permanently. It's the hum of the universe, and it goes on forever.

MUSIC: *stops*

BROOKES: Hello? Hello… have I got somewhere in London? Hello?

SOUND: *tapping the bell. "Yes… yes…"*

MUSIC: *Lachrimae Antiquae begins again*

SMITH: Every sound that has ever been made within the earth's atmosphere still exists, somewhere, however faint those frequencies are. And if we just had the right kind of technical equipment, we could hear the voice of perhaps Shakespeare himself, playing the ghost in *Hamlet*. And I ask myself then: are the sounds of the past gone forever?

BROOKES: Hello? Hello?

SOUND: *music swirls, echoes.*
telephone hang-up beeps.
Line cuts dead

--- end---