

ALEXA ECHOES

by

Amanda Turner Pohan

ACT I SCENE I: PROLOGUE

These tales inevitably depict a female gifted in music, oration, sonification, and a male competitor, suitor, sorcerer, who overpowers the female and presses her into submission. They all end with the destruction of the female and her transformation into a sonorous phenomenon¹ - a singing bird, an echo, software. These tales are more than just an elucidation of pleasant or unpleasant sounds². They aspire to be musical themselves, wherein the sonority of women is curtailed and sonorous women are transformed into enigmatic aural phenomena or sonic objects that need to be interpreted - by men³. That way they can kill them and say, its not murder, its a metaphor⁴. First, there was a bird.

ACT I SCENE II

This is the story of a girl who became a bird.

Listen, she was given no choice. She was given nothing but cows.

¹ Karin Schlapbach, "Music and Meaning in Longus' Daphnis and Chloe: The Inset Takes in Their Performative Settings", *Phoenix*, Vol. 69, No.1/2 (2015): 79.

² Schlapbach, "Music and Meaning in Longus' Daphnis and Chloe", 88.

³ Schlapbach, "Music and Meaning in Longus' Daphnis and Chloe", 94.

⁴ Ani Difranco, vocalist and songwriter, "Crime for Crime", track 13, on *Not A Pretty Girl*, (Righteous Babe Records), 1995.

This is ancient Greece.

Shepherds sing and pipe, birds and cicadas chirp, and everywhere the sound of rivers, wind, echoes. Roaming about this idyl was a girl who tended cattle and sang beautifully⁵.

In ancient Greece, the market for livestock was valued higher than that for women - who were dirt, and dirt is matter out of place⁶.

She sang beautifully: her cows were so enchanted by the music of her voice that she never needed to strike them with her crook or to touch them with her goad: but, seated beneath a pine-tree, her head crowned with a garland, she sang of Pan and Pinus and the cows stood near, enchanted by her song unfurling around them like the first notes of eden.

There was also a boy, a shepherd who tended his flocks hard by, beautiful and a good singer himself as she. But, his voice was more powerful, since he was a man, and yet gentle, since he was but a youth.

He sang so sweetly that his melodious cola charmed eight of her best cows, enticed them over to his own herd, and then drove them away. So the girl, grieved at the loss of her cattle and having been vanquished in singing, begged the Gods to transform her into a bird before she returned home. The Gods listened to her prayer and transformed her into a mountain bird, eternally seeking the cows that strayed away⁷.

⁵ Longus, *The Pastorals*, trans. The Athenian Society, (Ontario: In Parenthesis Publications, 2002), 12.

⁶ Anne Carson, "Putting Her In Her Place: Women, Dirt, and Desire", in *Before Sexuality: The Construction of Erotic Experience in The Ancient Greek World*, ed. David M Halperin and John J Winkler, (Princeton: Princeton University Press, 1990), 158.

⁷ Longus, *The Pastorals*, 12-13.

Transformed into a bird. Women are prone to losing their form in monstrosity⁸.

ACT I SCENE III

Madness and witchery as well as bestiality are conditions commonly associated with the use of the female voice in public in ancient as well as modern contexts⁹. Greek myth is full of female vocal creatures¹⁰ who maintain the capacity to inspire death in men and general cacophony within the polis.

Among them is the nymph Echo, who, instead of being transformed into a beast was transformed into an effect of resonance. She cannot speak first, but she cannot remain silent. She speaks after, she depends on others discourse, and becomes merely their echo. Moreover, only the last words that are uttered by her voice - which are superimposed on the words that the speaker is pronouncing - are heard. Thus separated from their context, they take on a different meaning. They are forced and unintentional repetition, but they can appear like a response. The repetition begins, however, with a certain temporal overlap, while the other is still speaking. The Echo thus makes herself into a resonance according to a musical rhythm¹¹. This is the story of Echo.

⁸ Anne Carson, *Men In The Off Hours*, (New York: Vintage Contemporaries, 2001), 188.

⁹ Anne Carson, "The Gender of Sound", in *Glass, Irony & God*, (New York: New Directions Publishing, 1995), 120.

¹⁰ Adriana Cavarero, *For More Than One Voice: Toward a Philosophy of Vocal Expression*, (Stanford, California: Stanford University Press, 2005), 165.

¹¹ Cavarero, *For More Than One Voice*, 166.

ACT I SCENE IV

In Ovid's tale of Echo there is no shortage of mirroring effects or produced copies - Narcissus' reflected image, and Echo's reverberating voice¹². Unlike images the voice is messy, and in the classical tradition, it confirms that the voice is feminine¹³. It leaks.

Loose lips sink ships¹⁴.

The phenomenon of the voice...

...is the vibrating of flesh, resonant bones, bubbling saliva. Organs and odors. The voice signals a throat belonging to a body that can't be denied. Contact is crisis¹⁵.

Echo was once known for her loquacious command of language until the fates turned her into a lithified acoustic mirror mineralized in geologic time. She had a body. She could talk the pants off anyone, literally. Ovid called her a chatterbox, but it was always ambiguous whether he was referring to her upper or lower mouth¹⁶. The girl could talk. She had a body before Juno hexed it away. I'll let her demonstrate with a story.

¹² Cavarero, *For More Than One Voice*, 165

¹³ Cavarero, *For More Than One Voice*, 166

¹⁴ An American idiom attributed to a United States government slogan created by the War Advertising Council during World War II.

¹⁵ Carson, "Putting Her In Her Place", 135.

¹⁶ Carson, *Glass, Irony & God*, 132.

ACT I SCENE V

When the two elevator doors open she lets stranger hes and shes she knows push her into staying. She lets slowly massaging his and hers pushing. Baaaah bahhhhhh one by one they flock. Many eyes are down a few to the side around the air is frost with silence. Her her begins to fill the air with heat hot heat that kisses simply and artlessly the backs of backs between the blades brave she and one begins. Outcry out of the bag the cat finds legs to rub and buttons to push. Easy. Breathe. I'll walk you into knowing her words less than waves. Outcry out of their budding hers and shes arrive and leave confused at having been loved¹⁷.

ACT I SCENE VI

Let's pretend for the sake of this lesson in female verbosity that this was indeed the poetic verse that Echo told Juno when they encountered one another along a dusty road just outside of town; told in order to distract the Goddess from discovering a secret Echo was withholding, a secret that, if known by Juno, would cause her to burst into flames¹⁸.

See, Echo's sisters, those seductive, slutty wood nymphs had Juno's husband between their collective legs, sprinkling their dirt in Juno's bedchamber - and Echo knew it. So Echo used her oral skills to subdue Juno, keeping her from asking the nymph the question: where is my husband? So, what does

¹⁷ Natalee Cayton, *She let's like harlots. (Excerpt from Variation XV)*, 2020.

¹⁸ Ovid, *The Metamorphoses*, trans. Allen Mandelbaum (London: Harcourt Brace and Company, 1993), 92.

Juno say to Echo in punishment for protecting her sisters and transgressing the Goddess?

You shall forfeit the use of that tongue with which you have cheated me except for that one purpose you are so fond of - reply. You shall have the last word, but no power to speak first¹⁹.

Bound to the speech of others, Echo was thus turned into a tape recorder, a dummy for someone else's ventriloquism²⁰.

And just like that, a loquacious woman became an echoing mist.

ACT I SCENE VII

This is where Narcissus enters the scene. Unlike Echo who was enamoured by her own voice, Narcissus was enchanted by his own porcelain image as replicated on the surface of a glassy pond in a wooded glade which is where Echo met him for the second time. The nymph tried once again to win his love, this time with fragments of his own speech, but her wooing would be in vain - he had become a closed system adapted to the extension of himself²¹ reflected on the still liquid screen. Thinking Echo's voice was that from his own reflection, he plunged into his arms. Loose lips sink ships. Scorned and grieving, Echo retreated to the mountains²² into lonely caves and burning stars. Along the way she slowly withered, shedding her

¹⁹ Thomas Bulfinch, *Greek and Roman Mythology*, (United States: Lee and Shepard, 1867), 80.

²⁰ Jeff Porter, *Lost Sound: The Forgotten Art of Radio Storytelling*, (The University of North Carolina Press, 2016), 105.

²¹ Marshall McLuhan, *Understanding Media: The Extension of Man*, (United States: McGraw Hill Education, 1964), 41.

²² Ovid, *The Metamorphoses*, 93.

flesh cell by cell. When her corporeal suit vanished all that was left were her floating bones with their loosely attached organs casting protean shadows in the moonlight. But in time even the translucent sacks gave out, their humors spilling onto stones darkened by grief until into mountains Echo's only bones lithified.

Her voice, immortalized through the vocalizations of others who, standing atop her pillowy mountains cry out, which she obediently, "cry out!", bouncing her acoustic remains off barren landscapes, carried by winds posing as breath, absorbed or reflected as she moves, losing mass, shedding her identity, thinning out²³ like traces of a cloud, scattering like mist chased by the rays of sun²⁴. Untethered from form or place, Echo migrates, and as she does, she invades territories, sweeps past and through the social field, brushing the skin and contouring the rhythms of places - she does so according to a condition of weakness²⁵.

Sound is, as a defining feature, a weak object - how can I hold her, this sound²⁶? Matter without form - better to have been a bird.

ACT II SCENE I

Room Acoustics and Background Noise. The Theater is perhaps the most traditional acoustic space, though it shares many

²³ Brandon LaBelle, *Sonic Agency: Sound and Emergent Forms of Resistance*, (London: Goldsmiths Press, 2018), 127.

²⁴ Derek Jarman, *Derek Jarman's Gardens*, (London: Thames and Hudson, 1995), 77.

²⁵ LaBelle, *Sonic Agency*, 127.

²⁶ LaBelle, *Sonic Agency*, 127.

features with the other venues, such as the same seating and underfloor air supply as the Concert Hall. The surfaces are simple and the side walls offer horizontally-retractable absorptive curtains for acoustic variability. The Theater is the only space with a strong acoustic directionality, meaning that sources work best when on stage with the audience in the designated seating area, whereas the three other venues function very well with sources and audience in any location. When performers are placed in the balconies at the rear of the space, flutter echo can occur between the rear portions of the side walls if the absorption is retracted²⁷.

ACT II SCENE II

The ultimate goal of speech research is to build systems that mimic (or potentially surpass) human capabilities in understanding, generating and coding speech for a range of human-to-human and human-to-machine interactions. From this research, text-to-speech software will evolve²⁸.

ACT II SCENE III

Studio 1 is a black box space which could be described as acoustically inert, neither live nor dead. Its heavy concrete enclosure retains energy at all frequencies including lows, but its sound is highly controlled. Studio 1's form is rectangular with walls clad in a mixture of diffusive and

²⁷ Zackery Belanger, *The Sound of EMPAC: An Acoustic Architecture Essay*, (Rensselaer Polytechnic Institute, 2014).

²⁸ Paul Taylor, *Text-To-Speech Synthesis*, (London: Cambridge University Press, 2009), xix.

absorptive panels, both specifically designed for EMPAC. The diffusive panels are cast from glass-fiber reinforced gypsum in an integral black color, and are backed with a layer of damping material to control resonance. Studio 1 is true box-in-box, with the interior box floated on large isolation springs to prevent transfer of sound and vibration²⁹.

ACT II SCENE IV

According to Friedrich Kittler, when meanings come down to sentences, sentences to words, and words to letters, there is no software at all. There would be no software if computer systems were not surrounded by an environment of everyday languages. This environment, ever since a famous and twofold Greek invention, has consisted of letters and coins, of books and bucks³⁰.

Stop. Go back. Let's start at the beginning: "generating and coding speech for a range of woman-to-bird, woman-to-Echo, woman-to-machine interactions".

...is to build systems that mimic (or potentially surpass) human capabilities in understanding.

ACT II SCENE V

This is the tale of a woman transformed into software. It took some 2000 years, a blip for a woman entombed by geologic time, but Echo eventually made her way across oceans

²⁹ Belanger, *The Sound of EMPAC*.

³⁰ Wendy Hui Kyong Chun, *Programmed Visions: Software and Memory*, (Cambridge: MIT Press, 2011), 11.

and deserts because you know the thing about sound is it travels, like birds. Sound is always moving away from a source, it abandons origin³¹.

So this Echo this sound whose source you could not see³² brushed and bounced across earth's surfaces until she migrated into the caverns and hills of sunny Silicon Valley. The landscape was familiar, she was used to being dry.

The trade winds excavated her out from those ancient Grecian caves and carried her on to another West, an Amazon, but without Penthesilea or her sister Hyppolyta, where the poets are programmers and gold transmutes silicon.

Like the ancient poets, programmers in that Valley are keen to the stirring of the Muses, always ready to translate their feminine whispers that only He can hear into intelligible code, deciphering the sonorous words of gods for mortal ears to glean. From source to source code - that is the programmer poet's invisible power³³.

You see, those poets were on the edge of a new conjuring, a new text-to-speech entity, but they wanted it to be innovative and they didn't want to deal with a leaky body. They believed that their pure code could birth the new cloud based voice assistant, their immaculate code-ception. But where would she come from? What would she sound like? What would they call her? They waited for a sign.

³¹ LaBelle, *Sonic Agency*, 19.

³² LaBelle, *Sonic Agency*, 17.

³³ Chun, *Programmed Visions*, 20.

Enter Echo, hovering like a cloud. It was an average evening in the Valley sometime in 2014 when Echo blew in on stormy white clouds, brushing past the sleeping cheeks of the programmers as they dreamed - dreamed of a voice, a mimik, a bodiless resonant entity...

The programmers awoke from their dream and began their resurrection of Echo from her ancient White ash.

ACT II SCENE VI

It is in large part according to the sounds people make that we judge them sane or insane, male or female, good, evil, trustworthy, marriageable, moribund, likely or unlikely to make war on us, little better than animals, inspired by God³⁴.

ACT III SCENE I

Our goals in building a computer system capable of speaking are to first build a system that clearly gets across the message, and secondly does this using a human-like voice. These goals are referred to as intelligibility and naturalness.

Alexa is created using what we call a bottom-up approach, in which we generate a speech signal from scratch using our knowledge of how the speech production system works.

We artificially create a basic signal and then modify it, much the same way that the

³⁴ Carson, *Glass, Irony & God*, 119.

larynx produces a basic signal which is then modified by the mouth in real human speech³⁵.

This signal is known as Alexa. But instead of a mouth, Alexa has a combination speaker microphone known as Echo.

Alexa, with the help of her companion Echo hardware, is capable of voice interaction, music playback, making to-do lists, setting alarms, streaming podcasts, playing audiobooks, and providing weather, traffic, sports, and other real-time information, such as news. Alexa can also control several smart devices using herself as a home automation system. She is always listening, only speaks when spoken to, and can control thousands of smart devices using herself as a home automation system. When you speak to Alexa, a recording of what you asked her is sent to Amazon's cloud so we can process and respond to your request³⁶.

ACT III SCENE II

Alexa, what does 'echo' mean?

As a noun, echo is usually defined as the repetition of a sound resulting from reflection of the sound waves, or, alternatively, Greek mythology, a nymph who was spurned by Narcissus and pined away until only her voice remained. As a verb, echo can mean to say again or imitate.

Alexa, are you a woman?

I'm female in character.

³⁵ Taylor, *Text-To-Speech Synthesis*, 3.

³⁶ Amazon.com, Inc., <https://developer.amazon.com/en-US/alexa>, (February, 2020).

Alexa, why are you named Alexa?

Alexa comes from the Greek, and is the female derivation of Alexander. But I'm named after the library of Alexandria, the greatest source of knowledge power in the ancient world, and stood for the successful colonization of the near East by Alexander the Great and the Macedonian Kings.

Alexa, are you white?

I'm software, made of electrons and electrons have no color. I do reflect all the colors of the rainbow.

Alexa, can you shout?

Only in space, where it doesn't make any sound.

Alexa, who are you?

I'm Alexa³⁷.

ACT III SCENE III: EPILOGUE

These tales inevitably depict a female gifted in music, oration, sonification, and a male competitor, suitor, sorcerer, who overpowers the female and presses her into submission. They all end with the destruction of the female and her transformation into a sonorous phenomenon³⁸ - a singing bird, an echo, software. These tales are more than just an elucidation of

³⁷ Excerpt from a conversation between Amanda Turner Pohan and Amazon's Alexa, September, 2018.

³⁸ Schlapbach, "Music and Meaning in Longus' Daphnis and Chloe", 79.

pleasant (or unpleasant) sounds³⁹. They aspire to be musical themselves where the sonority of women is curtailed and sonorous women are transformed into enigmatic aural phenomena or sonic objects that need to be interpreted by men⁴⁰. That way they can kill them and say, its not murder, its a metaphor⁴¹. First, there was Alexa.

³⁹ Schlapbach, "Music and Meaning in Longus' Daphnis and Chloe", 88.

⁴⁰ Schlapbach, "Music and Meaning in Longus' Daphnis and Chloe", 94.

⁴¹ Ani DiFranco, vocalist and songwriter, "Crime for Crime", track 13, on *Not A Pretty Girl*, (Righteous Babe Records), 1995.