

Song Exploder
Steve Reich - Different Trains: America – Before the War
Episode 229

Hrishikesh: You're listening to Song Exploder, where musicians take apart their songs and piece by piece tell the story of how they were made. I'm Hrishikesh Hirway.

(Different Trains by STEVE REICH)

Steve Reich is a composer who was one of the pioneers of minimalism. He was awarded the Pulitzer Prize for Music, and the New York Times called him "America's greatest living composer." I had the incredible honor of getting to speak to Steve Reich about his piece *Different Trains*, which was written for string quartet and pre-recorded performance tape. *Different Trains* was first performed in 1988 by the Kronos Quartet. They released a recording of it in 1989, which won the Grammy for Best Classical Contemporary Composition. *Different Trains* is a piece about World War II and the Holocaust. It's made up of three movements: 1. America – Before the War, 2. Europe – During the War, and 3. After the War. For this episode, Steve Reich breaks down the first movement, which was inspired by his own childhood experiences.

(Vocals: "One of the fastest trains / Fastest trains / One of the fastest trains...")

(music fades out)

Steve: My name is Steve Reich.

The first inklings of *Different Trains* happened with a offer from the Kronos Quartet to write them a piece.

The Kronos Quartet is a string quartet started in the early seventies by David Harrington and other musicians in the San Francisco Bay Area. Their specialty, by far, is new music.

The important part of background here is that in 1965 and '66, I did two tape pieces, one called *It's Going To Rain*, which is the first piece that was ever recorded of mine, and, uh, then *Come Out*.

(Come Out sample)

("I had to, like, open the bruise up, and let some of the bruise blood come out to show them")

The pieces were about speech melody. Daniel Ham, the kid whose voice is on *Come Out*, said "I had to, like, open the bruise up and let some of the bruise blood come out to show them" [Steve sings in time with the looped sample] "Ba-dum-ba-de-dum."

(Looped sample: "Come out to show them / Come out to show them / Come out to show them...")

(sample fades out)

But you know in 1987, about then, I was very interested in this new sampler keyboard.

And I was discussing all of this with my wife, Beryl Korot, the video artist, and she said, "Well, why don't you use the sampler for the Kronos piece?" I said, "Wow, that's a great idea." But I had absolutely no idea, you know, "Well, what am I sampling?"

So then I just...the trips that I took as a child popped in my head.

(Whistle and train sounds)

When I was one year old, two years old, three years, up 'til about five or six, I took cross country trains with my nanny, Virginia, who was, basically acted as my mother for the first 10 years of my life.

My mother, who was a singer and a lyricist, and my father, who was a lawyer, managed to be married for one year, and I was born in '36. In 1937, they divorced. My mother went back to LA, where she was from. My father stayed in New York, where he was from. Which meant I'd spend six months with one and six months with the other.

Well, they were 3000 miles apart. And in those days you didn't fly unless you were, I don't know, a millionaire.

So five years of my life was six months here, six months there, train trips both ways.

So it was great to look out the window and see cowboy country and then to go back and see the, you know, New York. And you would eat on the train, which was a very, that was exciting. You'd go in the dining car, you know, which had a tablecloth. I mean, it was very civilized travel. But, you know, it was a very, complex part of my childhood.

And then, all of a sudden, I thought, now, what years did I do this? In 1939? 1940? 1941? What was going on in the world while I was riding these trains? And we all know what was going on in the world. It was that was Mr. Hitler was trying to take over the world. And he was grabbing every Jew and every Jewish kid. And I thought, there but for the grace of God go I.

I was born in America and if I had been born in Europe, that just emblazoned in my mind... different trains.

(Train sound fades out)

So my first thought was, I'll just revisit that. The sound of the train, the train whistles, and I'll use Virginia's voice. She had a very melodic voice for a woman in her seventies.

So I went over to visit Virginia, which I did from time to time. I had a Sony Walkman Pro [laughs] tape recorder running. and I said, "I'm going to record you." And I said, "I'm going to make a piece." And she, you know, she just thought, you know, it sounds crazy, but why not, if he wants to do it. So I would record a number of our conversations. Many of which centered around reminiscing about these train trips, which is something we shared.

(Vocals: "Different trains every time...")

And then I thought, I need to find a Pullman Porter. In the 1930s and 40s, Pullman Porters would, you know, generally be the concierge, if you like, of the train.

When Martin Luther King was coming up, one of his important allies was A. Phillip Randolph, who was the head of the Pullman Porters Union.

And he represented a large and important part of the Black community. And so the Pullman Porters, as a group, were a formative force in the Civil Rights Movement.

So I was able to travel down to Washington, DC and meet with Lawrence Davis who was a retired Pullman Porter on these transcontinental trains.

And he was glad to speak about the old days.

(Vocals: "The crack train from New York...")

That melodic character to his voice grabbed me. And what I did was start playing them back, and when I got something, I ran it through the sampler.

(Vocals: "The crack train from New York / From New York...")

The criteria for selecting particular speech fragments, basically was two things: It has to be *musical*, and it has to be *meaningful*. And it turns out there was a lot of that.

It starts off with, uh, "From Chicago to New York, from Chicago to New York, from Chicago..."

(Virginia vocals: "From Chicago to New York...")

That's Virginia.

Now, that's very emblematic of like, it's kind of like "All aboard!" You know, she's talking about a trip to two well-known cities that everybody knows, but it's the [Steve sings] "dum-ba-dee-dah..." it's her speech melody that says "This is a keeper."

That's where the music from *Different Trains* comes from.

(Different Trains by STEVE REICH - viola)

The basic idea was: string instruments are going to double the speech melody.

(Steve sings melody with viola under)

F, A-flat, F.

So I would be sitting with a tape recorder playing back, and a pencil in my hand, and a music notebook in my hand, and a keyboard to check the speech melody.

(Viola)

Now it's going to be the viola. The viola gives it a little bit more weight than a violin.

And the viola is Virginia.

(Virginia and strings)

(Virginia vocals: "From Chicago...")

Oh, here's Virginia.

(Virginia and strings)

(Virginia vocals: "From Chicago / From Chicago / From Chicago to New York")

And then Mr. Davis was doubled by the cello.

(Lawrence and cello)

(Lawrence vocals: "Crack train from New York / Crack train from New York...")

Later on, "From Chicago to New York," when that comes back, it's followed by, "in 1939."

(Vocals: "From Chicago to New York / From Chicago / In 1939...")

And all of a sudden the date of the whole piece is clear.

(Vocals: "In 1939, 39, in 1939, in 1939, 39, in 1939" repeating section)

(Lawrence vocals: "1939")

And then Mr. Davis comes in, "1939, 1940, 1941."

(Lawrence vocals: "1939, 1939, 1939, 39, 1939 / 1940, 1940, 40, 1940, 1940, 40, 1940, 1940, 40, 1940 / 1941...")

And then Virginia says "1941, I think it must've been."

(Virginia vocals: "1941, I guess it must've been..." [Strings fade out])

And she's thinking of the beginning of World War II.

I took piano lessons as a child. Didn't get very far. I later became trained as a drummer. And a lot of my music is very percussive. Now *Different Trains* has got no percussion in it whatsoever, but in fact, it has a very basic drumming rudiment called a paradiddle, which is the locomotive. And I'll just go around a table over here...

(Steve drums on table)

Left, right, left, left, right, left, right, right. That struck me in my head as a drummer: This is the engine that's going to drive this piece.

(Strings paradiddle with finger drumming)

David Harrington, playing the first violin, and Joan Jeanrenaud playing the cello, and they're playing the paradiddle like crazy.

(Violin and cello playing paradiddle)

A lot of the writing throughout the piece is various forms of the paradiddle. So you got a paradiddle locomotive band [chuckles], and the string players kind of got into it.

(Paradiddle out)

Besides the string quartet and the human voices, you hear train sounds, particularly train whistles.

(Train whistle)

I lived in Lower Manhattan, not too far from a record store called J&R.

And I went over there while I was just beginning the piece and I started browsing, and lo and behold, they had a section called "Train Sounds," believe it or not.

So I bought, I remember I bought one called "Trains in Trouble" [chuckles].

(Locomotive sounds)

The train whistles in America are perfect fourths or fifths. You know, just big wide intervals that, you know, "Hey, wow!" And they're *long*.

(Train whistle)

Okay. Now we're going to add these other sounds and we're going to mess with them in a computer 'til we get them to really work with the strings and voices.

(Whistles and strings)

(Vocals: "From New York to Los Angeles / From New York / From New York / From New York to Los Angeles / From New York / From New York / From New York to Los Angeles / From New York / From New York...")

Speech melody, which is something that happens, we don't think about it. The way I speak, the way you speak, the way my nanny, Virginia, the way Mr. Davis speaks, it is as indicative of who they are as a photograph. Some would say it's *more* revealing.

(Vocals: "The crack train from New York / One of the fastest trains")

But I realized that everybody would be speaking in a different tempo, because when you speak, you don't think about what, you know, "bum, bum, bum-ba," take it.

No. That's not the way it works. You just speak. But when you make a loop out of it, [Steve sings] "dum-ba-de-dum / dum-ba-de..." you have a tempo.

(Vocals: "From Chicago to New York...")

Okay. And then you're going to go to, "One of the fastest trains."

(Vocals: "One of the fastest trains...")

[Steve sings] "Da-dum-ba-de-ba-da / Dum-ba-dum-da..." It's faster. And it's unrelated. It's not like, well, twice as fast or, you know, triplet equals half. Forget it. It's just another tempo.

Well, now how are musicians going to play with this so that they can go from one section to the next?

A lot of people, you know, will say, "Well, hey man put 'em on your computer and slow 'em down or speed 'em up 'til they get them on the same tempo!" But it's like saying, "Take the people who were like your mother, who were a prime representative of the Black community in the 1940s, and just sort of fix 'em up."

That just seemed like, it made my stomach, you know, churn.

But if the basic idea was, string instruments are going to double the speech melody, well, then, you better figure out how it works [laughs].

So, the solution—what makes the performance of the piece possible—was a backing track.

Hrishikesh: *Different Trains* was written for a string quartet to perform live, but along with the live instruments, there are additional pre-recorded layers that play at the same time. So the Kronos Quartet had to record those parts before they could ever play it live.

Steve: So you hear between 12 and 16 string players where you're actually hearing the recording and when you're hearing a live performance.

And the recording was done at Russian Hills studios in San Francisco. And the first couple of days was just me and the engineers working out two different click tracks. So first, [Steve sings] "Da, ba-de-da.." Okay, let's figure out that.

(Vocals: "From Chicago... [click track continues]")

Put down “quarter note equals (whatever it is).” And then it shifts to another number.

(Vocals: “One of the fastest trains...[click track continues]”)

So musicians come in, they hear, let's say two bars of the tempo for the very first thing, and they play the first part.

(Vocals: “From Chicago / From Chicago / From Chicago to New York”)

Now you've got to go to the next fragment. So you rewind the tape a bit and you switch over to Click Track B, which is at the other tempo, musicians put on their headphones. They hear, again, [Steve imitates click track] “bah, bah, bah, bah” and they're off on the new tempo.

(Vocals: “One of the fastest trains / One of the fastest trains / Fastest trains...”)

So laboriously, and I mean, Laboriously with a capital L, these different sections are recorded and then put together. And hey, they work.

(Vocals: “From Chicago to New York / From Chicago / One of the fastest trains / One of the fastest trains...”)

I had built my whole musical life on multiples of exact same instruments playing against themselves in canon, or in some kind of imitative counterpoint.

So what interested me was the kind of web of sound that's created by instruments of the same timbre interlocking in a way where you don't know who's doing what, and you just get lost in this larger fabric. And various things in the fabric, pop out to you as a psychoacoustic reality that, you know, we can't predict, but they're really there.

And it also enables you to thicken the plot musically to make richer harmonies, more complex rhythms, more response to the voices in the counterpointal texture of the music.

(Strings)

In the recording studio I heard first, one layer. Okay. Let's add the second.

(More strings)

Now we play both of those back when you add the third.

(More strings)

Now let's add the live part and the voices.

(Vocals: "In 1939, 39 / In 1939, 39 / In 1939 / In 1939, 39 / In 1939 / In 1939, 39 / In 1939" / "1939")

It was an overdubbing fest. I mean, we're not the Beatles or anything like it, but I mean, hey, you know, we had 16 tracks and they only had four [chuckles].

The backing tape and the finished recording came out of the exact same sessions, So we are hearing, in the studio, the finished piece. And this was really exciting.

(Music ends)

Hrishikesh: The second and third movements of *Different Trains* shift their focus away from Steve Reich's experiences in America, and turn to Europe and the Holocaust. For those movements, he sampled the voices of Holocaust survivors.

Steve: The original idea for the piece was just me, Virginia, and Mr. Davis. And then when I started thinking about the, the times that I'd actually made these trips, the Holocaust came to mind because I could have been a part of it. I was the same age.

So, I knew there was an archive of Holocaust survivors' recordings at Yale. Just having people talk about their experiences in Auschwitz and other camps. And that, you know, was a pretty intense experience to sit up there in some library at Yale with, with the headphones on, you know, listening to one incredible thing after the other and copying that off onto tape.

Hrishikesh: Can I ask you why you chose to discuss the first movement for this episode, and not the second or third movement?

Steve: I think... I get choreographed a lot. A lot of my music is used by dancers. And occasionally, not very often, but occasionally they want to do *Different Trains*. And I've specified to the publisher, I've said, "If they want to choreograph the first movement, it's fine, but not the second or third movements." And I feel that the use of the Holocaust survivors' voices was a pivotal decision, and that *they* control the music.

And when it comes to dealing with the Holocaust, I feel like it just... look, it works the way it is. Leave it alone.

(Scoring)

I was a touring musician for 40 years with my own ensemble. And part of my ensemble was a string quartet. And whenever we did a concert, *Different Trains* was the last piece of the program. And that's where it goes. I mean, it's the anchor.

(Vocals: "Different trains / Different trains, every time / Different trains")

Hrishikesh: What are you feeling right now, as you listen to this?

Steve: Well, happily, I'm moved. A good piece really can't be judged until years later. I mean... It isn't just hearing Virginia and the memory of her personally. It's how everybody in the piece demanded, deserved, a perfect setting. How do I know whether anybody would like a piece of music of mine? I don't know. So what have I got? If I'm almost moved to tears, maybe you will be too. And in a number of cases, it's proved to be the case. And I feel blessed because of that.

(Vocals: "Different trains / Different trains, every time / Different trains")

Hrishikesh: And now, here's *Different Trains*, Movement 1: America – Before the War, by Steve Reich, in its entirety.

("Different Trains, Movement 1: America – Before the War" by STEVE REICH)

To learn more, visit songexploder.net. You'll find links to stream or download *Different Trains*. Steve Reich also has a new book out, called *Conversations*. In it, he speaks to other artists, like the late Steven Sondheim, Jonny Greenwood from Radiohead, Brian Eno, and David Harrington from the Kronos Quartet, among others. There's a link to the book on the Song Exploder website as well.

Song Exploder is made by me, along with the show's theme music. I produced this episode with Craig Eley and Casey Deal, with artwork by Carlos Lerma, music clearance by Kathleen Smith, and production assistance from Chloe Parker.

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I'm Hrishikesh Hirway. Thanks for listening.