

Linking Music with Mathematics

Purdue School of Science student, Tyler Foxworthy discusses the importance music plays in his life from passion to academics and identity.

Date: January 28, 2010

Duration: 3:08

Transcript

[T. Foxworthy] Well, when I first started playing violin, at the beginning, of course it sounded awful, but it was a lot of fun, and that fun never really went away, so I just kept with it, and then eventually, a few years later, I learned how to play the piano, and it just all followed from there. I never got sick of it, and I eventually learned to really love it. I didn't love it at first, but after a few years, you know, it really became a part of me and became something I really, really loved.

Well, for me, it really boils down to the natural presence of patterns and symmetry in music that really appeals to the same parts of me that appeal to the mathematician in me, so it's really that pleasure I really get out of seeing things in order and things that just work together harmoniously. It's the same sort of paradigm that you have with mathematics and the same sort of thing in music.

Oh yeah; I'll frequently, especially if I'm bored or tired, I'll, more or less, be thinking of something, and I'll have the music, the music will be running in my head, or something along those lines, so yeah, definitely.

You know, I can remember, I can strongly remember the first time I really heard the music of Bach, and something about that resonated really, really deeply with me; the patterns and the structure, the movement out of all of that, and that's really what excited me about the idea of getting into music and learning to play the violin too, I think is really that spontaneous, that one spontaneous experience really drove me to want to do that, and then, the desire, once I was there, to get to the point to where I could play the type of music that I like to listen to.

You know, there's no way of knowing what somebody sounded like when they were playing 300 years ago, 400 years ago, and there's no way, we can't watch video tapes of somebody to get idea of their personality; they don't exist; reading books about, you know, a biography about a person is, can be hit or miss.

It's really when you look at, I know, not just music, but when you look at an individual's creative output, you get a sense of what that person was like; their peculiarities, the things that they like and don't like, especially when you don't just consider one piece, but when you look at the body of a work of the composer, you really get an idea of an essence of who that person was.