The singer/songwriter and the neuroscientist meet up to discuss music.

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David Byrne, the well known lead singer and songwriter of the seminal band Talking Heads, has had an extensive solo career, won an Academy Award for his work on The Last Emperor soundtrack, exhibited his artwork internationally, and authored five books, including, most recently, Arboretum. For 10 years, Daniel Levitin worked as a session musician, sound and recording engineer, and record producer. He is now the James McGill professor of behavioral neuroscience and music at McGill University and the author of The New York Times bestseller This Is Your Brain on Music. Recently at STK, in New York's Meatpacking District, the two traded ideas about music, language, and memory.

DAVID BYRNE: So, in the penultimate sentence of your book, you write that music is a better tool than language for arousing feelings and emotions.

This ties into what we were discussing a few months ago, about music and visual art bypassing the filters that language seems to get snagged on, in emotionally affecting you.

DANIEL LEVITIN: Yes.

DB: When somebody tells us what this song is about, or what this painting is about, we're kind of stuck because talking about the art, and the art itself, are almost separate areas. The music seems to have straight access to the so-called "reptile brain," and we feel it immediately. But often it's also touching all kinds of other parts of the brain. If it has lyrics, there's language in it. If it has a strong rhythmic element it's touching what you would call the motor parts of the brain and muscle. All kinds of stuff is involved. How do you think this all happens?

DL: My guess is it starts with trying to unite rationality with irrationality.

DB: I'll bet you get resistance too from people who say you can't analyze
this.

DL: Well, I remember a quote from Allan Watts, the philosopher. He wrote a number of books on Eastern philosophy in the 70s. He said that the problem with science is that when it wants to study the river, the scientist will go to the river with a bucket, take a bucket of water out, bring it to the shore, sit there, and study the bucket of water. Of course that's not the river.

And you know a lot of people have tried to study music by getting rid of everything except pitch or everything except rhythm. Or by using very strange, computer-generated sounds, to see what the brain does in response to them.

There's always this tension in science that you want to control your variables and you want to know what it is you're studying. And yet you want to have what we call ecological validity, which is just a fancy way to say it has to be like the real world. There's a tension between these two, and I've erred on the side of having ecological validity in my own experiments because I want to see the real phenomena.

But getting back to what you were saying about why art can get at some of the things language can't.

DB: Yeah. I mean, there's something about music that seems to touch what we would call irrational, emotional parts of ourselves. As somebody who makes music, you know there are kind of tried and true ways of doing that; there are buttons that you can press that will get emotional responses.

DL: Oh sure, the strings from Hitchcock's Psycho. I mean, you play that dissonant discordant string sound, and you know the reaction you'll get.