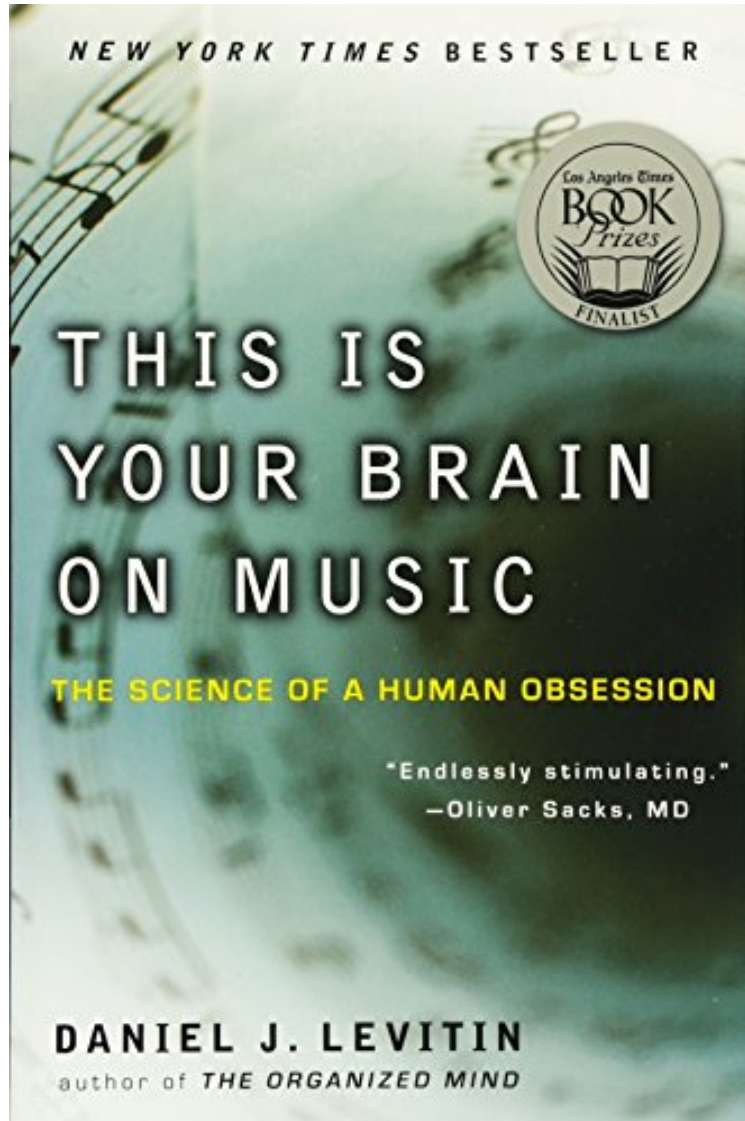


(Get free) This Is Your Brain on Music: The Science of a Human Obsession

# This Is Your Brain on Music: The Science of a Human Obsession

*Daniel J. Levitin*

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#8715 in Books Daniel J Levitin 2007-08-28 2007-08-28Original language:EnglishPDF # 1 8.00 x .76 x 5.30l, .62 #File Name: 0452288525322 pagesThis Is Your Brain on Music The Science of a Human Obsession | File size: 33.Mb

**Daniel J. Levitin : This Is Your Brain on Music: The Science of a Human Obsession** before purchasing it in order to gage whether or not it would be worth my time, and all praised This Is Your Brain on Music: The Science of a Human Obsession:

0 of 0 people found the following review helpful. Well-written and enjoyableBy LatcatinThis has to be one of the best books I have read on this subject. The author thoroughly explores and supports his ideas. He presents many paths to

new ideas and theories as he reviews the existing studies and theories of both himself and others in his field and related fields. I will be reading this one again!0 of 0 people found the following review helpful. Along with a lot of information about the brain's functioning ...By MichaelAlong with a lot of information about the brain's functioning in relation to music, there is much insider information from a professional sound engineer and a real music lover. I listened to a lot of music commented on in this book, learned new stuff and payed attention to many interesting details.0 of 0 people found the following review helpful. Fantastic Book!By A2900This book does an amazing job of introducing the reader to how the brain works, how it develops in the human, and how it responds to various stimuli including music. Combined with the works of Damasio and Leonard Meyer (U of Chicago), the book immerses the reader in a wonderful sea of information and opens new areas to explore.I can't recommend the book highly enough.

In this groundbreaking union of art and science, rocker-turned-neuroscientist Daniel J. Levitin explores the connection between musicits performance, its composition, how we listen to it, why we enjoy itand the human brain. Taking on prominent thinkers who argue that music is nothing more than an evolutionary accident, Levitin poses that music is fundamental to our species, perhaps even more so than language. Drawing on the latest research and on musical examples ranging from Mozart to Duke Ellington to Van Halen, he reveals: How composers produce some of the most pleasurable effects of listening to music by exploiting the way our brains make sense of the world Why we are so emotionally attached to the music we listened to as teenagers, whether it was Fleetwood Mac, U2, or Dr. Dre That practice, rather than talent, is the driving force behind musical expertise How those insidious little jingles (called earworms) get stuck in our headA Los Angeles Times Book Award finalist, This Is Your Brain on Music will attract readers of Oliver Sacks and David Byrne, as it is an unprecedented, eye-opening investigation into an obsession at the heart of human nature.

From Publishers WeeklyStarred . Think of a song that resonates deep down in your being. Now imagine sitting down with someone who was there when the song was recorded and can tell you how that series of sounds was committed to tape, and who can also explain why that particular combination of rhythms, timbres and pitches has lodged in your memory, making your pulse race and your heart swell every time you hear it. Remarkably, Levitin does all this and more, interrogating the basic nature of hearing and of music making (this is likely the only book whose jacket sports blurbs from both Oliver Sacks and Stevie Wonder), without losing an affectionate appreciation for the songs he's reducing to neural impulses. Levitin is the ideal guide to this material: he enjoyed a successful career as a rock musician and studio producer before turning to cognitive neuroscience, earning a Ph.D. and becoming a top researcher into how our brains interpret music. Though the book starts off a little dryly (the first chapter is a crash course in music theory), Levitin's snappy prose and relaxed style quickly win one over and will leave readers thinking about the contents of their iPods in an entirely new way. (Aug.) Copyright Reed Business Information, a division of Reed Elsevier Inc. All rights reserved.From School Library JournalAdult/High SchoolLevitin's fascination with the mystery of music and the study of why it affects us so deeply is at the heart of this book. In a real sense, the author is a rock 'n' roll doctor, and in that guise dissects our relationship with music. He points out that bone flutes are among the oldest of human artifacts to have been found and takes readers on a tour of our bio-history. In this textbook for those who don't like textbooks, he discusses neurobiology, neuropsychology, cognitive psychology, empirical philosophy, Gestalt psychology, memory theory, categorization theory, neurochemistry, and exemplar theory in relation to music theory and history in a manner that will draw in teens. A wonderful introduction to the science of one of the arts that make us human.Will Marston, Berkeley Public Library, CA Copyright Reed Business Information, a division of Reed Elsevier Inc. All rights reserved.From Scientific AmericanEveryone knows that music can calm a savage beast, rouse a marching platoon or move lovers to tears. But no one knows exactly how. Daniel Levitin, a professional musician, record producer and now neuroscientist at McGill University, explains the latest thinking into why tunes touch us so deeply. He also speculates about whether specific pathways have evolved in our brain for making and listening to music. Using brain imaging, Levitin has documented neural activation in people as they listen to music, revealing a novel cascade of excitation that begins in the auditory system and spreads to regions related to planning, expectation and language as well as arousal, pleasure, mood and rhythmic movement. "Music listening, performance and composition engage nearly every area of the brain that we have so far identified and involve nearly every neural subsystem," he notes. Music's effects on neurons are so distributed that in some cases stroke victims who can no longer decipher letters can still read music, and some impaired individuals who cannot button a sweater can nevertheless play the piano. Levitin describes new insights into these conditions as well as disorders that cause certain individuals to lack empathy, emotional perception and musicality. He and others suspect a cluster of genes may influence both outgoingness and music ability. He also posits that music promotes cognitive development. Not surprisingly, music reaches deep into the brain's most primitive structuresincluding our ancient "reptilian brain" tied to motivation, reward and emotion. Music elevates dopamine levels in the brain's mood and pleasure centers in ways similar to those triggered by narcotics and antidepressants. Levitin also explains how the neural underpinnings of auditory stimulation and mate selection reach far back in life's evolutionary scheme. Levitin has no agenda per se, although the book is a

rebuttal of sorts to scientists who say music has served no purpose other than to pleurably stimulate auditory nerve endings. He simply explains an emerging view about the coevolution of music and the brain. To tell his tale, Levitin engagingly weaves together strands of his own life as a professional musician (who dropped out of college to form a band) with those of his transformation into a neuroscientist. To revel in Ravel's Bolero or Charlie Parker's Koko, he reminds us, is to stimulate the brain in a "choreography of neurochemical release and uptake between logical prediction systems and emotional reward systems" a ballet of brain regions "ex quisitely orchestrated." Richard Lipkin