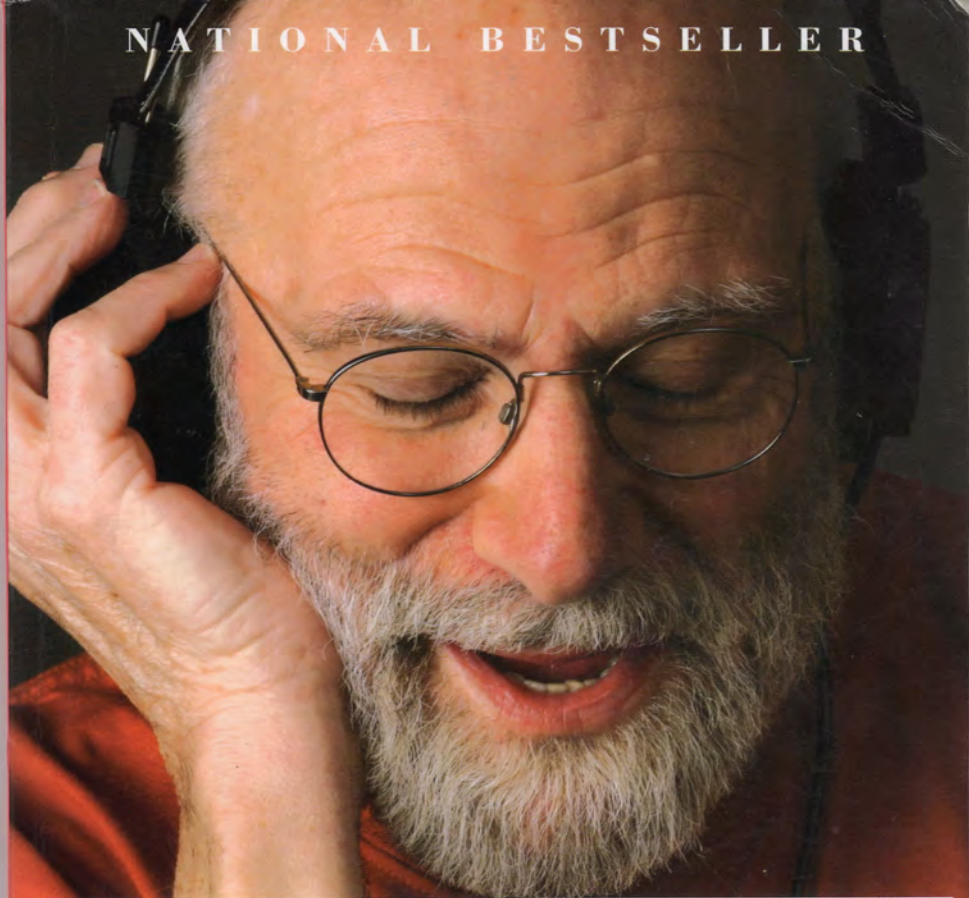


NATIONAL BESTSELLER



MUSICOPHILIA

Tales of Music and the Brain

Revised and Expanded

OLIVER SACKS

Author of *The Man Who Mistook His Wife for a Hat*

"Powerful and compassionate. . . . A book that not only contributes to our understanding of the elusive magic of music but also illuminates the strange workings, and misfirings, of the human mind." —*The New York Times*

specific affects and connections of a song; but bonding is deeper, more primal, if we dance together, coordinating our bodies and not just our voices. "The body is a unity of actions," Luria wrote, and if there is no unity, nothing active or interactive going on, our very sense of being embodied may be undermined. But holding someone, making the movements of dance with them, may initiate a dancing response (perhaps in part by the activation of mirror neurons). In this way, patients who are otherwise inaccessible can be animated, enabled to move and to regain, at least for a while, a sense of physical identity and consciousness—a form of consciousness that is perhaps the deepest of all.

Drum circles are another form of music therapy that can be invaluable for people with dementia, for, like dance, drumming calls upon very fundamental, subcortical levels of the brain. Music at this level, a level below the personal and the mental, a purely physical or corporeal level, needs neither melody nor the specific content or affect of song—but what it does need, crucially, is rhythm. Rhythm can restore our sense of embodiment and a primal sense of movement and life.

WITH A MOVEMENT disorder like Parkinson's disease, there is no significant carryover effect with the power of music. The patient can regain a fluent motor flow with music, but once the music stops, so too does the flow. There can, however, be longer-term effects of music for people with dementia—improvements of mood, behavior, even cognitive function—which can persist for hours or days after they have been set off by music. I see this in the clinic almost daily, and constantly receive descriptions of such effects from others. Jan Kolturn, who coordinates caregiving to the elderly, wrote to me with this story:

One of our caregivers . . . went home and made the simple intervention of turning on the classical music channel in front of the couch where her mother-in-law had mostly sat watching TV "shows" for the preceding three years. The mother-in-law, diagnosed with dementia, had kept the house awake at night when the caregivers turned off the TV in order to get some sleep. Daytimes, she would not get off the couch for toileting or family meals.

After the channel change, she had a profound behavioral change: She asked to come to breakfast the next morning, and did not want to watch her usual TV fare the next day, and asked for her long-neglected embroidery the next afternoon. Over the next six weeks, in addition to communicating with her family and taking more interest in her surroundings, she mostly listened to music (primarily country and western, which she loved). After six weeks, she died peacefully.

Sometimes Alzheimer's disease may provoke hallucinations and delusions, and here, too, music may provide a solution to an otherwise often intractable problem. Bob Silverman, a sociologist, wrote to me about his mother, who, at ninety-one, had had Alzheimer's for fourteen years and was living in a nursing home when she started to hallucinate:

She told stories, and acted them out. She seemed to think these things were really happening to her. The names of the people in the stories were real, but the action was fiction. In telling many of the stories, she often swore and got angry, which she never did before the disease. The stories usually had a kernel of truth. It was fairly clear to me that there were some pretty deep-seated dislikes, resentments, perceived

slights, and so on, that were being acted out. . . . In any case, she was exhausting herself and everyone around her.

But then he bought his mother an MP3 player with about seventy tunes on it that were constantly recycled—these were all familiar tunes which she recognized from her youth. Now, he wrote, “She listens on headphones so no one else is disturbed. *The stories just stop*, and every time a new tune comes on, she will say something like, ‘Isn’t that marvelous?’ gets animated and sometimes sings along.”

Music can also evoke worlds very different from the personal, remembered worlds of events, people, places we have known. This was brought out in a letter from Kathryn Koubek:

I’ve read many times that music is a whole other reality. It wasn’t until my father’s last days, when it became his *only* reality, that I began to understand what that means. Nearly a hundred years old, my father had begun to lose his grip on this reality. His talk became disconnected; his thoughts strayed; his memory was fragmented and confused. I made a modest investment in a portable CD player. When the talk became distracted I would simply put in a beloved piece of classical music, press the “play” button and watch the transformation.

My father’s world became logical and it became clear. He could follow every note. . . . There was no confusion here, no missteps, no getting lost, and, most amazing, no forgetting. This was familiar territory. This was home, more than all the homes he had ever lived in. . . . This was the reality.

Sometimes my father would respond to the beauty of the music by simply weeping. How did this music thrill when all other thrills had been forgotten—my mother, young with

a lovely face, my sister and I as children (his darlings), the joys of work, of food, of travel, of family?

What did this music touch? Where was this landscape where there is no forgetting? How did it free another kind of memory, a memory of the heart not tethered to time or place or events or even loved ones?

The perception of music and the emotions it can stir is not solely dependent on memory, and music does not have to be familiar to exert its emotional power. I have seen deeply demented patients weep or shiver as they listen to music they have never heard before, and I think that they can experience the entire range of feelings the rest of us can, and that dementia, at least at these times, is no bar to emotional depth. Once one has seen such responses, one knows that there is still a self to be called upon, even if music, and only music, can do the calling.

There are undoubtedly particular areas of the cortex subserving musical intelligence and sensibility, and there can be forms of amnesia with damage to these. But the emotional response to music, it would seem, is widespread and probably not only cortical but subcortical, so that even in a diffuse cortical disease like Alzheimer’s, music can still be perceived, enjoyed, and responded to. One does not need to have any formal knowledge of music—nor, indeed, to be particularly “musical”—to enjoy music and to respond to it at the deepest levels. Music is part of being human, and there is no human culture in which it is not highly developed and esteemed. Its very ubiquity may cause it to be trivialized in daily life: we switch on a radio, switch it off, hum a tune, tap our feet, find the words of an old song going through our minds, and think nothing of it. But to those who are lost in dementia, the situation is different. Music is no luxury to them, but a necessity, and can have a power beyond anything else to restore them to themselves, and to others, at least for a while.