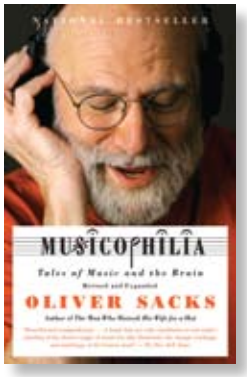
REVIEWED BY MARJIE VAN GUNTEN



Musicophilia: Tales of Music and the Brain

By Oliver Sacks
Vantage Books, 2007

Oliver Sacks is a practicing neurologist and professor of neurology and psychiatry at Columbia University Medical Center. This background, plus his knowledge of music and a strong empathy for his patients, make him uniquely qualified to tackle the subject of this book. In *Musicophilia*, Sacks shares his professional experiences in a very warm and personal way that results in a clinically based narrative that doesn't require scientific training to be understood.

The first case study in the book relates the experience of a man who was struck by lightening and subsequently developed a passion for music that was totally new to him. Considering the odds of being struck by a bolt from the blue, I began my reading with a bit of skepticism about the relevance of this book to someone working with a population of "normal" school children. This apprehension was not immediately eased as I read about people with exceptional medical conditions: seizures triggered by music, hearing loss resulting in amusia (inability to hear specific pitches), musical savants, or people with such powerful synesthesia that pitch, timbre, or harmony were overpowered by visions of colors when hearing music. None of these are normal conditions encountered in my teaching experience.

However, throughout the book the telling of these exceptional stories invites the reader to reflect on the relationship of music and the workings of our brains. The chapter titled "Music on the Brain: Imagery and Imagination" will be of great interest to any music educator. Why is it that some people are naturally musical geniuses (Mozart comes to mind), and is there such a thing as an unmusical child? Sacks states that virtually everyone experiences involuntary musical imagery. Why is music such a universal part of the human experience? "There is clearly a wide range of musical talent, but there is much to suggest there is an innate musicality in virtually everyone" (p. 101).

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In a later chapter on absolute pitch, he suggests that the ability may be common in all infants but may become maladaptive later in life. A study by Diana Deutsch shows that children who grow up speaking a tonal language (i.e., Chinese) met the criterion for absolute pitch at a much higher rate than non-tone language speakers. Early music training, in addition to speaking a tonal language, increased the rate at which students met the criterion. Non-tone language speakers were also more likely to meet the criterion if they began music study early, but not nearly at the rate of tonal language speakers. Deutsch and her colleagues believe that absolute pitch played a critical role in the evolution of both speech and music.

A fascinating pair of chapters deals with catchy tunes and musical hallucinations. Most musicians have experienced ear worms that "just come to us" and will find this section of the book to be very relevant. Involuntary repetition of movements, sounds, or words tends to occur in people with Tourette's syndrome, or obsessive compulsive disorder, or after damage to the frontal lobes of the brain. But the automatic, internal repetition of musical phrases is almost universal in people without any triggering medical condition. This common experience, says Oliver Sacks, is "the clearest sign of the overwhelming, and at times helpless, sensitivity of our brains to music" (p. 49).

Many perfectly healthy and otherwise normal musicians experience musical hallucinations, at least on a temporary basis. I find myself unable to sleep for most of a week after singing a set of choral concerts; fragments of music run in an endless loop in my head. Sacks cites research by Jerzy Konorski, a Polish neurophysiologist, suggesting that the mechanism producing hallucinations is built into our brains. It is fascinating to learn that musical fragments naturally make their way into the thalamocortical systems that underlie consciousness and self. For Konorski, the question is not why a person experiences hallucinations, but rather why we don't experience them all the time. Normally, we have mechanisms that block the hallucinations, but these may be inhibited by a loss of sensory input from eyes, ears, and other sense organs, which allows the unbidden music to be released in our conscious state. For some people, this is a permanent and debilitating condition.

In addition to descriptions of people with conditions most of us hope to

never experience, Sacks also describes how rhythm and movement served to heal him after a serious climbing accident. Through this event he learned that music could override the nervous system in the act of healing the body. A chapter entitled "Speech and Song" offers dramatic examples of the role of music as therapy for aphasia. The final chapter, "Music and Identity: Dementia and Music Therapy," is a fascinating window into the power of music as an emotional and physical healing tool.

In his preface, the author quotes Charles Darwin: "As neither the enjoyment nor the capacity of producing musical notes are faculties of least use to man … they must be ranked among the most mysterious with which he is endowed" (p. x). Music, says Sacks, is hardwired into us and is central in every culture. This book is a fascinating exploration of ways in which humans process, use, create, and simply enjoy music. This is an emerging area of scientific research, and I hope there will be many more books that elaborate further on the mysterious capacity of humans to produce music. ■

***Marjie Van Gunten**, former member of* The Orff Echo *Editorial Board, recently retired after forty years of teaching. She now lives in a meadow by the sea surrounded by the songs of birds and the rhythmic dance of waves.*

Ethics Statement

The American Orff-Schulwerk Association strongly encourages members to be positive and discreet when discussing our organization, specific courses and/or teachers, and the Orff movement. The very nature of the Orff Schulwerk philosophy embodies a broad spectrum of expressions, exploring different paths to arrive at artistic and educational goals. Members are encouraged to recognize and remain open to varied approaches and to celebrate both our differences and our similarities.

How to Make a Bequest to AOSA

A bequest is a way to give property through your will. One that designates AOSA as a beneficiary would provide for long-term support for our association. A will or living trust is the most common way that people include charities in their estate plans. With a bequest, you retain full use of your gift property during your life. If you already have a will, your attorney can draft a codicil (a simple amendment) to include a gift to AOSA.

Below is some sample language to facilitate a charitable bequest to AOSA. Please consult with your legal advisor to discuss whether this language meets your estate planning and charitable intentions.

- **A bequest of a *specific amount, percentage of an estate, or asset*:**
  I give [amount, percentage of estate, or description of asset] to the American Orff-Schulwerk Association.
- **A bequest of the *remainder of an estate*:**
  I give all the rest, residue and remainder of my property, of whatever nature and wherever located, which I may own or over which I have the right of testamentary disposition or a power of appointment at my death, to the American Orff-Schulwerk Association.
- **A bequest in the event that one or more of your *specific bequests cannot be fulfilled*:**
  If [beneficiary] is not living at the time of my demise, I give the American Orff-Schulwerk Association, [amount, description, percentage, or remainder of my estate].

AOSA is grateful that you are considering a charitable bequest. If you do decide to include AOSA in your estate plans and inform us of those intentions, you have the opportunity to be recognized by AOSA as a member of our Wildflower Legacy. For more information, please contact:

Katharine P. Johnson, AOSA Executive Director, P.O. Box 391089, Cleveland, OH 44139, (440) 543-5355, execdir@aosa.org

Please note: The language provided in this document is not intended to be a substitute for legal or tax advice. We recommend that you consult with your attorney and/or tax counsel for such advice.

THE WILDFLOWER LEGACY

The Wildflower Legacy recognizes and honors those who include AOSA in their estate plans. It gives us the opportunity to thank people who are planning for AOSA's future with these thoughtful and generous gifts.

We ask that gifts to the Wildflower Legacy be designated to the AOSA Endowment. The endowment provides AOSA with both flexibility and stability by providing for AOSA's long-term financial health. Our needs in forty years will be different from our needs today, and an unrestricted endowment provides for today's priorities while allowing us to successfully realize new priorities in the future.

AOSA is currently welcoming inaugural members of the Wildflower Legacy. All planned gifts qualify for membership. Please let us know if we should include you in the Wildflower Legacy.