I begin this review by stating, in the spirit of full disclosure, that my professional background differs considerably from most who contribute to Approaches. I am neither a music therapist nor a specialist music educator, nor am I a clinician of any kind. I am also an American. My field relevant to this review is disability studies in music, which I am widely credited with having founded (Straus 2011) and in which I first published (Lubet 2002). Disability studies are broadly and deeply interdisciplinary, drawing principally from the humanities and social sciences and those professions with which they are often allied, such as education, counselling, and social work. Fundamental tenets of the field include approaching disability as a civil and human rights concern and self-advocacy by disabled people. While I am well-acquainted with both music therapy and Autistic Spectrum Conditions (ASC), the unusual perspectives that inform my background may mean that my review of Adam Ockelford's book may reflect biases different from most contributors to this journal.

The title of Ockelford’s Music, Language and Autism portends a vast intersection of three vast topics. In this he certainly succeeds, taking on each topic individually and interrelating them lucidly and intelligently. Drawing upon decades of teaching children with ASC and other disabilities (including multiple disabilities), as well as a formidable career as a researcher, the book's introduction and seven chapters progress from an exposition of the manifestations of autism, through “The Challenge of Language” (p. 28) for children with ASC, the structuring of music (principally according to his “zygonic” theory), the development of musicality (which he regards as exceptionally common among children with ASC), the interrelationship of music and language in communication, “Exceptional Early Cognitive Environments” (p. 211), and a final chapter on teaching children with both exceptional musicality and ASC. I had anticipated that a greater proportion of Music, Language and Autism would be dedicated to the kind of pragmatics that are the focus of the final chapter. Music therapists and special music educators should bear this in mind. While this book is often extremely interesting, mostly very well written (and largely accessible to non-musicians) and includes information that may well inform practice indirectly, this is far from first
and foremost a book of clinical and teaching techniques.

**FOUNDATIONAL CONCEPTS**

The *Introduction* briefly references theories of autism and synopsises key ideas that frame Ockelford’s theses throughout the book. One such theory, the relationship between autism and blindness is a bit concerning. That this is a strong relationship is a rather bold claim, one whose case he makes better later, though not quite thoroughly convincingly and which would have benefited from citations of significant studies, in addition to those accounts of the author’s own experience as a teacher which he provides. His personal experience looms consistently quite large throughout this text. He concludes with a useful guide to navigating the book (pp. 20-22).

The very brief Chapter 1 concerns theories of autism, the needs of many children with ASC whom he does not regard as “higher functioning” (he never calls them “lower functioning”) for specialist professional support, and his case for music playing a larger role in their education. The prevailing view within disability studies in both North America and Europe favours inclusive education, which is not referenced. Inclusivity in no way precludes the engagement of professionals with training in disability and given that, as the author writes, language and behaviour can be particular challenges, an acknowledgement of the possibility of socially integrative approaches would have had value.

In Chapter 2, *The Challenge of Language*, the author is at his best. Ockelford writes with great thoroughness and eloquence of the many dimensions that contribute in an integrated manner to the meaning of linguistic utterances, spoken or written, and how these present particular challenges to children. It features a close reading of the text of *Twinkle, Twinkle, Little Star*, that highlights the difficulties a person with ASC might have interpreting its meaning. It is quite enlightening, but also implies an English-centric bias – an emphasis on particular characteristics of English, such as its approach to word order. Readers, including especially practitioners whose clients know and/or use other languages, should bear this in mind.

Early on in Chapter 2, Ockelford states “there is no evidence that autistic children’s understanding of music [italics Ockelford’s – in contrast to language] is impaired – in fact, quite the reverse” (p. 29). He references both a quantitative study by Rimland and Fein (1988) and his own experience to argue that at least 5% of autistic children (Rimland and Fein observe that half of the 10% in whom they detect “savant-like abilities”) may have “special musical abilities” (p. 29). This is a problematic assertion in that it depends on a rather narrow definition of what is meant by “understanding” music – for Ockelford, principally a sense of absolute pitch (AP) and the ability to perform on an instrument – and the presumption that impairment and giftedness in the same endeavour must be mutually exclusive. They need not.

One needs go no further than the final Chapter 7 to read Ockelford’s account of his years of attempting to teach – with only limited success – standard keyboard fingerings to his star “savant” pupil (pp. 248-250). Surely, the logic behind those fingerings is part of understanding music. The chapter and book then proceed to a discussion of whether children with autism can “feel” or can learn to feel the emotional content of music as neurotypical people do (pp. 256-258). Ockelford is ambivalent about whether this is possible and also questions whether it matters. While I agree with him on both counts, there can be no doubt that “feeling” and “understanding” music are, at the very least, intersecting capacities. If there is an inability to “feel” music as emotion, there is thus also an inability to understand it, at least on one level fundamental to many kinds of music, including much of the Western music that grounds his theories.

In Chapter 3, *Making Sense of Music* (p. 62), Ockelford explains how music creates meaning and how this differs from linguistic expression. He is clear that music as a “language” – a common attribution – differs significantly in its communicative abilities from verbal/written language. He presents his “zygonic” theory of musical structure and sense. The theory began as an analytical paradigm for musical professionals, but he eventually realised that it “is particularly good at explaining how some children with autism may process music: indeed the theory could have been constructed with them in mind!” (pp. 66-67).

“Zygonic” theory is interesting, though I wish he’d named it something more obviously descriptive. The theory’s foundation is that imitation is the root of all musical structure. To be sure, imitation as he defines it abounds in most music, but, at least here, it does not account well for, or perhaps even allow for, moments of genuine contrast. Further, zygonic theory employs dense verbal descriptions of musical phenomena, such that even the analytical example he offers, of the
melody (only) of *Twinkle, Twinkle, Little Star*, is lengthy, initially seven pages of prose and diagrams (pp. 74-81) (and he returns at considerable length to *Twinkle* later in the chapter). Based on this analysis, it is difficult to imagine the application of zygonic theory to longer works or even a harmonised, fully contrapuntal, orchestrated rendering of *Twinkle*, though Ockelford has published substantially elsewhere and considered more complex works (for example, Ockelford 2006).

The nuances of zygonic theory, though, may ultimately be less important than that, as Ockelford argues, the highly imitative structure of music, with a far higher rate of redundancy than verbal/written language, as well as music’s opportunity to be appreciated on many levels, makes it highly accessible to children in general and children with ASC in particular. Music may thus facilitate language acquisition and other extra-musical learning. The chart that concludes this chapter, which describes “the key similarities between language and music” (pp. 110-113), is quite valuable.

**INTEGRATION OF CONCEPTS**

Chapter 4 concerns *How Musicality Develops*. Ockelford observes six stages of musical development and “three domains of engagement”: “reactivity, proactivity, and interactivity” (p. 21). The last of these domains, “interactivity,” is important to the distinctions Ockelford draws between music and language, in that simultaneous active participation is fundamental to the former and relatively marginal to the latter. It is here that the author introduces his *Sounds of Intent*, a framework for describing the level and nature of children’s engagement with music in its three domains.

While at times Ockelford writes quite beautifully, this chapter presents difficulties. It includes pages of transcribed field observations (a total of 78) (pp. 115-123) describing how “children with learning disabilities, including autism, [engage] with music,” as well as a couple of challenging charts (the second is 3 pages long and full of abbreviations) (pp. 134-136), illustrating *Sounds of Intent* as a paradigm for evaluating musical engagement, apparently based far more on the author’s (considerable) experience than upon supporting literature. The application of *Sounds of Intent* is illustrated with a case study of a client with multiple cognitive, mobility, and sensory impairments. When the case was entered as prose into the longer of the two aforementioned chart templates, it filled 12 pages (pp. 146-158).

It was at this point in my reading that I began to be concerned for what struck me as the imbalance of qualitative versus quantitative data, in both the author’s own findings and those sources he (too infrequently) references, as well as the strong subjectivity of research that leans so heavily upon one person’s (and to a limited extent, his close colleagues’) experience. While this may reflect my North American bias, against which I cautioned readers, I would have preferred that the field notes had been coded into a few clear trends rather than served raw and, given especially that so much data appears to have been available, that the *Sounds of Intent* graph a database of cases, rather than chronicling a single case history as prose. A parallel concern for me, which likewise emerged during my reading of this chapter, was a preference for observation (of the case study) over outcomes. While “Shivan’s” life appears to have been enriched aesthetically by his intensive music education, readers are never told of positive extra-musical outcomes that may or may not have emerged. Though Ockelford is apparently not a music therapist (more about such vagaries later), such outcomes might be an expectation, at least of the music therapy readership of this journal.

Chapter 5, *Music, Language, and Communication*, is concerned with the manner in which music (and sound) can be used by children with ASC to facilitate communication in a variety of ways. Ockelford emphasises the often-uneven development of music versus language, the former significantly, even spectacularly, advanced over the latter. In one case, he writes of a non-verbal student who has learned to use music performed on keyboard as a “proxy language”, in which an evolving repertoire of gestures are employed with some facility as symbolic communication. How this might be useful away from the keyboard is not discussed. Other cases show music enabling speech and social interaction. In addition, Ockelford introduces *All Join In!* a cycle of 24 original songs that he uses to facilitate communication.1

Chapter 6 concerns another fundamental tenet of Ockelford’s praxis, *Exceptional Early Cognitive Environments* (p. 211) or EECE’s. Like “zygonic”, I found this terminology opaque and I remain unsure why he refers in his “new theory of autism and

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1 These songs are said to be available for free download, on the *Sounds of Intent* website: [http://soundsofintent.org/index.php?option=com_cont...article&Id=15](http://soundsofintent.org/index.php?option=com_cont...article&Id=15). However, this was impossible when I made the attempt, as there was no link.
music” (p. 241) to autism creating an “environment.” In brief, though, the author’s thesis is that children with ASC tend to process all three categories of sound as he (quite reasonably) defines them – speech, music, and “everyday sounds” – “as though they were inherently musical, and in terms of musical structure (repetition)” (p. 241). His particular interest here is in the 5% of children with ASC who exhibit exceptional musicality in the form of absolute pitch, which often leads to the early acquisition of the ability to play, largely auto-didactically, an instrument, typically a keyboard, though often with unorthodox technique that is difficult for teachers to guide toward a more standard approach. The chapter is ultimately about such talented children, frequently referred to here (to my discomfort, because of negative connotations elsewhere) as “savants”. Ockelford is particularly interested in nurturing their gifts and concludes: “It is crucial that appropriate adult support be provided to guide the development of technique and a love of playing in social contexts is available as soon as possible” (p. 242).

That this and the final chapter are really about the exceptionally musical 5% of children with ASC is concerning. Even if a larger percentage of children with ASC are exceptionally musical than the percentage found in the neuro-typical population (based heavily upon the less-than-convincing measure of absolute pitch), that obviously leaves 95% of the ASC group about whom we have learned little, at least in terms of their musicality, the role of music in their lives and education, and what extra-musical benefits music might have for them. This is a disappointment for me and one that culminates in the final chapter.

APPLICATION OF CONCEPTS (TEACHING)

The title of Chapter 7, Teaching the 1 in 20, makes clear precisely to whom Music, Language and Autism refers to in its subtitle, Exceptional Strategies for Exceptional Minds. It is not children with ASC in general, who are “exceptional” (another discomfiting term) by virtue of the non-neuro-typicality that will likely lead to disablement in so many situations and endeavours. Rather, “exceptional” is mostly synonymous with the giftedness of the 1 in 20. The chapter thus offers no best teaching practices for those working with the 19 in 20. Those recommendations provided for the 5% are sometimes helpful. These include “don’t talk too much (if at all)” (italics Ockelford’s) and that parents should be present for lessons whenever possible (with an admonition for those music therapists whose praxis differs) (p. 245). But the author emphatically cautions, “there are no golden rules!” (p. 245).

While readers should have every reason to accept that Ockelford is an effective and dedicated teacher, a number of his recommendations will be difficult to translate into one’s own praxis. One entire paragraph of advice bears quoting in its entirety:

And if the child does nothing? Discreetly introduce fragments of music. ‘Talk’ to children through pure sound. Improvise. Entice them to engage with you musically, excite them, tease them with single notes and exotic chords, a metronomic beat and quirky rhythms. Above all, be musically interesting; make your playing or singing irresistible (italics Ockelford’s, p. 246).

At the risk of seeming harsh, what is a teacher or therapist to make of that? How does one translate that into one’s own practice?

Most of the chapter concerns the student whom the author apparently regards as his greatest pedagogical accomplishment (pp. 246-258), Derek Paravicini, “a blind, autistic musical savant” (p. 217). While the young man, a pianist, is an extraordinary talent, loves music and public performance, and has had an auspicious career onstage and in major media, along with his teacher, we are told that he cannot tell which finger is which, reliably distinguish fingers from thumbs, or tell left from right (p. 251). It almost goes without saying that his fingering remains largely unconventional (p. 252).

Music, Language and Autism concludes with advice for those who teach the “exceptional”:

“Overall, the most important thing for those responsible for the education of children and young people on the autism spectrum who are (or may be) functioning at Levels 5 or 6 of the Sounds of Intent framework [that is, the students with the greatest musical gifts or potential], is to ensure that specialist provision is put in place as early as possible, with the aim, always, of minimising the impact of disability through maximising musical potential” (p. 259).

Again (and at the risk of seeming harsh once more), it is hard to know what to make of this. While surely young Paravicini has gained a great deal of joy out of music and public performance, the descriptions of his impairment in both this book and on the Sounds of Intent website (which sensationalise his accomplishments in a manner
that Disability Studies sometimes refer to as “enfreakment”), indicate that his ability to engage independently in the performance of the activities of daily living must be quite limited. His music education and performing career seem to have helped little if at all in this regard. Further, such extra-musical accomplishment, a fundamental goal of music therapy, is almost entirely unexamined in any of the case histories in Music, Language, and Autism.

CONCLUSIONS

This is certainly an interesting book and worth reading, but, as previously stated, of limited practical value. As a work of scholarship, drawn so deeply from the author’s own experience and more likely to reference “anecdotal evidence” than large n studies (at least studies clearly identified accordingly, with quantitative evidence), it is more compelling than convincing. The author’s biographical information is spotty on data that, had it been provided would have lent credibility. We are told that, among other things, Ockelford is a professor (where? of what?) and a composer (of anything besides the reverenced didactic works?). We are not told in what fields he was trained (which his University of Roehampton, School of Education homepage (www.roehampton.ac.uk/staff/adam-ockelford), where he is Professor of Music, indicates that these do not include music therapy, music/special education, or psychology).

Music, Language and Autism: Exceptional Strategies for Exceptional Minds can certainly be recommended as a chronicle of the observations and praxis of an accomplished educator and researcher, with a storied career. Potential readers seeking helpful information for their clinical/teaching practices with children with ASC, or studies that build on a wide variety of clinical literature, including large n quantitative studies, may find that there are more useful sources.

REFERENCES


