

Visually impaired musicians' insights: narratives of childhood, lifelong learning and musical participation

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With the support of the Royal National Institute of Blind People (RNIB), the life histories of five visually impaired (VI) musicians were collected and analysed between November 2011 and August 2012. This research was conducted as a pilot for a two-year, national investigation of VI musical participation, 'Visually-impaired musicians' lives' (VIML) funded by the Arts and Humanities Research Council (AHRC, 2013–2015), which has brought together the Institute of Education, University of London, the RNIB and the Royal Academy of Music, London as project partners. In this instance, life histories were co-constructed narratives – foci were the self-identities of this unique group and 'insider' perspectives on education, musical participation and society. Analytic induction of the biographies revealed that a perceived barrier to lifelong learning was having the ability to read notation, either adapted print or in Braille format, and the access to educators who had expertise to teach musicians with visual impairments. The respondents commented on the great value of ensemble participation and adopting teaching roles too. With widespread lore in society about the exceptional musical abilities of those with visual impairment, longstanding traditions of blind musicianship, plus evidence of distinct neural development and hearing, they acknowledged the cachet associated with blind musicians but, regardless, wished to be considered musicians first and foremost. The findings raise questions about social and music educational inclusion.

Background

According to the Royal National Institute of Blind People (RNIB), there are nearly 2 million people living with sight loss in the UK.¹ Research by the charity (2010–2011) indicated that there were 21 277 adult certifications of visual impairment (RNIB, 2013b). Currently, approximately 700 of these visually impaired (VI) people² are known by the RNIB to be professional or amateur musicians; however, the actual number is undoubtedly far higher as many VI musicians will not be in contact with them. The individuals explored in this paper have forged successful careers in music – from their stories, both their successful and unsuccessful encounters with others, much can be learned. Through offering personal biographies, the musicians explain their relationship to society around them and, in doing so, reveal self-identities. These identities are complexes of self-concepts (Hargreaves *et al.*, 2002); they result from constant social negotiation (Britzman, 1992). Barrett and Stauffer (2012) remind us of Deweyan epistemology that 'how and what we understand ourselves and the world to be are embedded and embodied in experience' (p. 4); such experience is

both transactional and unfolds over time, as do identities. Stories such as those here can act as a platform for future research or, alternatively, a guiding light for discussion of inclusion, social policy and practice.

Adam Ockelford has been central to the exploration of music and special needs in the UK (for examples, see Ockelford, 2000, 2007, 2008; Ockelford *et al.*, 2002), including investigating the musicality of children and young people with septo-optic dysplasia (SOD)³ (see Pring & Ockelford, 2005; Ockelford *et al.*, 2006) and retinopathy of prematurity (ROP)⁴ (Ockelford & Matawa, 2009). However, these pieces of literature have concentrated largely on children, with the exception of Ockelford (2007), which looked at the life of the 'savant' Derek Paravicini, and Clifton's (2005) conversations with children and adult musicians. Clifton's interviews examined various social- and life-skills and their relationship to musical participation, including matters of mobility, inclusion, schooling, Braille literacy, access to technologies and musical learning. The present research also addressed some of these themes by exploring the perspectives of adult VI musicians, but through expansive life-history interviews; we were interested to see the extent to which her findings would be replicated. Clifton had claimed that feelings of total isolation, lack of support and scant advice were a constant throughout all her discussions regardless of respondents' age; parents with children as young as five were '... saying the same things as those of 55 or even 75 year olds trawling through their earliest memories ...' (p. 6).

A variety of VI musicians have received huge acclaim, such as: the operatic singer Andrea Bocelli (see Bocelli & Pugliese, 2002); the classical pianist Nobuyuki Tsujii; the composer Frances McCollin (DiMedio, 1990); the 'savant' Derek Paravicini (Ockelford, 2007); the jazz musicians George Shearing and Art Tatum; and popular singer-songwriters like Ray Charles (Charles & Ritz, 1978; Evans, 2005) and Stevie Wonder (Williams, 2002; Ribowsky, 2010). The proliferation of biographies of well-known VI musicians directed at a non-academic audience evidences substantial interest by society in the relationship between musicianship and visual impairment.

Rowden (2009) has also scrutinised the manner in which the social positioning of the entire African-American community parallels the lives of VI musicians such as: the nineteenth-century prodigy Tom Bethune (1849–1908, aka Thomas 'Blind Tom' Wiggins); the blues performer 'Blind' Lemon Jefferson (1893–1929); spiritual musicians like 'The Blind Boys of Alabama' (Jimmy Carter, Ben Moore, Eric McKinnie); and the jazz musician Rahsaan Roland Kirk (1935–1977). Hitherto, though, there has been no research on VI musicians that has specifically utilised life history methodology.

The project reported in this article is a pilot for a two-year investigation into VI musical participation across the life-course called 'Visually-impaired musicians' lives' (VIML, see <http://vimusicians.ioe.ac.uk>). This has been funded by the Arts and Humanities Research Council (AHRC) and commenced in April 2013. The AHRC research phase brings together the Institute of Education, University of London, the RNIB and the Royal Academy of Music, London as project partners. It will entail: more extensive life-history interviews; a national survey; and outreach activities to engage conservatoire undergraduates with VI participants (both amateur and professional musicians).

Methodology

Interviews and their analysis

From their wellspring between the World Wars, life histories have become an established research method in the social sciences. Biographical research (Bertaux, 1981; Bertaux & Kohli, 1984; Armstrong, 1987) has been the vehicle to explore various groups, including the disenfranchised or 'deviant' (Thomas & Znaniecki, 1927; Shaw, 1930; Lewis, 1961; Sikes, 1985; Dollase, 1992; Casey, 1993; Huberman, 1993; Huberman & Marti, 1993; Munro, 1998; Barrett & Stauffer, 2009, 2012). The expansiveness and disposition of interviews is advantageous as it permits respondents to introduce matters that *they* consider important; themes are emergent and can be introduced by respondents. 'Insider' knowledge arises because of a collaborative air and greater freedom for storytellers than, for instance, in structured interviews. Without doubt, research based largely on sighted researchers' preconceived ideas, perhaps sourced from literature or personal assumptions, would have been a significant problem for this study. 'Voice' (Elbaz, 1990) and empowerment are integral to life-history work.

Lucy Green, Professor of Music Education at the Institute of Education, London has investigated popular musicians (Green, 2001), their 'informal learning' practices, and how these might be applied to more formal educational contexts. Lucy and I were approached by the Royal National Institute of Blind People (RNIB) during the Ear Playing Project (EPP, 2009–10 and 2011–12, Esmée Fairbairn Foundation; see Green, 2012a, 2012b; Baker, 2013). The EPP grew from the 'informal learning' strand of Musical Futures (Paul Hamlyn Foundation; Green, 2008; Hallam *et al.*, 2008), a project in UK classrooms in which Lucy served as the 'informal learning pathfinder'. Private instrumental teachers had begun to question how the Musical Futures 'informal' approach could be applied to their work. Consequently, the EPP engaged sighted instrumental students in playing along with audio recordings and without recourse to print notation. Furthermore, in tandem with this 'deep listening', EPP raised student autonomy and motivation by opening a doorway to self-selected music; pupils could, eventually, bring their own recorded music to lessons to learn by ear (on CDs, iPods, etc.). The RNIB music team were interested in Green's pedagogical methods; they believed that these would apply well to their community. A training event was organised for their members (25 February 2012), two of whom participated in this investigation. We also hosted a musical event for VI children at the Institute of Education, University of London (3 March 2012). It was patent from conversations with the musicians, children and parents who attended that further research was needed on VI musicians' lives.

Five VI musicians' life histories were collected between November 2011 and August 2012. Prior to this, the RNIB provided the researcher with training on eye conditions and their ramifications, and maintaining rapport during conversations. Subsequently, the charity facilitated contact with the respondents. Respondents were given an information sheet in Word format; there was also the offer of a copy in Braille. None of the participants considered the latter necessary as they could access the information through Assistive Technology (AT) interfaces like Screen Reader or Magnifier software applications.⁵ The document detailed research aims, procedures and ethical arrangements. These were

assessed and approved by an ethics committee at the Institute of Education, University of London. Participation was voluntary; it was made clear that respondents could withdraw if they wished without reason or prejudice. The interviews took place at the RNIB building in Judd Street, London, or by telephone. These discussions were audio recorded and transcribed in verbatim fashion. The narratives contained various turning points, critical incidents and episodes (Denicolo & Pope, 1990, 2001; Pope & Denicolo, 1993; Burnard, 1999, 2003, 2004; Sikes *et al.*, 2001). For instance, there were encounters in schools that were formative for their current attitudes to VI and society, or watershed life-phases concerning the onset of blindness and its effects.

The fieldwork shuttled repeatedly between interviewing, transcribing and analysis visiting respondents several times. Analytic Induction (AI) was utilised (see Silverman, 2001; Roberts, 2002; Lee & Fielding, 2004) to understand the collected life histories. Although these lives were unique, the researcher also wished to investigate any common themes amongst them. This AI entailed: recurrently collecting new interview data in response to respondent feedback on the researcher's provisional analyses; searching for remarks within the growing dataset that countered his preliminary thoughts (see Miles & Huberman, 1994 on 'negative evidence'; also Ryan & Bernard, 2000); introducing themes from other respondents for each participant to accept, reject or elaborate; and, at the end of the process, respondent verification of overall findings, which were emailed to the respondents. Thus, the coding scheme was constantly adjusted in its NVivo9 software database throughout this process until interviewees considered the final portrayal a credible depiction of *their* lives. It was 'authentic' to them, although a product of both the interview style and the interactive nature of the research process (Guba & Lincoln, 1989; Seale, 1999a, 1999b, 2002). Social researchers who '... privilege "experience" as "authentic" ...' will take findings back to the people studied to confirm they resonate with their experiences (Silverman, 2001, p. 235).

First questions included 'How did you come to instrumental learning in childhood?', 'What were the issues surrounding your musical participation and schooling?' and 'Do you consider the opportunities for lifelong music-making adequate?'. 'Active interviewing' (Holstein & Gubrium, 1995, 1997, 2003), and the injection of themes for respondents' appraisal (as mentioned above), were purposeful ingredients of the construction of knowledge thereafter. Guiding questions and 'subjectivity' were not negative factors in this postmodern life-history research – these were normal parts of the process; similarly, the quality criteria of the natural sciences did not apply. Indeed, the researcher was an 'active agent' (a 'catalyst') working in concert with this group of interviewees to fashion knowledge (Fontana, 2003). It was accepted that, in part, his interests shaped the final interpretation, although, most importantly, this was confirmed by the respondents as their 'truth'. Further details of the research methods, AI and the paradigm can be read in Baker (2005a, 2005b, 2005c, 2006).

It was an ethical requirement that the life-history texts were returned to interviewees who evaluated their fidelity or 'internal consistency' (Atkinson, 1998, 2001). This was also an opportunity for interviewees to flag sensitive issues they preferred not to have published. Pseudonyms were also used and other 'identifiers' removed. Total anonymity could not be assured, though, due to the respondents belonging to a limited group of people active in their field. Accordingly, the limitations of confidentiality (e.g. colleagues recognising their

opinions or profiles in this article) were made clear at the start of the research; they all agreed, on that basis, to proceed with the project.

About the respondents

Four of the interviewees are accomplished performers. These are: John (47 years, piano), Matthew (34 years, woodwind), Anne (61 years, woodwind) and Emma (22 years, strings). John and Anne have sizeable instrumental teaching practices.

John has retinitis pigmentosa (RP).⁶ He lost much of his vision after becoming a music teacher. John's present music-making entails the use of large format print notation combined with recollections of the pieces he played as a fully-sighted musician.

Anne's condition is retinopathy of prematurity (ROP). She approaches new pieces through Braille music in conjunction with listening to audio recordings. For VI musicians like Anne, the RNIB have a music library; also, printed scores can be transferred into Braille format. There are transcription services (e.g. Golden Chord, Hereford, refer to <http://www.golden-chord.com/> or Prima Vista, Leeds, at <http://www.primavistamusic.com/>). Lydia Machell, Director of Prima Vista, is the pioneer of a Sibelius plug-in that can output digital files (in .brf format). These are downloadable and can be used with a Braille editor, Braille note-taker (which has tactile display for its users) or a Braille embosser. Nonetheless, this is a fairly recent innovation and, although improving, access to Braille musical scores is a considerable problem for many blind musicians.

Matthew has Leber's congenital amaurosis (LCA) with a small amount of residual vision in one of his eyes.⁷ Since birth, his vision has been very limited. In a similar fashion to Anne, he mainly learns music from audio and Braille but, by using high-powered magnifiers, can also read stave notation; Matthew states that this is 'slow going and tiring'.

Emma is the only respondent not involved with classical music; her interest is popular music. She has high myopia (or substantial short-sightedness) with nystagmus, although many people meeting her would be unaware that she has an eye condition.⁸ Emma is able to play from large formats of print notation but describes herself as largely 'an ear player'.

David (22 years) is a composer studying at a music conservatoire. His condition is also ROP and, in order to study piano pieces, he reads Braille music; when composing, he 'improvises' (quote) at the keyboard and inputs material via MIDI into Sibelius music engraving software.⁹ Through a recent collaboration between the software developer David Pinto, blind jazz pianist Kevin Kern and Sibelius, Sibelius Speaking has been produced. This software makes it possible for the JAWS Screen Reader to interact effortlessly with Sibelius aiding VI users to compose and edit their inputted material.¹⁰

The respondents' stories

On childhood and becoming a musician

Some of the interviewees (Matthew and David) stated that, in early childhood, they started to learn musical instruments because they and their parents perceived it to be something achievable given their visual impairment. The notion of heightened aural senses in blind musicians is embedded in various cultures.

There has been a longstanding tradition of blind piano tuners who have a UK national society (the Association of Blind Piano Tuners). Although, to the well-informed musician or music scholar, piano tuning may seem to have little connection with the wider music perception skills needed for performing, the existence of a specific VI professional group such as this is rather suggestive of a wider belief in society about superior aural capabilities in blind people. Meeker (2006) wrote of the blind troubadour in Europe, the Middle East and Asia that ‘music has historically been one way that visually-impaired people could earn their living’ (p. 3). Similarly, Kononenko (1998) identified the period 1850–1930 as a zenith of blind Ukrainian minstrelsy. These musicians ‘were repositories of tradition and culture . . . They were disseminators of the word of God and the major source of folk historical and religious information’ (p. 3). In the Aomori Prefecture of Northern Japan, participation by itinerant, VI musicians in the Tsugaru-jamisen tradition¹¹ continues to this day (Groemer, 2012). There is also an ancient custom of blind Japanese singers, which stems from mediaeval times. These vocalists accompany themselves on the biwa¹² (De Ferranti, 2009). Ottenberg (1996) has studied blind musicians in Sierra Leone as well. Strong traditions coupled to a perceived relationship between blindness and musicality may have contributed to the interviewees’ parents leading them in a musical direction. Aside from social lore concerning heightened musicianship, there is also evidence of blind children acquiring different auditory capacities to their sighted counterparts. A higher incidence of absolute pitch has been found in people who become blind in their early lives (Hamilton *et al.*, 2004). Using an online assessment tool, Dimatati *et al.* (2012) discovered superior naming of pitch by children with congenital VI as compared with sighted counterparts in a control group; this, they have argued, may be due to early differences in neural development as a result of sight loss.

It was something that I could do obviously having a visual impairment. It didn’t pose any difficulty to me. I guess my eyesight had some kind of bearing on the fact that I took up music (Matthew).

I used to have an emotional connection to music and I used to listen to different people, to music. It was something that I really enjoyed when I was younger. . . . For me, it was something that I could connect with, you know, like I couldn’t do with other things, for example, sports quite so easily as I was blind. (David)

These musicians started learning without notation. David, for example, remembered experimenting and improvising on a keyboard. Auditory approaches to learning may well have been a good ‘fit’ for these musicians in early childhood; nonetheless, they were eager to underline the importance of notation later in their biographies (i.e. Braille for blind people) for meeting the demands of music-making both within and outside school. Notation, they contended, became crucial for taking music examinations, fully understanding the theoretical aspects of music, composing, and learning repertoire. Matthew described literacy as ‘the big divide’, a key issue affecting a person’s likelihood of eventually becoming a professional. Readers should note that Matthew’s perspective is that of a classical musician; the significance of literacy for professional musical participation depends upon the genre a person pursues.

Are educational opportunities equal?

Matthew is employed by an organisation for blind and partially sighted people. In his day-to-day work, he liaises with schools and teachers, supporting children and their parents with gaining access to musical learning and engagement. He believes there had been a shift towards educating visually impaired children in mainstream schools, which he considers negative in some respects. Although keen to accentuate it is merely his impression, Matthew considers the present expertise available and, particularly, the teaching of Braille music insufficient. For Matthew, musical literacy is essential for music-making with sighted counterparts; that, in turn, is important both professionally and socially into adult life. In understanding these remarks, we should remember Matthew's position as a classical musician. Matthew reflects on the problems he perceives:

If you're not going to learn print notation, you should learn Braille notation; but we know that just doesn't happen, and it doesn't happen for a lot of reasons. You've got a lot of teaching assistants who aren't confident in the literary Braille let alone wanting to teach Braille music. You've lost that network of special school teachers, where they've got five kids in a class who want to learn rather than one kid every five years. So there are a lot of factors that have made it a lot more difficult to learn Braille music and, now, the ones who are learning and pursuing it are really the 'crème de la crème', both in terms of academic capability, motivation and supportive parents . . . Rather than, when I was at school, there were a lot of people who were not particularly good at music but all had some grounding in Braille music. It was just something that happened. If you showed any sign of singing in the choir or playing the piano, you tended to learn at least the basics. So that's one area that has really changed and hasn't helped. (Matthew)

Wesseling (2004) has an intersecting perspective. She has stated that many blind people are prevented from learning Braille due to:

A severe lack of competent teachers; the changing emphasis in school curricula; and sadly, a misguided view that Braille music is just too difficult. (p. vii)

This problem is compounded, Wesseling maintains, by the quality of VI musicians' natural musical ear; learners may feel that Braille will slow them down. Matthew's viewpoint highlights how access to educators with the right knowledge can have ramifications for inclusive musical learning both within the VI community and in society more generally. The two youngest interviewees, David and Emma, commented on the mainstream schools they attended:

In school, the teachers didn't know much about Braille music. I didn't find music education in mainstream education quite useful enough really. Obviously, they were more prepared for literary Braille rather than music as it were. . . . the teachers didn't have the experience to help me deal with the curriculum because of the notation. And so, if you think about a class, you know, everyone gets taught stave notation and, obviously, they didn't have tactile methods for me to learn. (David)

Matthew was eager not to inspect special schooling through ‘rose-tinted spectacles’ as the ‘ultimate solution’, though. He added a caveat:

The special school system has changed so much since I went through it. I think my generation’s those who left in the latter part of the 90s; we were the last generation where it was a kind of equitable route through. It was one of two possibilities. Now I think special schools are increasingly catering for people with more diverse needs who aren’t necessarily at the top of the academic pile, so the expectations grow less and less and you’re, therefore, pushed less and less. I think now your best route, if you want to participate in music, or ensemble playing, is to find yourself a really good teacher who is prepared to invest some time and expertise in order to get you fluent in whatever form of notation it might be. (Matthew)

Having a Braille music teacher in every mainstream school with an enrolled VI student would incur vast expenditure, mean widespread training, or entail peripatetic specialists covering sites that are geographically distant. Emma reflected on her own mainstream schooling and the separate issue of large-print notation. Even with this, it was a matter of sighted teachers taking responsibility:

Before I even turned 10 or 11, I tried my hand at learning two instruments, and for whatever reason, I didn’t take to it. Looking back now, I think maybe it was because I was taught by a sighted teacher who didn’t necessarily understand my inability to see the scores. . . . Some of the teachers were better than others. Some, they would be like ‘Could you enlarge that for me?’, ‘Oh I forgot’. With others, it would be already there, you know, ready. So yes, a lot more needs to be done rather than the teachers relying on external sources like the teaching assistants to give you the information. It’s *their* lesson; *they* are delivering it; I am *their* student; *they* should cater for me. (Emma)

Social interaction and inclusion

Social interaction and interpersonal matters in relation to sighted people were, unsurprisingly, recurrent within the biographies: an identity originating from one’s visual impairment could either be positive or negative. Emma had a traumatic time at her mainstream school. Her condition, one of severe myopia, was easy to hide; she did not want to be spotlighted as different, which made her periodically disengage from music and also turn her back on specialist help until the age of 16 years.

Teaching assistants from the school would help me, sit with me in classes but, when I got to a certain age, I had quite a lot of bullying and therefore it made me reluctant to have this help because it singled me out. I refused to have enlarged materials and just anything that pointed me out; all my friends sat in groups and I was sat next to this middle-aged woman helping me write stuff off the board. You know, it’s not really the nicest of social atmospheres when you just want to fit in and be like everybody else, is it really? . . . Probably, at the age of 11, 12, 13 years, I was just like ‘No, I am just like everybody else; I don’t need this help’, you know. I was shooting myself in the foot in a way, just because I was the only person in my school with a severe visual impairment.

I don't think the children had enough awareness about my visual impairment, as well, which is why maybe things turned out the way they did. (Emma)

In contrast, Matthew's youth orchestra was positive – a cherished way of socialising with sighted peers beyond the walls of his school for blind children. He had kept in touch with friends from that time. In that way, it had become important for his social network into adulthood. Owing to his extremely poor eyesight, where possible, he prepared repertoire from Braille and audio recordings as a teenager. This meant memorising small sections at first and also noting the overall structure of works; his memories were made concrete, and their accuracy checked, by playing along with the audio. Eventually, he memorised his part sufficiently for rehearsals; he recounted the kudos of being *the* orchestral player without a music stand.

I was definitely known as, not necessarily even a blind musician, but the musician who didn't have a music stand. . . . The youth orchestra was the only time I got to meet sighted people, you know, rather than being in a blind school, so that was fantastic and, yeah, we had a good time. I'm still regularly in touch with the lady who ran it; she's a very good friend. I am also in touch with a few people who were in it. I still bump into people every now and again who were in it, which is quite nice. It was very important as a social interaction thing and just for getting beyond the walls of the blind school really. (Matthew)

As adults, all of the interviewees were keen to be on a par with sighted professional musicians in terms of skills and ability. Often they trod a line between either connecting or disconnecting visual impairment from their musical identities. Matthew had 'come to terms' with this duality. It was merely part of his biographical journey:

I'm quite comfortable with the fact, partly because blindness and music have gone together for a long, long time, there's a whole tradition of the blind musician and I'm quite happy to buy into that and be part of that tradition. It used to bother me. I remember that a local newspaper covered a festival where I was playing and the first headline was, like, 'Blind virtuoso' or something and I hated it. I ripped it up. I hated it. I didn't want to be known as blind before musician but, to be honest, now I find that people take their lead from me. If I don't mention it, they don't tend to mention it either. (Matthew)

Ensembles, problems and solutions

It was apparent that all of the respondents valued ensemble membership highly both for its social benefits and as an outlet for their musical skills. However, they recognised that obstacles could first arise during their time at school. With the preparation of instrumental parts taking considerable time and effort – more so than sighted children working from print at a comparable level of musicianship – the confidence to become an ensemble member could become a barrier in childhood. For the VI musician, Jackie Clifton (2005) has observed:

Our greatest battle is to rebuild self-confidence and convince everyone to give us a chance to prove what we can do. (p. 7)

This 'insider' vantage point, which is more about self-esteem than ability, marks a surprising juxtaposition with any prevailing understanding of VI people as having superior musical aptitude. Speaking anecdotally, Matthew raised other problems that might affect integration into the mainstream system:

There might also be the very simple fact that, as a visually impaired kid in a mainstream school, you haven't got time to participate in a lunchtime orchestra because you're busy off learning Braille or your independent living skills or mobility, using a white cane, or catching up on Science because you need a bit more time to do stuff. I think the curriculum has made it very much more difficult to find time to do all these extra-curricular things. (Matthew)

You might live a little bit further away from your school as well. If you go to a school with a visual impairment unit, it might be one of the two schools in your county. You might have a longer distance to travel, so it might be more difficult for you to get to after-school rehearsals or Saturday morning things. There are lots of reasons why I think [visually impaired] people are tending to participate less. (Matthew)

The interviewees reported that successes meant involvement in ensembles where there was understanding and support from sighted musicians (e.g. desk partners giving reminders of the number of bars of rest, or peers counting a couple of bars quietly prior to instruments coming into playing position), where repertoire was carefully picked, more easily memorised, or it was acceptable to play only selected items within concert programmes. It was also easier to participate when playing by ear and improvising were commonplace within the genre.

I pick what I do in the orchestra very carefully. Some of it I would find impossible to play in an orchestral setting. Really modern stuff I think would be very difficult. I think it's the rhythms. I did Nielson's 5th symphony and it was incredibly difficult. All the rhythms were different in different bars and I actually had to have somebody counting very quietly. I couldn't have done it any other way. It was like jumping on a moving bus and if you slipped you had it. (Anne)

I don't know what you can necessarily do about it [ensemble membership] apart from creating opportunities that are more suited to people who are used to playing by ear. I was part of a really good improvisation collective for a year or so ... (Matthew)

Some blind people I know do perform in orchestras but that is quite tricky in that they wouldn't be able to get through as much repertoire as sighted musicians. Obviously, you'd have to learn it all, wouldn't you? I play in a folk ensemble and everybody is *made* to learn the music by ear. (David)

The memorisation of scores was a recurrent theme in relation to orchestras; the sighted needed to appreciate the extra time required to digest material. Clifton (2005), writing of the

overall educational and social support mechanisms in the UK, has advised that progress will arise through 'understanding the time needed to absorb and process information as a visually-impaired person' (p. 110). Working from Braille scores required extensive memorisation and that meant additional time:

I am playing Brahms' Academic Overture in October, but I can't possibly play in everything they do. There is no way that I could memorise everything ... I think it takes a blind person a lot longer to prepare anything musically ... (Anne)

Ensemble playing is virtually impossible for me unless I learn the music beforehand. I need to go back to rehearsal marks, to learn all those as well. (David)

Memory also had a bearing on the suitability of instrumental parts:

Say you go for an audition for your school orchestra ... and you're put on the second violin, it's actually really difficult to remember what your part is. That's why we do not tend to see any blind musicians playing middle-part instruments, sort of violas or bassoons, French horns, tubas. The parts are very much less memorable than they are for the flutes and violins and clarinets. (Matthew)

Benefits of a visually impaired approach

The interviewees adopted different strategies for learning pieces. To recap, with declining sight, John was still using large formats of conventional sheet music in tandem with his memories of pieces. Emma was an accomplished ear-player and valued this enormously as an aspect of the popular idiom within which she belonged. Anne memorised her music from Braille and audio. Matthew employed a combination of memorisation from Braille, some inspection of print notation using magnifiers, and repetitive listening to recordings before rehearsing with others. The Braille-audio system necessitated progressively building a reliable memory of longer pieces by starting with small segments of scores, motifs or phrases, and checking against both mediums constantly to ascertain accuracy. They all identified benefits to their approaches:

Once I learn it [from Braille] I don't really forget it. I don't really have an issue with forgetting things because I think it's so engrained into my long-term memory that I can focus on musical things. I notice that, when people have read from the score, they get so attached to the musical score. I think, if you memorise, I think it's something *less* that you have to think about and you can really start focusing on the musicality. (David)

I've been in loads of rehearsals [with sighted musicians] where you've played through the piece and they've said 'Oh yeah, that's brilliant, we've got to the end'. The first couple of times, it always feels like no one is listening to anyone else. They are just absolutely fixated on getting through this piece and playing it. Whereas, for me, I've already done all that note-bashing stage. (Matthew)

It's something maybe people take for granted who don't use their ear much. I think they're just a bit unaware of the benefits of it. I mean I really appreciate listening to a piece of music and knowing I can jam along to it. I just pick up my [instrument] and find the key and have a little improvise on top of it. Whereas, I know sighted people who are just like 'How can you do that?' (Emma)

Teaching roles

The respondents emphasised that music teaching was a viable occupation but it was crucial to navigate it thoughtfully, with the utmost professionalism. Owing to the scepticism of some parents about their capability to provide for sighted children, success relied on acquiring students through professional networks or, alternatively, belonging to a trusted institution, as John explained:

When it comes to teaching, what happens is that they [parents] are a bit sceptical. They will not say that you will be not able to do it, but they are a bit sceptical. And they wait until somebody probably has gone through it . . . Before they have that confidence in you, most of the pupils and parents must come from some reference point. If you have that kind of backing, you don't have a problem. If you have, for example, an institution that has recommended you, you don't have that problem. (John)

With no specific VI training in pedagogy, starting a music teaching career also meant learning alongside students and adapting to sighted approaches.

I had to teach myself what print music is like. I did that with the children's help to begin with; I learned with them. I now have a tactile stave that somebody has made for me. Occasionally, the children would say to me 'What is this sign?' and if I don't have the book in Braille, I don't know. I would have to ask somebody; I am happy to do that. (Anne)

John's RP resulted in the unexpected loss of much of his vision whilst already employed as an instrumental teacher. This was extremely traumatic for him; it was a critical incident resolved through the intervention of social services. After an adjustment period, he felt ready to continue with his music teaching:

Putting myself together has taken around one or two years because, when it was landed on me, the position of my sight, I didn't have the opportunity to go through any form of counselling. I was just told and it was left like that. So that really made me down for about 8 or 9 years. I abandoned music; I thought I would not be able to function as a musician any longer. I walked out of my job because I felt that was the end for me. I invited the social services to come in and that is how everything now started changing. I decided that I was going to go back to my music. (John)

Are musical opportunities adequate?

The respondents were asked, based on their experiences to date, if VI musical opportunities across the life-course seemed adequate. All of the respondents were doubtful. Some mentioned a subtle type of employment discrimination whereby VI candidates were not selected for musical roles on account of their disability. There would never be evidence of this, they added; it was just something they sensed when discounted from performing or teaching roles. Others noted community musical opportunities that were organised in such a way that their contribution was precluded. One interviewee, for instance, mentioned courses where there was a reliance on standard print notation and, moreover, insufficient time to transfer it into Braille. I asked Matthew if, from his position of working with VI children's music-making, he felt the situation was more inclusive. He commented on the Labour government's *Music Manifesto*, which pledged that 'every primary school child should have opportunities for sustained and progressive instrumental tuition, offered free of charge or at a reduced rate' (DfES, 2004). The aforesaid vow led to whole-class instrumental lessons in primary schools, which continue.

We're quite sceptical. I think [my colleague] and I are quite sceptical about the adequacy of musical opportunities because we just don't get the number of enquiries from music teachers of blind instrumental learners that we would expect, so we're not convinced it's happening as much as it should do. There are boroughs in London where they've said 'Everyone's going to have music lessons' and 'Everyone's going to learn an instrument' but we just haven't had the number of enquiries you would expect knowing how many visually impaired kids there are in that borough. (Matthew)

David talked positively about technological advancements (e.g. Sibelius Speaking). He reflected that these innovations were making music education far easier, yet there was, nevertheless, a problem:

As far as I am aware, the statistic of blind and visually impaired people going into higher music education is still quite low even though technology is improving. For example, Sibelius now accesses virtual script, which has been quite revolutionary really. It is one of the reasons why I could take the composition course. But, even so, there is this massive lack of resources and, perhaps, knowledge really. (David)

Reflections and further lines of enquiry

The participants' stories tell us about their reading of society and their place within it, but cannot be understood as an incontestable reproduction of an objective, widely generalisable reality of education. Whether or not these storytellers' opinions reflect education 'as it presently is' needs to be assessed through other research methods. Nevertheless, the intersecting themes in these five accounts do lead to intriguing lines of enquiry.

For instance, the interviewees mentioned the social advantages to VI children learning in mainstream schools or, at least, musical inclusion with the sighted, as illustrated by Matthew's recollections of his youth orchestra or Anne's orchestral playing into adulthood.

Emma was negative about being 'singled out' in her mainstream school but, regardless, felt that interaction with the sighted nourished her personal development. She put this unfortunate critical episode down to 'her own maturity at that time'. Significantly, all those educated in the mainstream system remarked on its failure to address their needs. In 2007, a survey estimated that there were 25 305 children and young people with visual impairments in England, Scotland and Wales. Of the 5886 primary-age students for whom the researchers had data, 71% were in mainstream schools, with a further 1% in sites resourced for visual impairments; of the 4367 secondary-age students surveyed, two thirds were in mainstream secondary schools, with only 4% in sites resourced for visual impairments (Morris & Smith, 2008, pp. 2–5). More recently, the RNIB has indicated that 23 543 VI children 'under 3 years to 16 years' (to UK Year 11) attended mainstream or special schools in 2012 that were supported by VI services (see RNIB, 2013a; also see Keil, 2012). Available data suggest that the support mechanisms and resourcing of mainstream schools have improved; nonetheless, the picture of music teaching is far less clear.

It was obvious that our five VI musicians did not want to 'compartmentalise' themselves as a social group across the life-course (in school or beyond it); this was also evident from Matthew wanting to be a 'musician' first and foremost (rather than a 'VI musician'). But then again, from their standpoint, there could be shortcomings to inclusion in mainstream music education due to teachers not meeting VI needs, as borne out in the biographies of the two youngest respondents, Emma and David (both aged 22 years). Many of the problems faced by pupils who are blind or partially sighted occur at school level. Literature has hitherto found that problems are caused by teachers, such as a lack of understanding of the effects of a visual impairment (Franklin *et al.*, 2001) and poor planning (Keil *et al.*, 2006). For our interviewees, this issue was not merely about access to Braille music teachers; it could apply to the provision of large print formats and the capacity to 'join in', as Emma conveyed in her life history. It is interesting that David, a young composer, mentioned that technological advances were becoming enormously beneficial for VI music-making. Innovations were making access to Braille scores and profiting from specialist music software far easier, yet there remained a problem – for David, there was a shortfall in knowledge and training, both within and outside the VI community, about the technologies that open up possibilities for music-making. His view intersects with Clifton's (2005) *Conversation Pieces*:

We must make sure that good independent skills, computer and technology skills are learnt at as early an age as possible. In this modern day all visually impaired people should have a computer, scanner etc. and be able to use them with confidence. Then we have a choice. If we don't have these skills we have no choice. A lot of this is down to a lack of information as well as training. (p. 93, an adult musician and Braille user)

Despite these technological advances mentioned by David – and access to Braille scores increasing through services like Prima Vista – Matthew (age 34 years) laid blame for a decline in Braille music reading at changes in educational provision as more VI children flowed into the mainstream system (his perception). Matthew believed that Braille music was essential for long-term VI musical learning and participation. To place his hypothesis about Braille, schooling and a decline in musical participation across life-course into context, the survey published by Morris and Smith (2008) suggested that only 3% of blind

and partially sighted students of age 5–16 years used 'literary' Braille as their sole or main format for reading and writing; indeed, many partially sighted students have no need for Braille anyhow and blind children may have other disabilities affecting their capacity to utilise the medium. An earlier survey (Keil & Clunies-Ross, 2002) had found that only around 4% between the ages of 5 and 16 years utilised Braille. The 2007 survey mentioned above indicated that two thirds of secondary-age VI pupils attended mainstream schools, but evidently it was unnecessary for many of them to pursue Braille at all. Whether or not such a decline exists in Braille music literacy and culpability can reasonably be levelled at VI children being enrolled into mainstream schools undoubtedly demands more research.

The Special Educational Needs and Disability Act 2001 (SENDA) and Disability Discrimination Act 2005 placed a legal obligation on schools, universities, adult education providers and Local Authorities to make reasonable provision to ensure people with disabilities are given the same opportunities as those who are able-bodied (also refer to DfES, 2001a, 2001b). Interviewees intimated that, whilst policy was well-intentioned, it was often not implemented in practice. Matthew's work advising and supporting the music education of children brought him into daily contact with parents, VI students and schools, so he clearly contributed helpful insights on this matter. It is important to note, too, that the act is not merely concerned with primary and secondary schooling: David was studying at a music conservatoire during the investigation, so could also offer additional wisdom. We should be cautious, nonetheless, and not extrapolate to the current educational situation from the retrospective accounts of people without direct experience on the failure of mainstream schools to meet VI musical requirements, i.e. from the personal histories of people who attended particular establishments prior to the act. As such, this issue also calls for further investigation, but every respondent held this perspective. Such an investigation must be understood in light of fast-changing Special Educational Needs (SEN) arrangements too. A recent Green Paper (Gove & Teather, 2011; see also Quinn, 2012) has made a changing pattern to VI education foreseeable. In response to the children's poor life chances, and parents feeling the need 'to battle for the support they need, where they are passed from pillar to post' (Teather, 2011), the government's Green Paper sets out reforms:

- A single early assessment process will be formed and an 'Education, Health and Care Plan', which reflects the family's needs and ambitions for the young person.
- Local services will publish a 'local offer' of what is available and parents will have the option of a personal budget to use; there will be trained key workers to assist them in navigating the available services.
- Parents will have the right to express a preference for any state-funded mainstream or special school; this will be met unless incompatible with the child's SEN or the education of other children; this extends the situation that currently exists in law to include Academies and special Academies.¹³
- Schools will have more autonomy to innovate and overhaul their SEN provision (DfE, 2012c).

The consultation of the Green Paper also promises a greater role for special schools to work in partnership with other types of school 'in order to improve the quality of provision for disabled pupils and those with SEN by sharing their expertise, facilities and resources'

(DfE, 2012c, p. 40); this is a move applauded by the RNIB (Jennings, 2013). It would be heartening if these partnerships encompassed music pedagogy.

Recommendations

A Department for Education (DfE) census for January 2012 showed that there are 8.2 million pupils overall (DfE, 2012a). From government statistics, it seems that approximately 2.8% of that school population have Special Educational Needs (SEN) (DfE, 2012b). VI students may well represent a diminutive or 'low incidence' disability group within the SEN body in the UK; then again, for this group (as for all children), music is a life-enhancing activity. Alongside this, a strong cultural 'imprint' is generated by: traditions of blind musicianship; the popularisation of contemporary blind and partially sighted musicians; and research evidence concerning the enhanced musical abilities of VI people. Indeed, these may help to drive up participation within the VI community. In that light, any reported unpreparedness of music teachers to address VI children, or lack of wider awareness of technologies and practices (as touched upon by David), is worrying; we do need to authenticate the claims made by our five respondents, but in our present education system of course.

Whatever the facts and figures concerning 'awareness' and 'preparedness' in today's education, though, musical technologies for blind and partially sighted people are rapidly advancing, as are the possible ways for VI people to engage with music; it is imperative that music educators either keep in step with this progress or, at least, have access to information and training when required.

Clifton (2005) has appealed for: superior training and support for teachers; and support and advice from well-informed arts consultants (p. 8). It is simply not possible for every music teacher working in a mainstream school to learn Braille music. However, some knowledge of ATs (such as JAWS, Braille note-takers, magnification software), how these can be used in music alongside music software and equipment (e.g. Sibelius or digital music stands), and the manner in which blind or partially sighted musicians learn, perform and compose music would be helpful.

Mainstream primary and secondary schools and instrumental music hubs need to look to specialist organisations such as the RNIB to create professional development opportunities together. The Association of Teachers and Lecturers (ATL, 2011) 'welcomes the emphasis [in the Green Paper] on special schools as centres of expertise on SEN and a correspondingly bigger role for them in initial teacher education and in professional development' (p. 8). However, special schools themselves may not have expertise in Braille music or VI musical learning so, in those terms, this step may have limited impact. 'Experiential' elements within conservatoire pedagogy and outreach programmes could feed and cultivate skills in the future generation of music educators, though: this will be a component of the two-year AHRC project mentioned earlier, which will use findings as the basis for training at the Royal Academy of Music before forging 'music days' to bring sighted undergraduates into contact with visually impaired musicians. Some VI musicians will wish to become music teachers themselves like John and Anne. There is, it seems, a need for pedagogical training that prepares them for catering for sighted children plus the development and support of a professional network.

Postlude

Life histories can provide us with individuals' subjective realities (Munro, 1998; Faraday & Plummer, 2003). In this study, they have allowed us to place 'an emphasis on ... the perspective of an *insider* looking around' (Muchmore, 2000, p. 1). That is, through the research process, interviewees were able to introduce matters important to them and to confirm the findings as their 'truth'; thus, there is some empowerment. Even so, the researcher cannot be divorced from his position as a sighted 'outsider', influencing the findings to some extent through his preconceptions and interests. Nevertheless, life history research can be comprehensible, collaborative and emancipatory for interviewees. The interviewees in this study confirmed and appreciated the findings sent to them by email. David wrote, for instance: 'I agree with your findings and am very grateful that you have undertaken such important research' (email, 31 October 2012). Among other remarks were: 'I have had read the summary and it is excellent' (Anne, email, 31 October 2012); and 'the statements ... do resonate with my perspective' (Matthew, email, 15 October 2012). Life history research has been noted to obstruct the marginalisation of groups through articulating their hitherto unheard voice (see Sparkes, 1994); and so, the life accounts of stakeholders in society cannot be separated from a political angle. From the personal stories offered herein, potential education, community inclusion and career issues are raised; we can, therefore, start to ponder these, consider the need for specific areas of research and, ultimately, offer practical solutions. However, the stories offered here – as with any biographical testimony – are personal, partial and shaped by the unique circumstances of the interview occasion; as such, they can only be presented as a platform for continuing enquiry.

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Notes

- 1 See <http://www.rnib.org.uk/aboutus/research/statistics/Pages/statistics.aspx> [accessed 16 May 2013].
- 2 The term 'visually impaired' is used in this article to refer to a person who is either blind or partially sighted.
- 3 Septo-optic dysplasia (SOD), also known as 'de Morsier' syndrome, is a congenital malformation of the brain. It involves hypoplasia (underdevelopment) of the optic nerve. A sufferer's vision can be partially lost with parts of the optic nerve missing or, in some patients, completely absent. Definitions of the eye conditions in this article come from: the RNIB at http://www.rnib.org.uk/eyehealth/eyeconditions/Pages/eye_conditions.aspx; Dr Michel Michaelides and the British Retinitis Pigmentosa (RP) Society at <http://www.rpfightingblindness.org.uk/home.php>; and Dr Andrew Blaikie

- and the Scottish Sensory Centre (SSC, Moray House School of Education, University of Edinburgh) at <http://www.ssc.education.ed.ac.uk/resources/vi&multi/eyeconds/list.html>
- 4 In early infancy, retinopathy of prematurity (ROP) is the formation of irregular blood vessels on the retina, which then cause scarring and fibrous tissue. It is a non-hereditary condition. This affected premature babies, particularly in the 1950s, as the result of excessive administration of oxygen.
 - 5 Screen Reader software applications interpret what is being displayed on a computer screen. This interpretation is subsequently re-presented to VI users as text-to-speech or to a Braille output device. They allow VI users to hear various electronic file types (e.g. Word documents or webpages) and also to create them. Some of these applications have a high degree of sophistication. Features can include: announcements of software opening; reading items when a drop-down menu is activated; character and word echo as the user types, to assist with accuracy; inflections on capital letters; and announcements of punctuation. There are number of these programs like JAWS (Job Access With Speech from Freedom Scientific, see <http://www.freedomscientific.com/>) or Window-Eyes (GW Micro). Other Assistive Technologies (ATs) include Screen Magnifiers such as iZoom (Issist) and WinZoom (Clarity Software, see <http://www.clarityusa.com/>), which are intended for partially sighted people.
 - 6 Retinitis pigmentosa (RP) is an inherited, degenerative condition that progresses at various rates. Typically, a later onset means a more rapid degeneration. Symptoms of RP are: abnormalities of the photoreceptors; tunnel vision or, alternatively, loss of the central visual field; poor colour separation and deteriorating night vision; and extreme tiredness.
 - 7 Leber's congenital amaurosis (LCA) is an inherited rod-cone disorder that is degenerative. Many children with LCA can see very little. A variety of other eye-related abnormalities occur with this disease, including roving eye movements (nystagmus), deep-set eyes, cataracts and photosensitivity. LCA has symptoms such as very low levels of retinal activity and ocular pigmentary changes.
 - 8 Nystagmus is marked by involuntary movement in the eyes. The rapidity of this movement varies and usually involves both eyes. It typically occurs in infancy but can also be acquired later in life. Its causes include eye disease during infancy or optic nerve degeneration. It can also have hereditary origins.
 - 9 See <http://www.sibelius.com>.
 - 10 A press release by Sibelius entitled 'Sensing music: Sibelius opens up a new World for pianist Kevin Kern' on Sibelius Speaking is available at <http://www.sibelius.com/news/press92.html>. Sibelius Speaking 3 is available from <http://www.dancingdots.com/>.
 - 11 The blind shamisen player, Takahashi Chikuzan (1910–1998) brought attention to this tradition through a 1977 film entitled 'Chikuzan Hitori Tabi' (or 'Life of Chikuzan', Kaneto Shindo, Dir.). The shamisen is a three-stringed Japanese lute performed with a plectrum.
 - 12 The biwa is a short-necked lute with frets used for storytelling. It is associated with Benten, a Shinto goddess of music, poetry and education. A notable exponent of this vocal tradition was Yamashika Yoshiyuki (1901–1996).
 - 13 Academies in the UK are schools with freedom from Local Authority control; they can set their own pay and conditions, for example, and also exercise some flexibility concerning the delivery of the curriculum.

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