Some people don’t just hear music, they can see it as well – Dr Penelope Lewis reveals the strange world of synaesthesia

‘Gentlemen, a little bluer if you please: this tone type requires it!’ What orchestra would not be baffled by such an appeal? Yet this was a typical remonstrance from Franz Liszt, who has also been quoted as saying: ‘That is a deep violet, please, depend on it. Not so rose!’ Though the musicians in Liszt’s orchestra probably became accustomed to his eccentric sensory system, music may be ‘seen’ as coloured shapes projected in the air, or shapes which are seen may be perceived as odours.

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understood what he was on about. Today, we know that those gifted few who see colours when they hear music are experiencing a bizarre neurological condition called synaesthesia, in which a stimulus to one of the five senses such as music is perceived not only correctly as sound, but also by some other sensory system. So music may be ‘seen’ as coloured shapes projected in the air, or shapes which are seen may be perceived as odours.

Sometimes more than one additional sense is stimulated at once. Synaesthete Carol Crane, who perceives musical sounds as touches to her skin, says: ‘I feel different musical instruments on different parts of my body – for example, violins are always on my face, guitars are always on my ankles – it’s like a shimmer, kind of a very soft brushing... That’s about as close as I can get.’

It should come as no surprise to hear that synaesthetes are well represented among artists and composers, who often use their gift as a source of inspiration or at least to provide an alternative perspective or approach (see box far right). Oliver Messiaen, for instance, saw colour in association with music and composed several pieces, such as Oiseaux Exotiques and L’Ascension, in which he made an effort to ‘produce pictures’ using sound. Mezaan claimed his synaesthetic experiences looked similar to the work of Robert Delauney of the Blaue Reiter painters’ group, which explored multi-sensory stimulation in their art, combining colour, sound and dance to maximise its emotional impact.

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that such an unlikely sounding phenomenon as synaesthesia truly exist? Scientists say that it can – and that it is only the selective death of neural pathways not used during early childhood that prevents this confusion from continuing into adulthood. These pathways do not die off completely in synaesthetes, which is why they continue to experience mixed senses. If this is true, children stimulated with the right combination of sensory inputs will retain the targeted brain pathways and their synaesthetic ability. This raises the tantalising possibility that – given the right training from infancy – we could all experience life through the fascinating kaleidoscope of synaesthesia.

SYNASTHESIA & SENSORY FUSION IN THE ARTS

Dr Penelope Lewis reveals the strange world of synaesthesia. The concept of multimodal, or multi-sensory – perception peppered writings of musicians and visual artists alike. Russian painter Wassily Kandinsky (1866-1944) was a sound/colour synaesthete and a member of the Blaue Reiter group. He wrote extensively about his experiences, saying of Wagner’s Lohengrin: ‘The sounds, the deep tones of the bassoon, and especially the wind instruments at that time embodied for me all the power of that pre-mortal hour. I saw all the colours in my mind.’

‘I SAW ALL THE COLOURS MY MIND BEFORE MY EYES’

they stood before my eyes. Well, almost crazy lines were sketched in front of me.’

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MY EYES Õ MY MIND

The colours in my mind; and especially the wind instruments of sound. Messiaen has also been quoted as saying: ‘The violins, the deep violet, please, depend on it. Not so rose!’

MY MIND

Strangely enough, in women and left-handed people, synaesthesia is more common and is estimated to affect about one in 500 of the population. The condition also runs in families and is therefore thought to have a genetic basis.

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