

Ultra sound: why music means so much to us | Adam Ockelford

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Plucking at the heartstrings: Emily Watson in *Hilary and Jackie* (1998). Photograph: BFI

It's a question that has intrigued thinkers across the ages from [Socrates](#) to [Schopenhauer](#): why is it that abstract patterns of sound mean so very much to human beings?

We are more exposed to music than ever before, thanks to streaming – from [Spotify](#) and [YouTube](#) to [Mixcloud](#)– and downloading, and we're bombarded with music via advertising, too. It is there to influence the way we think, feel and behave. As every filmmaker knows, music is unique in its power to stir the emotions. As music therapists' work with dementia patients and autistic children has shown, music has the capacity to touch us and tap into memories that words alone are not able to reach. But how?

Defining what *isn't* music can help us to understand its powerful effect on us. There are those who believe that certain everyday sounds – particularly the sounds of nature – should be classed as music, such as Tennyson's "[babbling](#)

[brook](#)". This may be regarded as music to a poet's ear, but it doesn't "communicate" to us in the way music does. Music conveys meaning since all its constituent sounds – notes – elicit tiny emotional responses, and these are locked together in a coherent narrative through imitation. In this sense, rushing water or pattering rain fail the "musical" test.

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How does music compare with the other uniquely human form of communication in sound: language? Unlike words, sequences of notes are free to convey pure emotion, unfettered by the need for semantic understanding. Hence music requires less mental processing power than language, and music in its simplest form – the early vocal interactions between baby and caregiver – precede language in human development. The miracle is that the structure and meaning of both music and language are grasped quite intuitively in the early years, merely through exposure. This is because the young brain is primed to search for patterns in sound – explicit tuition isn't necessary.

Music is central to the notion of what it is to be human, and spans cultures, continents and centuries.

Many of the core cognitive traits required for musical understanding stem from an evolutionary need – one being the ability to detect difference and similarity around us: what looks the same, smells and tastes the same, also sounds the same, and therefore *is* the same. It may be, as the human brain evolved, other purely musical abilities built on these cognitive survival skills – above all, the ability to express oneself emotionally, and to understand others – through abstract narratives in sounds. And these skills also became important to our survival.

Current thinking stresses the importance of music in early bonding between

parents and infants, and the sense of cohesion within wider social groups it can provide. There is increasing recognition, too, of the potential role of music in the development of empathy, ie “If I can copy the sounds you make, then I must in some respects be like you; the emotions that I experience as I make sounds like yours may be the same as the emotions that you experience.” And the process is reciprocal, as in: “If you imitate me, then to a degree you must understand me, must know how I feel.”

My music, your music, our music can bind us together as families, as tribes and as societies in a way that nothing else can.

Comparing Notes: How We Make Sense of Music by Adam Ockelford is published by Profile Books at £20. Order a copy for £17 from bookshop.theguardian.com