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Music as a technology for social bonding: Comment on “Music, empathy, and cultural understanding” by E. Clarke et al.

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From the perspective of evolutionary psychology music can be seen as problematic. Despite its ubiquity there is still no clearly agreed function in terms of improving the fitness of the species. Is it therefore fairer to judge it as ‘auditory cheesecake’ [see 1] rather than attributing it with any specific purpose? An alternative argument is that it plays a fundamental role in the formation of human social bonds, and the authors of “Music, empathy, and cultural understanding” concur with the view that music has a unique capacity to help people connect with others [2]. There is now evidence that even in the modern world there is a significant effect of our social bonds on health and longevity [3], suggesting that our hominid ancestors might have relied heavily on their social network for survival. If music has the capacity to encourage the formation of these social bonds it could form a powerful tool in the success of our species.

Music as an evolved technology

Music has been described as a biotechnology [4], developed by early humans because it brings together a number of behaviours that each have the propensity to encourage social bonds between those engaging together. There is now increasing evidence that this is the case, and that separating out many of the independent features of music-making we find small but additive effects on the formation of social bonds that people feel with one another, acting via physiological, psychological and social mechanisms. Physiologically the act of exertion and synchronisation during musical activities are likely to lead to the release of a cascade of neurotransmitters and hormones involved in social bonding [5]. Psychologically the processes of sharing the intention to coordinate [6], shared attention to an external source [7], prediction of the movements of another person [8], synchronisation [9] and experience of success [10] have all been shown to have independent effects on how socially bonded co-actors feel. Finally, at a social level music taste can act as an honest signal of the group that we belong to, given that it can reveal information about where and when we grew up [11].

Music-making appears to be an efficient means to combine all these features into one activity. The authors of the target paper question: ‘why not football, or food..?’, and indeed, sports activities contain many of the social bonding elements of music suggesting some direct comparison should be made between the two in future. By identifying common and divergent features of different social bonding activities we could potentially develop some optimum activity for bringing people together. However, as the authors state, the ability for music to evoke emotions does seem to place it on some different plane from sporting

activities, and the fact that we can share a social experience with absent agents whilst listening to music suggests it has some uniquely empathy inducing qualities [12].

Using music in modernity

The authors comment on music therapy as a practical method to utilise the empathy that comes from social music making. While this comes close to bringing back the social roots of music it is likely that many of the beneficial impacts music can have on health and wellbeing occur through a sense of social inclusion. Recent research suggests that the difference between singing and other social group activities could be that it encourages very fast social bonds to develop between groups of strangers [13] which harks back to the evolutionary origins of the behaviour; when two neighbouring groups of hunter-gatherers encounter one another they often engage in ritual activities including music-making, thus breaking down any social barriers that are initially experienced. If this capacity can be harnessed then we have a powerful tool with which to connect disparate social groups, as has been found in the study reported here and in projects working with cultures in conflict (e.g. in Northern Ireland [14]).

In conclusion, the exploration of the empathic effects of music-making is timely and important, but it is worth keeping in mind the evolutionary roots of the behaviour. If we can identify activities that tap into the same psychological mechanisms for social bonding then these may prove to have comparable empathy inducing effects. Similarly the context in which we would historically have made music might also reveal more about the ways in which it can foster tolerance and understanding of different social groups.

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