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Book Review

Beethoven's Anvil: Music in mind and culture by William L. Benzon. Basic Books, 2001.

Reviewed by John S. Wilkins

Alfred Russel Wallace, Darwin's colleague and co-discoverer of the theory of evolution by natural selection, famously "converted" to spiritualism because he could not see how human faculties like language, mathematics, intelligence and musical ability could have evolved. A gorilla, with none of these faculties, survived well enough, why would humans need more? It must have been something beyond nature, given how sublime such faculties can be.

Since that day, psychologists and cognitive scientists have done an enormous amount of research into the ways in which the other faculties evolved, but music has been overlooked, and in a way it is perhaps the most fundamental of the lot. Or that is one way to read this book, although Benzon does not say it outright.

A musician himself, Benzon first discusses the experiences had by musicians who are in the groove, who are performing at their peak as it all comes together. The subjective experiences of these sweet moments is compared to a mystical experience as the performer "becomes" the composer or an extemporised jam brings several performers together to produce a complex event that is neither rehearsed nor led by a single individual. How, asks Benzon, can this be?

Amongst many other things, Benzon analyses the ways in which musicians and dancers coordinate their behaviours, how rhythms develop and time is kept, and ultimately how social structure is reinforced and indeed created by music. In some ways it seems on his account that music is a way of creating society, and thus is a goad to further selection, a social selection as it were, for greater complexity of hominid capabilities.

There is a tendency in books like this to over-draw the scope of the hypothesis. Benzon, to his credit, does not make music the core of all human specialities and cognitive powers, however, and this makes the implications of his basic idea – that humans evolved to be linked through such communal activities as dance and rhythm – even more interesting. It might explain, for example, how larger social groups than is normal for apes evolved in our lineage, and how self-consciousness developed as a way to represent internally what the performer is doing with respect to others in the performance. The discussions of the ways in which rhythm is produced by the brain are among the most interesting parts of the book. He helpfully identifies each principle or hypothesis with a name

and summary, giving credit to those from whom the ideas are derived if not his own.

Benzon is dismissive of accounts of evolution of culture that rely on memes being intentional states. Memes for him are physical events or actions that are passed on, not mental ones, and music here is no exception. In giving an account of the evolution of music, he traces its origin to mimicry in behaviour and vocalisation of animals in the protohuman environment, with the subsequent selection on the social coordination of musical abilities. Later musical evolution is cultural, constrained by the attractors imposed by the neurological and somatic properties of our evolved biology. Some of this is rather Kiplingesque, but it is not, so far as I can see, introduced to definitively provide the historical origins of music – instead it is there merely to show that an account can be given, *contra* Wallace.

The book is worthwhile for its historical information of modern musical movements such as jazz and blues, as well as the more traditional dead white male classical styles. He is nothing if not eclectic – to him all music is worthwhile studying and all tells us something about the ways in which humans work. Musical specialists, historians and performers alike, might find a lot to provoke them, whether they agree with him or not.

Some of the book is hard to follow, and there is a slightly scattershot nature to its organization. Moreover, the neurophysiological accounts are, it seems to me, placeholders for fuller explanations – unnecessary for the specialists who might be inspired by it, and opaque for the rest of us. One wonders if the literature cited is a comprehensive survey, or if references have been picked that support the prior hypothesis, although they do go to the plausibility of the argument. Given the breadth of the disciplines and the amount of work on this and related topics, perhaps one could do no more. Notwithstanding, it is well worth a read and I think it will presage some solid research in a field that has been unduly ignored by cognitive researchers.

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