The natural history of human laughter: evolution and social function

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Laughter is a peculiar human behaviour and has attracted the attention of researchers for decades. The occurrence of laughter worldwide suggests a long evolutionary history, with deep roots in the facial and vocal displays of primate ancestors. An ethological analysis of context and consequences suggests that laughter has most probably evolved as a social signal, which function is to create affiliative bonds among members of a species. Laughter, however, is also used in aggressive contexts, for example when undesired individuals are ostracized from a group. In both cases, the formation and maintenance of cooperative groups appears to be the essential feature through which laughter provides survival and reproductive benefits to individuals displaying it. I will review psychological and ethological evidence in favour of the hypothesis that laughter functions as a coalition formation signal. I will also stress the importance of gathering observational data on human laughter, as this line of evidence is necessary to complement experimental research on the production and perception of laughter. Finally I will discuss the implication of this research on the need, in social signal processing research, to study the social effects of emotional signals in addition to the symbolic meaning created by the community of perceivers.