Only When I Laugh

Have you ever thought how peculiar laughing is? Why do we open our mouths, make peculiar grunting or guffawing noises and become incoherent when we hear or see something ‘funny’. More strangely, why do we laugh at unfunny situations? Are humans the only creatures that laugh? Is laughing of any value at all in health or survival? Well, let us find out.

It is very difficult not to be influenced by someone laughing around you. It is infectious. It relieves tension.

But it is not true to say that we only laugh because we are confronted by something funny. Indeed most of the time we laugh it is not because of something humorous at all.

Robert Provine, seen below not laughing, is a Professor of Psychology at the University of Maryland in the USA and he has carried out many studies in to laughter (what a great job!). He has discovered that, far from simply laughing at something funny, only 15-20% of laughs were generated by anything resembling something amusing. The remaining occasions were the result of a variety of events such as courtesy during a greeting, a response to something unfunny, a non-specific response to a particular event or a number of other reasons.

So we laugh at things that we find ‘funny’. However, we laugh much less when we are alone than when we are with other people. According to Provine we laugh thirty times as much when we are in groups compared to when we are alone.

When we hear people laugh it makes us laugh ourselves. On occasion we all find ourselves laughing in company without having any idea what we are actually laughing about. Someone else laughing is a trigger.

This has led to the hypothesis that laughing is not primarily a self-expression but instead a trigger to produce positive feelings in other people. Laugh in a group...
and others start laughing. It eases tension and fosters a bond within the group making it more cohesive. It is thought that this may have been particularly important for small groups of early humans. This type of spontaneous laughter is mediated through the brainstem, the most primitive part of the brain, and it is therefore probably the most original and basic form of laughter.

It appears that laughter may be an instinct. After all, babies laugh almost from birth, long before they understand Morecambe and Wise! Indeed blind and deaf people also laugh from an early age so it cannot be a learned behaviour. There must be a genetic code somewhere.

Laughter is not under our conscious control. Whilst we choose to speak or move, we do not choose to laugh except in forced situations such as producing a laugh when the chief executive tells a bad joke! Not only can we not choose when to laugh, it may be difficult to stop or suppress once it happens, as anyone struck by something funny at a funeral will attest.

Implausible though it may sound, laughter can reach epidemic levels and there are a number of reports of outbreaks of laughter which were 'contagious'. The oft reported case in Tanzania in 1962 is a case in point. Three girls started to laugh uncontrollably. After a few months had elapsed, two-thirds of the school’s students had the symptoms and the school closed. Eventually over a thousand people had the laughing symptoms and it spread into neighbouring Uganda. There were no harmful long-lasting effects but it could only be described as truly infectious laughter.

Of course, laughter may take many different forms and, as I said, only a small proportion is associated with humour. Tickling causes laughter but it is certainly a different mechanism and probably a different form of laughing. Polite or ‘fake’ laughter will sound very different to the spontaneous response to humour. And what about the fiendish snarl of a Bond villain or the intimidating, threatening cackle of the evil wicked witch. It shows that not all laughter is infectious. It may be intimidating or downright frightening. This sort of disturbing and upsetting laughter comes from higher centres in the brain and has developed more recently in evolutionary terms.

Almost all of us have watched chimpanzees ‘laughing’. Is that what they are doing?
Well the evidence suggests that they are. Most apes make a ‘smile face’ and pant to produce a sound which is akin to the ha ha of human laughter. The same features have been found in some other animals. Clearly animals do not tell jokes but they do laugh when they are tickled, when they playfully tumble with each other or when they run around. Human babies behave in a similar way and gurgle and make faces when they are tickled or are played with. It is part of the bonding process and gives further credence to the idea that laughter was an early human relational activity, associated with brainstem activity and some sort of genetic coding.

All this hypothesis about types of laughter and brain origin lead us to the rather quirky research of French Physician Guillaume Duchenne, who developed a technique of assessing smiles by placing electrodes on faces.

He worked in an old woman’s hospice and so have plenty of material and he must have had a way with him because, according to accounts of his work, all the old ladies wanted to be electrocuted by the “little old man with his mischief box”. Using his technique he produced a voluntary smile involving the muscles of the side of the face but that there was the second sort of more genuine smiling which involved, not only facial muscles but also the muscles round the eye (orbicularis oculi).

The second type of laughter, now known as Duchenne laughter, was affectionately known as ‘soul emotion’. Over a hundred years later Gervais and Wilson postulated the two site brain theory, suggesting that the more spontaneous Duchenne laughter developed 2-4 million years ago which the more voluntary laughter was a much newer feature.

It is certainly correct that the number of muscles required to smile is somewhere between 10 and 43, depending on how broad and animated a smile it is, whereas a frown takes a reasonably constant 17!

People say that laughter is the best medicine. Will it make you fitter, reduce your blood pressure, improve your immune system, help you lose weight and improve your memory.

Probably not. It might be, though, that laughter is contagious and if people are together they bond and feel better. It seems very unlikely that a joyous individual will live a long life whilst the miserable, joyless gloom-merchant probably won’t live to draw his or her pension.

So, can you die laughing? It is a commonly used expression. The answer is that very occasionally it does happen when someone laughing uncontrollably brings on a heart attack or stroke.

However, as someone once said, “Keep smiling, it makes everyone wonder what you have been up to”.

A very happy day to you all.

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