

**Part 1**

Read the text below. Then read the ten questions which follow, choose the best answer (a, b, c, or d) to each question and WRITE it on your answer sheet:

**What makes us laugh?**

1 Why do we laugh? Well it's funny you should ask, but this question was suggested by reader Andrew  
3 Martin, and it is a very interesting one to investigate. For what at first seems like a simple question turns out to require a surprisingly complex answer – one that takes us on a journey into the very heart of trying to understand human nature.

Most people would guess that we laugh because something is funny. But if you watch when people actually laugh, you'll find this isn't the case. Laughter expert Robert Provine spent hours recording real conversations at shopping malls, classrooms, offices and cocktail parties, and he found that most laughter did not follow what looked like jokes. People laughed at the end of normal sentences, in response to unfunny comments or questions such as "Look, it's Andre," or "Are you sure?". Even attempts at humour that provoked laughter didn't sound that funny. Provine reports that the lines that got the biggest laughs were ones such as "You don't have to drink, just buy us drinks," and "Do you date within your species?".

So if we want to understand laughter, perhaps we need to go deeper, and look at what is going on in the brain. The areas that control laughing lie deep in the subcortex, and in terms of evolutionary development these parts of the brain are ancient, responsible for primal behaviours such as breathing and controlling basic reflexes. This means laughter control mechanisms are located a long way away from brain regions that developed later and control higher functions such as language or even memory.

Perhaps this explains why it is so hard to suppress a laugh, even if we know it is inappropriate. Once a laugh is kindled deep within our brains these 'higher function' brain regions have trouble intervening. And the reverse is true, of course, it is difficult to laugh on demand. If you consciously make yourself laugh it will not sound like the real thing – at least initially.

There is another fundamental aspect to laughing. All humans laugh, and laughter always involves a similar pattern of whooping noises. Deaf people who have never heard a sound still make laughing noises. The laughing noises produced by humans share many of the acoustic properties of speech, further evidence laughter is hijacking the brain and body apparatus that we use for breathing and talking.

25 But this does not fully answer the original question. Even if we identified the precise brain areas  
26 associated with laughing, even if we were able to make someone laugh by stimulating part of their brain  
27 (which can be done), we still don't know what makes people laugh. Yes, we know about the effect, but what  
29 about the cause, that is, the reason why we laugh in the first place?

To answer this, perhaps we need to look outwards, to look at the social factors at play when people laugh. I've already mentioned Provine's study of laughter in its natural context. Provine showed that laughter is used to emphasize speech, it doesn't just interrupt at random. This suggests that it plays a communicative role – it isn't just some independent process that happens to us while we are talking to someone. He also found that the speaker typically laughs more than the audience, and that laughter was most common in situations of emotional warmth and so-called 'in-groupness'. Again, all strongly suggesting that laughter has an important social role. Perhaps the most important social feature of laughter is how contagious it is. Just listening to someone laugh is funny. And it is not always used for positive reasons. For all the good feeling that goes with laughing with someone, there is also a dark side, when someone is laughed at to belittle or show disdain.

What these observations show is that laughter is both fundamentally social, and rooted deep within our brains, part and parcel of ancient brain structures. We laugh because we feel like it, because our brains make us, and because we want to fit in socially.

1. In line 1 "you" refers to:
  - a) the reader Andrew Martin;
  - b) another reader of the article;
  - c) any person in general;
  - d) no one of the above.