

## Passage 9

### The Origins Of Laughter

**A.** There is no doubt that laughing typically involves groups of people. “Laughter evolved as a signal to others — it almost disappears when we are alone,” says Robert Provine, a neuroscientist at the University of Maryland. Provine found that most laughter comes as a polite reaction to everyday remarks such as “see you later”, rather than anything particularly funny. To find the origins of laughter, Provine believes we need to look at play. He points out that the masters of laughing are children, and nowhere is their talent more obvious than in the boisterous antics, and the original context is play. Well-known primate watchers, including Dian Fossey and Jane Goodall, have long argued that chimps laugh while at play. The sound they produce is known as a pant laugh. But after removing the context, the parallel between human laughter and a chimp’s characteristic pant laugh is not so clear. The question is: does this pant laughter have the same source as our own laughter? New research lends weight to the idea that it does. The findings come from Elke Zimmerman, head of the Institute for Zoology in Germany, who compared the sounds made by babies and chimpanzees in response to tickling during the first year of their life. Using sound spectrographs to reveal the pitch and intensity of vocalizations, she discovered that chimp and human baby laughter follow broadly the same pattern.

**B.** Zimmerman believes the closeness of baby laughter to chimp laughter supports the idea that laughter was around long before humans arrived on the scene. So far, though, the most compelling evidence for laughter beyond primates comes from research done by Jaak Panksepp from Bowling Green State University, Ohio, into the ultrasonic chirps produced by rats during play and in response to tickling. All this still doesn’t answer the question of why we laugh at all. One idea is that laughter and tickling originated as a way of sealing the relationship between mother and child. Another is that the reflex response to tickling is protective, alerting us to the presence of crawling creatures that might harm us or compelling us to defend the parts of our bodies that are most vulnerable in hand-to-hand combat. But the idea that has gained the most popularity in recent years is that laughter in response to tickling is a way for two individuals to signal and test their trust in one another. This hypothesis starts from the observation that although a little tickle can be enjoyable, if it goes on too long it can be torture. By engaging in a bout of tickling, we put ourselves at the mercy of another individual, and laughing is what makes it a reliable signal of trust, according to Tom Flamson, a laughter researcher at the University of California, Los Angeles.

### Questions 1-5

Look at the following research findings (Questions 1-5) and the list of people below. Match each finding with the correct person, A, B, C or D. Write the correct letter, A, B, C or D, in boxes 1-5 on your answer sheet.

**NB** You may use any letter more than once.

1. Babies and some animals produce laughter which sounds similar.
2. Primates are not the only animals who produce laughter.
3. Laughter can be used to show that we feel safe and secure with others.
4. Most human laughter is not a response to a humorous situation.
5. Animal laughter evolved before human laughter.

### List of people

**A** Provine

**B** Zimmerman

**C** Panksepp

**D** Flamson