personal english



Facts and Trivia #26

The Duchenne Smile







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Why do we smile? Some experts suggest that the answer lies in evolutionary psychology, which seeks to explain every aspect of human behavior as the outcome of trial-and-error patterns. One of the first attempts to analyze the social functions and goals of smiling came from Charles Darwin himself, who (in his book The Expression of Emotions in Men and Animals) suggested that humans may have adopted the behavior of animals by baring their teeth. Even though it may have originally retained the aggressive implications of such a display, as more and more tribes began to use it as a form of greeting, in time it eventually lost its predatory edge. Guillaume-Benjamin Duchenne (1806-1875), a contemporary of Darwin specializing in **neurology**, also turned his attention towards this social phenomenon, and - by zapping single muscles on the face with electricity and then observing the changes – found out a primary distinction: some smiles come from the soul, while some others are social instruments consciously used for some purpose. Thanks to Duchenne's research, scientists who study facial expressions now distinguish between social non-Duchenne smiles and spontaneous Duchenne smiles. Not that it takes a scientist to make this distinction: as you can ascertain from the pictures on the left, if the smile engages the musculature around a person's eyes (B), it's probably a Duchenne smile; if it doesn't, then the smiling person may be trying either to conceal their embarrassment or to endear their interlocutors.

Click on the Pictures for a **VIDEO** and an **ARTICLE** on this Topic