

WHEN OUR FACES BETRAY OUR EMOTIONS...

Filming a person to measure their emotional state: this is what an automatic facial expression analyzer allows. To test this method, researchers at the CSGA asked 44 people to film themselves with their computer webcams while eating chocolate, smelling perfume or watching a commercial video. The films were then cut into frames (6 frames per second of video). These were submitted to a facial expression analyzer (Microsoft Azure API - Face©) that translates facial expressions into emotions: anger, disgust, fear, contempt, sadness, joy, surprise or indifference.

While advertising videos are more associated with an expression of joy compared to smelling a perfume, the results showed different emotional profiles between these two types of stimulation as well as an evolution of these profiles over time. For example, when participants watch a coffee brand advertisement, they first show slight joy, then a spike of joy occurs at the end of the advertisement during the final joke. When participants smell a fragrance, peaks of sadness appear with a sequence specific to each fragrance. In contrast, the analyzer detected almost no emotion when participants ate chocolate.

Analyzing a person's facial expressions to infer their emotional state has the advantage of being a non-verbal and implicit method (the person is not asked to put into words what they are feeling). However, this method seems more adapted to certain types of stimulation than others and the results question the relevance of this measure for detecting emotions caused by the consumption of food products.

Contact

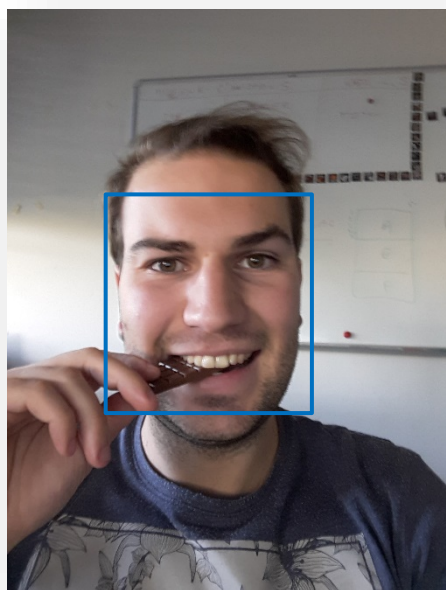
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To know more

Mahieu, B., Visalli, M., Schlich, P., & Thomas, A. (2019). Eating chocolate, smelling perfume or watching video advertisement: Does it make any difference on emotional states measured at home using facial expressions? *Food Quality and Preference*, 77, 102-108.

Key-words

Food; odor; emotion; facial expression; video; chocolate



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