

 [Emotion tracking company gets funding from the European Commission \(via EDRI\) by Aimarsella](#) by Louise S. [2015, May 12]

Realeyes is a London based start-up company that tracks people's facial reactions through webcams and smartphones in order to analyse their emotions. The analysed data is used to help companies maximise the impact of their advertising and market research campaigns. The technology allows the companies to know how consumers feel when they view the video content.

Realeyes has just received a 3,6 million euro funding from the European Commission to further develop emotion measurement technology. This grant is part of Horizon 2020, an EU research and innovation programme designed to encourage European competitiveness. This is happening at the same time as, the EU is trying to reform the current data protection legislation. In the absence of a meaningful update of the current legal framework, it is questionable whether the current data protection law can provide an adequate level of protection, and be effective in balancing different interests when it comes to profiling.

The technology is based on six basic emotional states that, according to the research of Dr Paul Ekman, a research psychologist, are universal across cultures, ages and geographic locations. The automated facial coding platform records and then analyses these universal emotions: happiness, surprise, fear, sadness, disgust and confusion. The company is planning to develop the technology so that in the future even liking, boredom or attraction could be measured.

According to those supporting the use of such technology, this technological development could be a very powerful tool not only for advertising agencies, but as well for improving classroom learning, increasing drivers' safety, or to be used as a type of lie detector test by the police. To participate in the study for testing and developing the tool, people are asked to give their consent and then share their subconscious responses to the content presented by simply using the webcam.

However, the technology raises some serious privacy concerns regarding the usage, storage and control of the data collected. First of all, the software not only detects consumers' facial expression, but also a person's gender and age bracket. Furthermore, according to the Realeyes privacy policy, even IP addresses and website usage information are being collected by placing cookies on consumers' computers. All the collected data is being stored in a massive database, and the company has the possibility to combine all the data sets in order to build a

more specific profile of a person. Lastly, the vague definition of retention period does not provide any degree of control or predictability to consumers, since the privacy policy says that personal information will be stored "for as long as it is required" for their research and business purposes. According to Anna Fielder, board chair of Privacy International, it is questionable whether the consumers, when consenting to the study, can truly understand how the technology was being implemented.

Profiling represents one of the biggest challenges for privacy due to the mass surveillance and technological capabilities of linking and analysing all the widely available data. Bearing in mind, for example, that the European Commission, in its proposal for the update of data protection legislation, introduced an option for Member States not to implement protections against profiling, its approach to this important issue seems profoundly reckless.

Emotion tracking start-up gets EU funding boost (17.04.2015.)

<http://blogs.wsj.com/digits/2015/04/17/emotion-tracking-startup-gets-eu-funding-boost/>

Webcam-based emotion ad tracking is a real thing and big brands are doing it (27.04.2015.)

<http://adexchanger.com/online-advertising/webcam-based-emotion-ad-tracking-is-a-real-thing-and-big-brands-are-doing-it/>

Realeyes FAQs

<http://www.realeyes.me/faqs>

Realeyes Privacy Policy

<http://www.realeyes.me/privacy>

Googling your brain: latest "data protection" proposals from Council (14.01.2015.)

<https://edri.org/googling-your-brain-latest-data-protection-proposals-from-council/>

(Contribution by Morana Peru?i?, EDRi intern)

 [Comment by Nick Brown](#) by Louise S. [2015, May 12]



I have written a short blog post about this, which you can read

here: <http://steamtraen.blogspot.com/2015/05/real-time-emotion-tracking-by-webcam.html>.

This story is an excellent example of how people in positions of power can allow their infatuation with technology ("Oh yeah, my smartphone recognises my face to unlock itself.

Well, only about half the time, but when it works it's really cool") to lead them to waste public money on projects that would have terrifying implications if they worked, although in practice will just turn out to be one more white elephant. The IT industry has been getting this wrong for thirty years or more.

The notion of an algorithm being able to determine someone's emotional state from the disposition of their facial features is absurd on its face (for a start, it presumes that we can make a working definition of "emotional states"); the idea of deploying such an algorithm in any situation where people will have incentives to game it borders on negligence. This project is a remarkable combination of scientific psychology and people trying to pick economic winners; there's something to dislike here wherever you are on the socio-political spectrum.

Best,  
Nick  
nick.brown@free.fr

 [Comment by Louise Sundararajan](#) by Louise S. [2015, May 12]

Emotions are something that happen inside me—my body, my brain, my heart and soul. This is the rhetoric of interiority. One of the functions of this rhetoric is to cordon off certain unshared aspects of the self and declare them private and inviolable. In traditional societies, this rhetoric of interiority goes hand in hand with the distinction between in-group and out-group. As part and parcel of the “inner” self, emotions can be known only by the in-group—“those who know me,” not by the out-group—“those who do not know me.” This theme finds an eloquent expression in a Chinese poem from the Odes:

That wine-millet bends under its weight,  
That cooking millet is in sprout.  
I go on my way, bowed down  
By the cares that shake my heart.  
Those who know me  
Say, “It is because his heart is so sad.”  
Those who do not know me  
Say, “What is he looking for?” (Henry, 1987, P. 15, emphasis added)

If those who don't know me misses the mark, how much more would a robot? However, decoding accuracy is not the main issue here. It is upsetting to be misunderstood by those who do not know me, but it would be equally, if not more, upsetting to be decoded with accuracy by a stranger. Thus the “techno-myth creep” of tracking emotions is the nightmare of a flattened universe, in which certain vitally important ontological and epistemological distinctions—such as private versus public; in-group versus out-group—have been eliminated. The obliteration of privacy in emotion tracking is the logical conclusion of the dissolution of the in-group versus out-group distinction in the postindustrial West . Critics have noted for some time that what used to be considered private matters are now talk show fodder,

purveyed by “celebrities as well as noncelebrities discussing their sex lives, childhood traumas, favorite foods ...” (Mestrovic, 1997, P. 63).

My prediction is that when our emotions become the big data to be decoded and manipulated by the robot, the complex functions of emotions in traditional societies will become increasingly relevant to the modern life. How to maintain emotional wellbeing in an increasingly flattened universe? Indirect communication as anti-exploitation device in traditional societies is very relevant here. In indirect communication the exchange of information tend to be “subtle, with both parties benefiting from producing brief, discrete signals that do not inadvertently provide important information to third-party competitors” (Owren, & Bachorowski, 2001, p. 162). There will be an arms race between the development of ever more powerful tracking robots and the evolution of ever subtler cues encoded in emotion expressions. If you want to outsmart the big data robot, read my forthcoming book on Emotion in Chinese Culture, and you will find out why Chinese traditionally don’t put much stock on facial expressions, and why they don't think you should wear your emotions on your sleeves.

Louise

 [Comment by Tony Marsella](#) by Louise S. [2015, May 12]

✖ May I add the following:

Gem: emotions are encoded proprioceptively, imagistically, and viscerally. These are non-redundant!!! Relying on face is a typical security error! Unbelievable lack of understanding of "emotions" and culture ..... Wisdom. They would be better off to read poetry and literature.

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 [Comment by Maureen O'Hara](#) by Louise S. [2015, May 12]

✖ It's a great example of techno-myth creep.

Maureen O'Hara  
mohara@nu.edu

