

# Philosophers put forward a new emotion recognition model

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Philosophers at the Ruhr-Universität Bochum have put forward a new model that explains how humans recognise the emotions of others. According to their theory, humans are capable of perceiving feelings directly via pattern recognition. They do not have to deduce feelings by interpreting other people's behaviour. That model is described by the philosophers Prof Dr Albert Newen and Dr Anna Welpinghus, together with Prof Dr Georg Juckel from the LWL University Hospital for Psychiatry, in the journal *Mind & Language*.

## **An emotion is a pattern of typical features**

A key thesis of the Bochum model states that every emotion is determined by a pattern of characteristic features, for example physiological reactions, facial expressions and gestures, a typical feeling or a cognitive assessment of the situation. Even if an individual does not display all components of an emotion pattern, perhaps because he or she is maintaining a neutral facial expression, the other features are sufficient for rendering the corresponding pattern recognisable.

## **Emotions are perceptible even with sparse clues**

Humans are able to perceive typical emotion patterns even if the clues are sparse. "Typical modes of movement and blushing indicate anger, even if the individual is able to control their facial expressions," elaborates Newen. "Emotions are not merely [feelings](#) that are hidden

inside and that become apparent only if one observes an individual's behaviour and draws conclusions from it." Such an extrapolation of emotions does naturally occur in everyday life. However, the common method is the direct perception of an emotion on the basis of typical features, because more often than not, sufficient information is already available.

## A case study

An employee has a conversation with his manager at his place of work and worries he might be made redundant. Typical fear elements in that situation include 1) physiological reactions (e.g. palpitations, perspiration rate), 2) behavioural tendencies (e.g. being petrified, flight reflex), 3) forms of expression (e.g. [facial expressions](#), gestures, posture), 4) sensation of fear, 5) a cognitive assessment (e.g. "It is very likely that I'm going to lose my job, but I need the money") and 6) the "intentional" object at which the fear is directed (in this case the termination of contract). The emotion pattern is in place, even if some typical features are missing, for example if the employee has trained himself to maintain a poker face. It is sufficient for the features to manifest themselves to a minimal extent. Even if we attempt to train ourselves to get rid of one expression of emotion, we will only partially succeed; usually, the [emotional](#) state is revealed through involuntary reactions such as gaze direction.

**More information:** A. Newen, A. Welpinghus, G. Juckel (2015): Emotion recognition as pattern recognition: the relevance of perception, *Mind & Language*, [DOI: 10.1111/mila.12077](https://doi.org/10.1111/mila.12077)

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