

**The impact of context on the perception of emotions**

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To appear in: Abell, C. and Smith, J. (Ed.), Knowledge of Emotion: Expression and Social Cognition. Cambridge University Press.

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### **Abstract**

This chapter considers the impact of context information on the perception of emotions. Different types of context are discussed and the limits of the influence of context information are delineated. A model of the meaning of emotion expressions in context (MEEC) is introduced, which proposes a pertinent but not exclusive role for context information by proposing core appraisals as the limiting frame of reinterpretation. The model, just as do social constructivist accounts, considers perceivers as active participants in the emotion decoding process, but as ones who are limited with regard to their constructive freedom.

## Introduction

Most human interactions are imbued with emotional exchange. In fact, it is hard to imagine a meaningful interaction in which emotion communication plays no role and even banal everyday transactions such as paying at a supermarket often involve an exchange of smiles or sometimes the expression of displeasure by one or both interaction partners. Importantly, these expressions serve as social signals that provide information about the expresser but also about the situation (Hess, Kappas, & Banse, 1995) and that help to coordinate and facilitate interpersonal interaction and communication (Niedenthal & Brauer, 2012; Parkinson, Fischer, & Manstead, 2005). The present chapter asks the question of the influence of context on the social signal value of such emotion expressions. What do they in fact tell us about the person or the situation and which influence has the context they occur in on the meaning of the exchange?

When considering the impact of context on one hand and the social signals inherent in emotion expressions on the other, the first question to ask would be what emotions actually signal. The scientific study of emotion expressions is usually traced to Darwin's seminal work "On the expressions of the emotions in man and animal" (1872/1965). Darwin understood emotion expressions as the visible part of an underlying emotional state, which are evolved and (at least at some point in the past) adaptive. The notion that the expressions communicate the organisms' state and thereby allow a prediction of the organisms' likely behavior was a central point in this argument. Yet, Darwin's view has been disputed and rejected by those who considered facial expressions as exclusively or predominantly social or cultural signals, which are not linked to underlying states. Research by Ekman and colleagues (Ekman,

1973; Ekman & Friesen, 1971; Ekman, Friesen, & Ellsworth, 1972; Ekman, Sorenson, & Friesen, 1969) as well as Izard (Izard, 1971a, 1971b) initially vindicated Darwin's idea that at least some, basic, emotional expressions are universal and directly associated with an underlying emotional state (see Hwang and Matsumoto, this volume, for a defense of this view, and Jack and Russell, both this volume, for criticisms). To this day, this view has been repeatedly challenged by those who consider emotion expressions to be purely social signals or social constructions unconnected to an underlying state (Barrett, 2013; Fridlund, 1994 - see also Russell, this volume). Yet, at the same time emotion expressions are calorically costly which begs the question of the usefulness that is necessary to maintain such a system through mammalian history in much of which the social negotiation aspect can only be of limited relevance especially in species that do not live in social groups.

However, in some ways the question of what emotions actually express is less important when considering how they are interpreted. Specifically, as is amply demonstrated by the use of facial expressions in the arts, films and literature, people understand emotional facial expressions to express emotions and they react in function of this understanding. Thus, people treat emotion expressions as if they express emotions and act in accordance. Yet, what are the consequences of considering emotion expressions as signs of emotions?

According to appraisal theories of emotion, emotions are elicited and differentiated through a series of appraisals of (internal or external) stimulus events based on the perceived nature of the event (e.g., Frijda, 1986; Scherer, 1987). Appraisal theory posits that a change in the (internal or external) environment is evaluated according to whether the event is pleasant or

unpleasant (pleasantness) as well as whether the change is in line with the motivational state of the individual or obstructs the individual's goals (goal obstruction). Individuals further evaluate their ability to cope with or adjust to the change (coping potential). A further set of evaluations regards the correspondence with the relevant social and personal norms, that is, how the event is to be judged in terms of ethical, moral or social norms (norm incompatibility). The outcome of these appraisals is partially determined by the personality of the person (Scherer, 1987, 1999) as well as their personal values and beliefs. Specific emotions are differentiated by the pattern of appraisal they are the result of. Thus, anger is an emotion that is characterized by appraisals of goal obstruction, high coping potential and a perception of norm violation. By contrast sadness is characterized by appraisals of goal obstruction, but combined with low coping potential, with norms playing less of a role. In this sense, one can say that emotions tell stories. This is what Lazarus (1991) referred to as core relational themes. In this view, sadness tells a story about loss and anger a story about insult to the self. This idea is also relevant to the conclusions observers draw from facial expressions, that is, the inferences about a person's character, their goals and intentions, which can be drawn from observing or learning about the person's emotional reaction to an event (see below).

Yet, an emotion expression does not occur in a vacuum. The now defunct classic model of nonverbal communication was a straight adaptation of the Communication Model by Shannon and Weaver (1949) according to which a message is transmitted from a sender to a receiver. There is feedback from the receiver to the sender and the message may be distorted by noise. In this model the message sent actually matches the intended message and conversely that the

understood message matches the received message. This is, however, not how human communication works. In fact, it is often the case that individuals believe to have sent a clear message when this was not the case. Humans overestimate both the intensity of their expressions (Barr & Kleck, 1995) and the clarity, that is, the ease of interpretability, of their expressions (Senécal, Murard, & Hess, 2003) as well as the extent to which they are in fact observed by others (the spot light effect, Gilovich, Medvec, & Savitsky, 2000). Ambiguity in expression in turn, makes information about the situation in which the expression occurred and the naïve emotion theories of the perceiver more relevant (see below). These naïve emotion theories also include stereotypes and cultural and social encoding rules. Thus, the application of social knowledge to what is perceived, influences the perception of the message, such that the same nonverbal behavior when shown by a different person or in a different situation will be interpreted differently. That is, the social context: who interacts with whom and where, can exert strong influences not only on what is sent but also on what is perceived. In fact, it can be argued that social context becomes a determining factor in many everyday interactions. However, as noted by Darwin and others and is an implicit core of appraisal theory of emotion (cf. Frijda, 1986; Scherer, 1987) emotion expression convey meaning and this meaning limits the impact of context.

In what follows, we will first discuss the process of understanding facial expressions and drawing inferences based on these expressions. We will then discuss the elements of context, which in our conceptualization extends over current discussions of context in terms of information about the emotion eliciting situation to include the tacit information the perceiver has about relevant social rules and norms as well as the perceiver's own goals, motives and emotions.

Finally, we will focus on the limits of context – that is, on the important caveat that context is not all, but that emotion expressions have in fact a true communicative value.

The present chapter focuses on facial expressions. However, much of what we discuss can be applied to emotion decoding processes in general, both those based on nonverbal cues such as postures, tone of voice, and gestures and those based on second-hand information such as verbal descriptions of the expresser's behavior.

### **The two path-model of emotion recognition**

There are two ways to identify emotions from nonverbal cues. Most research on emotion recognition implicitly assumes a pattern matching process, where specific features of the expression are associated with specific emotions (Buck, 1984a). For example, upturned corners of the mouth or lowered brows are recognized as smiles or frowns respectively and a perceiver can thus conclude that the individual is happy or angry. In this process the perceiver is a passive decoder, who could and in fact can (e.g., Dailey, Cottrell, Padgett, & Adolphs, 2002), be replaced by an automated system and context information plays no role or only a minimal one.

However, when the perceiver knows the expresser or is aware of the situation in which the emotion is shown, s/he can adopt an active role in the emotion identification process. Knowing about the event allows people to use their naïve emotion theories about the emotions that are typically elicited in certain events to predict the most likely emotion. For example, knowing that someone's car was vandalized typically leads to the expectation that the person will be angry. Thus, even if the person is not very expressive we can still assume

that she is angry. Knowing the goals and values of others allows the perceiver to take their perspective and to infer their likely emotional state. Knowing about the temperament and emotional dispositions of the expresser further allows us to refine predictions. Thus in the case above, we may expect more intense anger from a choleric person than from an easy-going one and more anger if the car was cherished than if it was not.

Whereas a pattern-matching approach to decoding emotion expressions works well for the intense and unambiguous expressions that are typically depicted in standardized sets of emotion expressions such as the Pictures of Facial Affect (Ekman & Friesen, 1976), it breaks down in many everyday situations where the nonverbal signal is often weak and ambiguous (Motley & Camden, 1988). In this case, perspective taking can allow an observer to deduce the likely emotional reaction based on both the ambiguous expression and the context information.

But what happens if the expresser does not know the other person well or at all? In this case, any social category that the perceiver is aware of and for which expectations regarding emotional reactions exist, can affect emotion identification (Kirouac & Hess, 1999) in that the perceiver is more likely to attribute the more expected emotion evidenced in the ambiguous expression. For example, knowing that a (male) expresser is black or of high status leads observers to more readily label their expression as angry (Hugenberg & Bodenhausen, 2003; Ratcliff, Franklin, Nelson Jr., & Vescio, 2012). In the same vein, when a person is identified as a surgeon participants rate the facial expressions of the person as less intensely emotional than the same person and expressions when associated with a different identity, following the stereotype

expectation that surgeons control and restrain their emotions (Hareli, David, & Hess, 2013).

In sum, the identification of emotions can be accomplished via either a passive pattern matching process or a process where the perceiver actively generates a label for the likely emotional state of the sender based on both the expression and their knowledge of the context. This knowledge can take either the form of individualized knowledge about the expresser or be based on the expresser's social group and the stereotypes, expectations and beliefs associated with members of this group.

### **Inferences from emotion perception**

#### *A model of the reverse engineering of appraisals*

As mentioned above, appraisal theories of emotion posit that emotions are elicited by the spontaneous and intuitive appraisal of (internal or external) relevant stimulus events according to the perceived nature of the event (Arnold, 1960; Scherer, 1987). Importantly, appraisals relate to the subjective perception of the stimulus and not its objective characteristics.

Thus, the mere fact that someone reacts with an emotion to an event, signals that the event is relevant to that specific person, which in turn provides information about the person's goals and values. For example, the fact that a person reacts with anger to a perceived injustice signals that the person cares about this fact. This information is therefore encoded in the emotional expressions that are generated in this process.

Importantly, even though appraisals are typically not the product of reasoning processes, people can and do reconstruct appraisal processes consciously after the fact (Robinson & Clore, 2002) and they can do so for other

people's emotions as well (e.g., Roseman, 1991; Scherer & Grandjean, 2008). As such, emotions can be seen as encapsulated or compacted signals that tell a rather complex story about the emoter (Hareli & Hess, 2010) (see Figure 1).

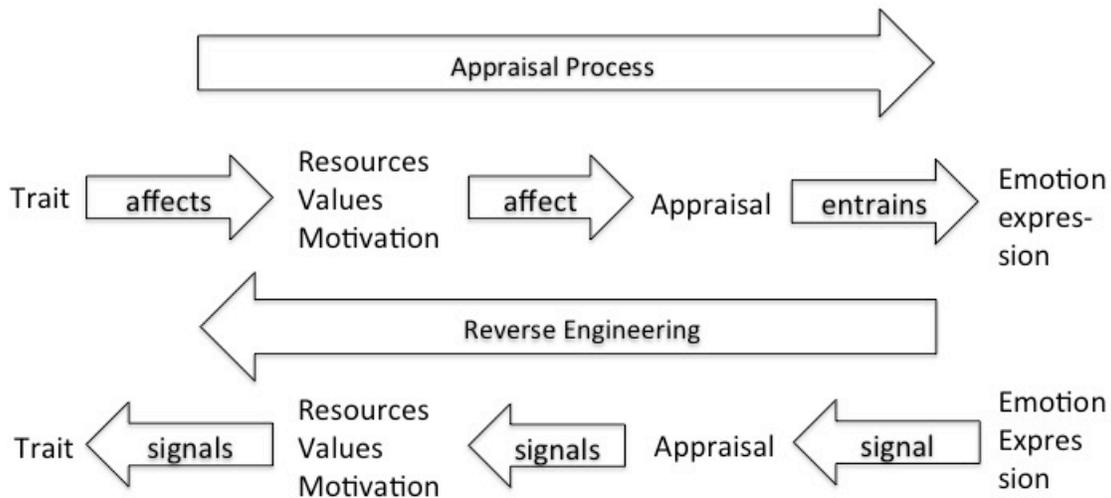


Figure 1. Reverse engineering of appraisals (Hareli & Hess, 2010).

Importantly, the information provided by emotional reactions refers not only to the situation at hand but also to relatively stable characteristics of the person. Specifically, stable traits such as dominance, affiliation, and competence impact the motivational goals, preferences, and resources of a person. Thus, a person who is competent may be expected to have more resources to deal with potential problems than a person who is not. Likewise an affiliative person can be expected to have affiliative goals. Conversely, seeing a person react with anger in a difficult situation suggests that this person is high in resources in this situation and likely in other situations as well.

In short, emotion displays convey, by their very nature, information not only regarding the senders' emotional states, but also information regarding their interpersonal intentions (see also, Frijda & Mesquita, 1994). However, the

attribution of behavioral intentions also depends on the context of the interaction. Such elements as the relative status of the interaction partners, the gender composition of the dyad, and the cultural background of the interaction partners all play an important role in this regard. In fact, the social context can be expected to modify the interpretation of a specific expression, insofar as context information is used as part of the process of understanding the other, that is, permits the taking of the other's perspective in a given situation. Context can also impact on the inferences that are drawn from these expressions.

### **Types of context**

The importance of context to the interpretation of emotion expressions is no new discovery. The modified Brunswick model developed by Scherer (1978) in the context of person perception and which has then been applied to emotion communication, includes cultural context, social relationships and situational context. In research, context has been provided by a variety of means (see also, Matsumoto & Hwang, 2010), such as combining facial expressive stimuli with pictures or stories describing the purported emotion elicitor (Carroll & Russell, 1996; Noh & Isaacowitz, 2013; Szczurek, Monin, & Gross, 2012). Social group information can be provided by adding information such as a Niqab or a surgical mask to the facial information (Fischer, Gillebaart, Rotteveel, Becker, & Vliek, 2012; Hareli et al., 2013; Kret & de Gelder, 2012) or by providing group labels (Thibault, Bourgeois, & Hess, 2006). The presence of other people also provides a context to the situation (Kafetsios & Hess, 2013; Masuda et al., 2008).

Alternatively, information from the face has been contrasted with information from another nonverbal channel – for example the body (Aviezer et al., 2008). As

this overview shows there is a wide range of information that can be considered context.

### **Situational context**

First, there are all those elements of the situation that are informative about the emotion elicitor. This includes factual information but also the real world knowledge that people have and that allows them to deduce further information. For example, information that a person just competed in a game is factual information, information that players in a competition have negative interdependence such that what is good for the one must be bad for the other is real world knowledge. Thus, when I see one competitor with a big smile, I can assume that the other one is not feeling like smiling because they lost.

Another element of the situation is the presence of others. Other individuals may directly interact with the expresser but they may also just be present at the event. In this case, they may provide information about the meaning of the situation through social referencing. Specifically, when people are confronted with complex or ambiguous situations, the emotional reactions of others can be informative about the event. This information can then be used as an input to one's own emotional reaction to and appreciation of the event. For example, in a recent study Landmann, David, Hareli & Hess (2015), participants were asked to evaluate stories describing an unusual behavior, an impolite behavior or an immoral act. Participants also saw a picture showing another person who had reacted to these events with either anger, disgust or neutrality. In effect, the same event was rated as more immoral when the participant saw that person reacting to it with anger or disgust than with neutrality and these effects were mediated via appraisals associated with the perceived expressions.

That is, participants reverse engineered the appraisals from the expressions and used these to inform their own reactions to the event.

These effects should be distinguished from the effect that the valence of the situation may have through priming or other perceptual effects. For example, when a face is shown together with a scene without there being a logical link between the two, the valence of the situation can activate affective response categories (a funny scene can activate response categories linked to positive affect) and hence influence emotion decoding. Thus, Righart and deGelder (2008) found that when participants were asked to categorize facial expressions that were shown against the backdrop of an emotional scene while ignoring the scene, the categorizations were biased by the emotional content of the scenes. Somewhat similar effects occur when faces are shown within a group of other individuals especially when the presence of the others is not explained; these effects tend to be stronger for people high in interdependence (Hess, Blaison, & Kafetsios, in press; Masuda et al., 2008).

### **The perceiver as context**

Another important element of context is the perceiver. The two-path model of emotion perception considers the perceiver not as a passive read-out module but as taking an active part in the perception process. As such, not only the real world knowledge mentioned above, but the stereotypes the perceiver hold, the norms the perceiver is aware of and the perceiver's own goals and motives are all relevant for this process. We will discuss these in turn.

**Stereotypes expectations and social norms.** Stereotypes are not the same as social norms. However, in this context we consider mostly prescriptive stereotypes that imply a behavioral norm. Thus, if someone holds the stereotype

of women as more irrationally emotional and men as more controlled, they should expect men to act with more emotional restraint (Shields, 2005).

Clearly stereotype and norm knowledge require some level of situational knowledge, which anchors the relevant norm. However, insofar as the norm relates to specific social groups, which can be identified based on their face alone (e.g., racial groups, the elderly, men and women) this situational knowledge may be activated by the very expression that is to be decoded. Thus, with regard to the example above, if the perceiver knows that the person whose car was vandalized is a woman, norms of behavior relevant to women and anger will become more accessible. These norms may then influence the identification of an emotional cue associated with the target person. Specifically, women were expected to show sadness rather than anger in such a situation unless they were explicitly described as very dominant (Hess, Adams, & Kleck, 2005). As the identification of emotions includes not only the labeling of a 'central' emotion but also of secondary emotions these can be influenced by stereotype expectations as well. For example, Algoe, Buswell, and DeLamater (2000) have shown that observers perceived fear expressions as reflecting more intense anger and contempt when targets were described as the boss (i.e., high status) rather than as employees (i.e., low-status) in line with stereotype expectations related to power.

**Cultural display rules.** A specific case of norms are cultural display rules, that is, the social rules that guide the appropriate display of emotion expressions (Ekman & Friesen, 1971). These differences can in part be related to differences in

cultural values such as individualism and collectivism (Matsumoto, Seung Hee, & Fontaine, 2008, see also Hwang and Matsumoto, this volume) but also openness to change (Koopmann-Holm & Matsumoto, 2011) or masculinity (Sarid, 2015) among others. Mostly however, we can assume that cultural display rules are not linked to one specific cultural value but are the result of more complex processes involving more than one cultural attribute. Importantly in this context, social display rules have a converse side in social decoding rules (Buck, 1984b), such that perceivers tend to be less good at decoding expressions that are proscribed in a given culture. For example, in a recent study Hess, Blaison and Kafetsios (in press) found that Greek participants rated sad faces as more intensely sad and German participants rated anger faces as more angry than vice versa in line with cultural display rules that respectively endorse the expressions of these emotions in these two countries.

**The perceivers' goals, needs, and own emotional state in emotion identification.** A second perceiver related context factor are the perceivers' goals, and needs, and even their own emotional state (Showers & Cantor, 1985). These factors specifically affect what is extracted from the available bottom-up information, for example, by determining the degree of effort that the perceiver invests. Thus, being highly motivated and having the ability to do so, a perceiver may pay more attention to the available cues. By contrast, if motivation and/or ability are low, less attention may be paid. Thus, Thibault et al. (2006) found that perceivers who strongly identified with members of a group were better at labeling emotion expressions from members of that group. This finding fits well the more general idea that people often invest relatively little effort in learning about the characteristics of out-group others (Park & Rothbart, 1982). In a similar

vein, research on gender differences in emotion recognition shows that motivational factors may have a substantial impact on recognition accuracy and may explain why in some studies women outperform men in this task (Ickes & Simpson, 2004).

But motives do not only affect attention, they can also reframe the perception of emotion expressions. For example, the smile of another person is usually perceived positively as happiness. But, when, as in the example above, perceivers know the other person to be in competition with them, the perceivers' own goal to achieve success becomes salient, and the same smile may become a smirk and the happiness becomes glee in their mind.

Not only attention and framing of the available cues but also their processing can be influenced by perceiver characteristics. A good example would be the way the emotional state of the observer affects decoding. An individual's emotional state influences how social information is processed (e.g., Bower & Forgas, 2000; Bower & Forgas, 2001). Specifically, according to Forgas's "affect infusion model" (1995), perceivers' information processing strategies differ in the extent to which a full search of information occurs and how open or closed this search is and hence in the use of perceiver knowledge. At one extreme of this process, the perceiver may directly and automatically retrieve a preexisting label when encountering a stimulus. At the other extreme, the perceiver may engage in an extensive and open search of information. This latter strategy involves substantive processing using preexisting knowledge in a relatively unbiased manner (Bower & Forgas, 2000). Thus, the degree to which subtle cues and situational information are integrated when, for example, trying to label a smile, depends also on the emotions felt by the perceiver.

To render the issue more complex – the perceiver's emotional state may in fact be partially determined by an automatic reaction to the emotion of the expresser, such as when emotional contagion occurs (cf. Hatfield, Cacioppo, & Rapson, 1994). This process could conceivably precede the conscious identification of the other's emotional state. For example, the fear of a target may cause fear in the perceiver. This fear, in turn, may affect the identification process by causing the perceiver to be less attentive to the details of the target's emotion - or give preferential status to the elements of the expression consistent with the perceiver's own fear. Thus, even if the perceiver correctly identifies the emotion as fear, the fear may be attributed to the wrong cause or associated with the wrong object or be perceived as more intense than it actually is.

Obviously, both processes mentioned above, may operate at the same time such that low motivation and/or ability will both result in partial attention to cues and in the limited processing of these cues, such that more easily accessible stereotypical knowledge may serve as readymade templates for recognition based on a superficial observed feature (Chaiken, 1980; see also, Forgas, 1995).

Finally, it should be noted that individual differences in personality also can affect decoding and that these also provide an element of context. For example, traits such as hostility (Larkin, Martin, & McClain, 2002) and aggression (Hall, 2006) can bias emotion perception.

In sum, context can be defined in a variety of ways and includes both the situation and the perceiver. The perceiver's knowledge, naïve emotion theories, motivations goals and emotions all enter into the active process described in the

two-path model of emotion recognition. However, this raises the question regarding the limits of the influence.

### **Limits to the malleability of emotion perception**

The pervasive influence of context on emotion perception can give the impression that early critics of Darwin were right in saying that facial expressions per se are meaningless. That at best they can – as claimed by Bruner and Tagiuri (1957) be culturally learned signals, which are not meaningfully linked to an underlying state or are to be considered as constructed within the moment either at the interface between individual and environment (Mesquita & Boiger, 2014) or in the head of the individual (Barrett, 2009, 2013), that is, in the vein of strong psychological constructivism (Faucher, 2013) created in a “simulator” which constructs “on the fly” emotion concepts adapted to particular instances of a category.

We think that this impression is false. It is important to note that even though context frames the way people interpret cues and the attention that is paid to the cues as well as the level of processing that is applied to this endeavor, context is also confronted and limited by the story that emotions tell. More specifically, context is limited by a framework based on the core appraisals that distinguish one emotion from another and that create the emotion’s story. That is, only within the frame provided by that story and only within the limits of these appraisals can context change our perception of emotions. When in fact, context and expression diverge past this frame, then the expresser will be considered “strange” or “deviant” (Szcurek et al., 2012) and the expression correspondingly discounted. In fact, this notion can be supported by research originally designed to underline the power of context. Thus, Aviezer et al. (2008)

in an attempt to show the malleability of emotion perception, created stimuli which combined an emotion expression with a body stance. In study 1, a disgust face was combined with stances communicating disgust, anger, sadness and fear. There are two types of disgust, physical disgust in reaction to noxious stimuli, and moral disgust in reaction to morally inappropriate behavior (Rozin, Lowery, Imada, & Haidt, 1999) and this disgust resembles anger in that it is associated with goal obstruction and high coping potential combined with an appraisal of norm violation. By contrast, fear and sadness are both emotions that are characterized by low coping potential and norm appraisal is not very relevant. The findings show that the disgust face combined with an aggressive body posture was indeed overwhelmingly miscategorized as anger (87%). However, when the disgust face was combined with fear (13%) and sadness postures (29%), which are much less compatible with the appraisal pattern for moral disgust, it was miscategorized to a substantially smaller degree.

Similarly, the inferences drawn from an emotion are influenced by situational information only to the degree that this information is relevant within the appraisal pattern. Hareli, Elkabetz and Hess (2015) showed participants a series of images from a fictional ball game. At the end of the game one team member's facial expression is seen and this person is identified by the color of their shirt as either a member of the team that played the last turn or as an opponent of the team. The team member shows either a happy, neutral or awe expression. As mentioned above, participants' real world knowledge tells them that there is negative interdependence between the two teams. Participants were asked about the performance of the last player on the field. When the expresser showed happiness, their judgment depended on the presumed motivation of the

expresser – that is, on whether they were on the same team as the player or on the opposing team. Happiness is an emotion for which the central appraisals are pleasantness and goal conduciveness – essentially the notion that something nice and in line with the plans of the expresser had happened. Hence the player's performance was rated as good when a supporter of the same team was seen smiling and as bad when a supporter of the opposing team was smiling. Yet, when awe was shown something very different happened. Awe is associated with appraisals of something that exceeds norms. It does not depend on goal conduciveness. In fact, people report being in awe of forces of nature such as storms, earthquakes or volcanic eruptions none of which are goal conducive. In line with this notion, participants' judgment did not at all depend on who showed the expression, whether supporter or opponent showed awe the performance of the player was rated as excellent.

In sum, context plays a very important role in emotion perception, however it plays this role within the – admittedly large – framework of the core appraisals characterizing this emotion.

### **A model of social signals in context**

Based on the notions above, we formulated a model of the meaning of emotion expressions in context (MEEC, see Figure 2). In this model, expressions are perceived within a situational context (the real world) and then interpreted within an interpreted context (the perceived world). The information from the real world will determine the encapsulated meaning of the expression (the story that the emotion tells) and this process will be influenced by the perceiver as context processes outlined above. If the information provided by the context and the interpretation of the expression fall within the frame of the core appraisals

associated with the emotion the process can go on to allow for inferences to be drawn from the expression. In case of a mismatch the perceiver has to reevaluate the match explicitly. One outcome of this process can be to discount the expression as “deviant” and to ignore its input. Another outcome could be to reevaluate the situation. For example, most people react positively to puppies. If a person shows fear in response to the puppy one might consider the possibility that the person suffers from an extreme form of fear of dogs. However, just as in horror movies it might be that just behind the puppy a large aggressive drooling, likely rabid, dog can be seen which changes the situation completely.

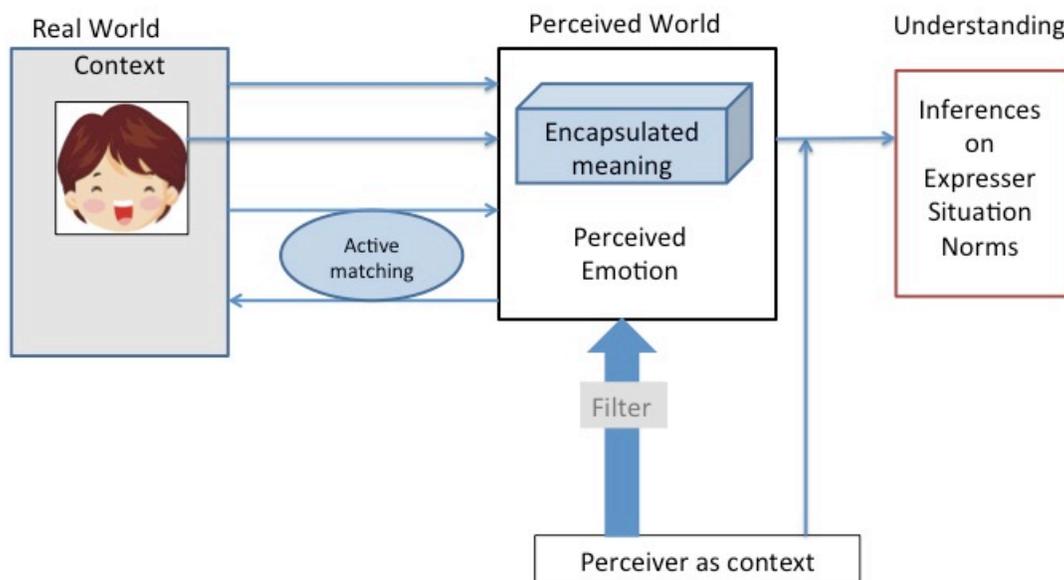


Figure 2. A model of the meaning of emotion expressions

The model distinguishes between two types of context, the “real world” or situational context and the context provided by the perceiver’s knowledge, goals and emotions, but the model does not distinguish within these categories. In fact, as the short overview above shows, there are many operationalizations of context, without a clear definition of what is or is not to be considered context.

For example, from a multi-model emotion decoding perspective (Bänziger, Grandjean, & Scherer, 2009) facial expressions and body postures are both emotion signals and not a context for each other. Also, when an unattached head is floating above an image without an obvious link between the two, it is not clear that the scene in the image is a context for the face, even though it certainly influences the perception of the face (Righart & De Gelder, 2008). Discussions about the role of context for the construction of emotional meaning, however, require a clearer definition of both what is considered to be signal and what is considered to be ancillary information as not everything that is perceived at the same time as the expression has the same epistemological standing with regard to the meaning of an expression. Thus, as noted above, a scene that is depicted together with a face can – through affective priming – activate response categories, which in turn facilitate or hinder the categorization of the expression. This bottom-up process is to be distinguished from the type of top-down process that is engaged when participants use real word information to deduce expressers' motives when drawing inferences from their expressions. Future research and theorizing needs to pay more attention to the specific processes engaged in the construction of the meaning of emotion expressions and in the limits of this process. In this vein, it would be important to not only show when a specific context influences perception but also when it does not.

Another, more difficult to study, aspect regards the question of what is in fact constructed. In this chapter we have focused exclusively on the *perception* of (facial) emotion expressions. Yet, the same general line of argument has been applied also to the elicitation process (Barrett, 2006). Generally speaking encoding is not the same as decoding and clearly the same processes need not be

at work. For example, at least in Western cultures, the presence of wrinkles around the eyes when smiling (the so called Duchenne smile) is understood as a signal of an authentic or “true” smile of enjoyment (Thibault, Levesque, Gosselin, & Hess, 2012), but there is good evidence that this smile is regularly employed by expressers as a social smile in situations devoid of enjoyment (Hess & Bourgeois, 2010; Krumhuber & Manstead, 2009). Thus, the attribution of enjoyment by perceivers is not matched by the actual elicitation conditions. This and other examples suggest that care needs to be taken when translating from one domain to the other.

In sum, the model of the meaning of emotion expressions in context (MEEC) proposes a pertinent but not exclusive role for context information by proposing core appraisals as the limiting frame of interpretation. The model, just as do social constructivist accounts, considers perceivers as active participants in the emotion decoding process, but as ones who are constrained with regard to their constructive freedom.

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