

# The Social Calibration of Emotion Expression: An Affective Basis of Micro-social Order

Sociological Theory 30(1) 1–14

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DOI: 10.1177/0735275112437163
http://st.sagepub.com



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#### **Abstract**

This article analyzes the role of emotions in social interaction and their effects on social structuration and the emergence of micro-social order. It argues that facial expressions of emotion are key in generating robust patterns of social interaction. First, the article shows that actors' encoding of facial expressions combines hardwired physiological principles on the one hand and socially learned aspects on the other hand, leading to fine-grained and socially differentiated dialects of expression. Second, it is argued that decoding facial expression is contingent upon this combination so that reciprocal attributions of emotional states, situational interpretations, and action tendencies are more effective within rather than across social units. Third, this conjunction affects the conditions for emotional contagion, which is argued to be more effective within social units exhibiting similar encoding and decoding characteristics, and thus aligns emotions and action tendencies in a coherent, yet socially differentiated way.

#### **Keywords**

Emotion, facial expression, social order, microsociology

# THE AFFECTIVE FOUNDATIONS OF MICRO-SOCIAL ORDER

The assumption that social interaction is a key connecting link between individual action and social order is a mainstay of sociological theory. However committed we may be to an individualist or structuralist tradition of explaining social order, it is above all social interaction that leads to the emergence of order. Most authors work on the assumption that there is a certain micro-order to social interaction itself and that this mutual referencing exhibits certain patterns that are best explained by reference to beliefs and desires or to social macrostructures. Whether interactive micro-orders come about primarily as a result of rational deliberation, social norms, preferences, or symbolic communication, the vast majority of explanatory strategies adopted by sociologists assume the emergence of *patterns of social interaction* that recur on a fairly regular basis. These regularities are also thought to be a key factor in forming mutual expectations concerning

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courses of social action. Regardless of the causal processes that bring about these patterns, they are assumed to solve problems of contingency and to reduce complexity.

My aim in this article is to take a closer look at social interactions and their implications for the emergence of micro-social order in the sense of regular, persistent, and potentially macrostructure-generating patterns of interaction, without initially turning to the motivational bases of action. This necessarily limits the analysis to overt social action that can be directly perceived and experienced. I will also leave aside the consequences of actions, for example, in terms of subjective utility. Instead I will focus on specific behaviors that may be broadly attributed to the "corporeality" or physiology of actors. In this sense, I will also neglect the language-based level of social interaction resting on symbolic meaning, instead emphasizing meaning that becomes evident without engagement in reflexive thought and deliberative interpretation.

This focus implies neither reducing intersubjective meaning to "nonsocial" factors nor denying the fundamental significance of the interactive negotiation of meaning. Rather, I will highlight those aspects of social interaction that are not usually the object of reflexive processes but that, I claim, are indispensable to the smooth unfolding of everyday interaction. Specifically, I aim at investigating the role of emotion and the role of automatic and involuntary facial expressions of emotion in the structuring of social interaction.

While George H. Mead (1895) had already hinted at the crucial importance of physiology and emotional expression for social interaction, he and the symbolic interactionist perspective that built on his work mainly focused on the reflexive-discursive aspects of emotional expression (e.g., Goffman 1959). This focus on the "performative" aspects of emotion expression is found in both the sociology of emotion and certain sociological theories seeking to understand social interaction and structuration. The sociology of emotion has analyzed emotion expression primarily in connection with social norms, viewing them as subject to social control and (intentional) regulation ("emotion work"; Hochschild 1983; Thoits 2004). However, such analyses tend to neglect the specific pre-reflexive, physiological features of emotion expression and thereby reduce emotions to an arbitrary form of behavior (Theodosius 2006). Following early studies in the sociology of emotion, interest in the expressive components of emotion has markedly declined, despite the fact that neighboring disciplines have notched up landmark findings in the field.

Sociological theories extensively considering emotions in explaining micro-social order have most notably been put forward by Randall Collins and Jonathan Turner (Collins 2004; Turner 1988, 2007; Turner and Collins 1989). Both base their work on symbolic interactionism (Collins 2004:xi; Turner and Stets 2005:164f), underline the fundamentally ritualistic character of social interaction, and assume that this is the point of departure for regular "interaction ritual chains" (Collins 2004) with structure-generating effects. These regularities result mainly from the exchange of emotional resources and the satisfaction of needs, which both authors see as motivated by actors' pursuit of "emotional gratification." Though in principle the theories of Collins and Turner focus on the *encounter*, they shed little light on the expression of emotion, despite the fact that it can markedly enhance our capacities to explain social order. Collins (2004) largely and firmly excludes emotion expressions from his concept of "emotional energy" (p. 139). Turner (2002) meanwhile takes account of emotionally expressive behavior on basic evolutionary premises but goes into little detail about the many and diverse functions of such expressions (pp. 67–97).

It is well established that emotions comprise a large number of expressive nonverbal (and verbal) components with various social functions and are thus an integral element of social interaction (Keltner and Haidt 1999; Parkinson, Fischer, and Manstead 2005). These nonverbal signs include facial expressions, gestures, bodily postures, prosody, and autonomic nervous system responses. It is also well known that such responses occur mostly involuntarily and automatically (Barrett, Ochsner, and Gross 2007). These physiological manifestations of emotion are important to sociological analysis precisely because they are subject to intentional control only to a very limited extent. It is thus no surprise that various facets of emotional expression are often classified as indicators of actions, intentions, and their "authenticity" (Ekman 1992). Importantly, and as I intend to show, this does not mean that they ought to be viewed as separate or in isolation from processes of social and cultural learning and calibration, deeply rooted in socialization, social practices, and normative orders.

However, it is first necessary to pin down the concept of *emotion* in more detail to render emotions' expressive components productive for sociological analysis. To this end, I follow Klaus Scherer's (2005) definition of emotion that has proved of considerable value in various disciplinary contexts (see Thoits 2007 for a sociological extension). I thus define an emotion as "an episode of interrelated, synchronized changes in the states of all or most of the five organismic subsystems in response to the evaluation of an external or internal stimulus event as relevant to major concerns of the organism" (Scherer 2005:697). These subsystems have a cognitive-perceptual and evaluative components as well as neurophysiological, expressive motor, motivational, action-related, and phenomenal elements. The linkage of these components within discrete emotional episodes is of special significance to sociological analysis because it suggests that emotional expression, for example, facilitates inferences about other components such as cognitive appraisals or action tendencies. The poker face may be instructive here. The term refers to those gifted players who are able to suppress most emotional expressions so that other players are unable to infer anything about their feelings or underlying cognitive appraisals, while at the same time being able to decipher subtle signs on the part of the other players and use this information to their own advantage. This affective dimension of intersubjectivity, though not necessarily conscious or based on symbolic gestures, may facilitate the reciprocal attribution of situational appraisals and action tendencies.

According to Turner (2002, 2007), these qualities of emotion expression alone are sufficient to reveal possible effects on the emergence of micro-social order. Turner assumes that certain ("basic") emotions are characterized by biologically fixed links between their constituent components, such that specific expressive signals allow unequivocal inferences about other components of the underlying emotion. This view of emotionally expressive behavior is part of the mainstay of emotion research but reflects only one aspect of the efficacy of expressions in social interaction. Moreover, it is not uncontested, and it applies only to a certain category of emotions, the infamous "basic" emotions such as joy, anger, fear, disappointment, or disgust, and much less to "social" emotions such as shame, guilt, or embarrassment (Izard 2007).

There is much to suggest that in most cases the linkages between different components of an emotion are not biologically hardwired and that in fact social and cultural factors have a crucial influence on this link (Barrett 2006). Ample theoretical arguments and empirical evidence exist for both suppositions, not least within the sociology of emotion (Turner and Stets 2005). In light of this, sociological approaches acknowledging a largely biologically determined linkage of emotion and expressive behavior are faced with three problems: first with evidence that casts doubt on this invariable linkage (see below), second with the potential limitation to so-called basic emotions, and third with the inherent neglect of the explanatory potential opened up by a perspective less focused on biological linkages.

Building on Turner's arguments, my aim in this contribution is to alleviate these problems while enhancing our understanding of key interaction-related aspects of the facial expression of emotion. First, drawing on evidence from various strands of emotion research, I will show that the social "molding" of emotion expression occurs independently of assumed emotion categories (e.g., basic vs. social) and of attempts at intentionally regulating emotion (emotion work). In doing so, I will argue that the pre-reflexive and physiological basis of facial expression offers independent explanatory potential for sociology. Second, I will argue that actors develop specific "dialects" of facial expression and an ability to decode (automatically interpret) these dialects as an adaptation to their embeddedness in social units and preexisting systems of social order. I shall illustrate that social units "calibrate" emotion expressions and thereby contribute to the reproduction of micro-social order. Third, I further substantiate this perspective by accounting for the rapid interindividual transfer of emotional states in social interaction. This emotional contagion has largely been ignored in the sociology of emotion, although it is a significant concomitant of facial expression and vital in terms of the action tendencies associated with emotion.

Emotional contagion draws a link to a more general conjecture underlying my arguments. In relating to a number of recent studies, I assume that not only the expression of emotion but also the elicitation of emotion are closely linked to social structural and sociocultural conditions (Barbalet 1998; Gordon 1990; Lively and Heise 2004; von Scheve and von Lüde 2005). This is evident in emotion work (Hochschild

1983), the frequency with which certain emotions occur (Collett and Lizardo 2010; Schieman 2004), gender differences in emotional experience (Simon and Nath 2004), and the more general sociocultural construction of emotion (Thoits 2004). Importantly, the automaticity and social plasticity of the facial expression of emotion reflect not only emotions' individual psychological precursors but also, most crucially, their social and cultural situatedness.

## FACIAL EXPRESSION AND EMOTION

Integrating the facial expression of emotion into a genuinely sociological understanding of social interaction requires clarity about the characteristics and special qualities of facial expression. In view of explaining micro-social order, the relevant qualities are primarily those that indicate links between social and cultural embeddedness and expressive behavior and emphasize the status of emotion expressions in comparison to other forms of behavior, such as intentional social action. In this light, research on the facial expression of emotion can be divided into two largely antagonistic standpoints viewing expressive behavior as either biologically hardwired or socially constructed (Russell 1995; Russell, Bachorowski, and Fernández-Dols 2003).

Sociological, anthropological, and social psychological approaches tend to focus on social norms and practices that regulate facial expression and adapt it to specific social demands (Thoits 1990; Wierzbicka 1995; Zaalberg, Manstead, and Fischer 2004). In contrast, physiological perspectives usually emphasize the biological causes and the automatic and involuntary nature of facial expression. They are based on the hypothesis of the universality of facial expression, whose origins lie in evolutionary theories (Tomkins 1962) and corresponding cross-cultural studies (Ekman 1972). The hypothesis of universality is essentially based on two assumptions. First, it assumes that specific patterns of facial expression are the causal and biologically determined consequence of an underlying discrete emotion. Second, its supporters postulate that both these specific patterns of facial expression and the ability to make reliable inferences about the underlying discrete emotions are cultural universals. These assumptions also imply that the number of distinct facial expressions of emotion is in principle limited to the number of underlying discrete emotions—a view found especially in concepts of basic emotions (Scherer and Ellgring 2007). In sociology, it is mostly Turner (2002, 2007) who relies on these supposed qualities of emotion expressions. He assumes that (basic) emotions are always, and for the most part involuntarily, represented and communicated by a universal facial code that allows others to clearly infer underlying emotional states, situational appraisals, and action tendencies.

Though the universality hypothesis has had a decisive influence on empirical research over the past 30 years, it has not gone uncontested. In particular, social constructionist research has underlined that, above all, social norms and practices are relevant to understanding facial expression since they adapt expressive behavior to the prevailing social contexts (Russell 1994, 1995). Apart from these more implicit normative influences, the expression of emotion may be deliberately intensified, suppressed, or simulated for various reasons. This view is well established in the sociology of emotion and is reflected in such key concepts as "emotion work" and "emotion management" (Fineman 2003; Hochschild 1983; Thoits 1990).

Even supporters of the universality hypothesis do not deny the role of social norms in emotion expression, as is evident in the concept of "display rules" (Ekman 1972:225). However, for the most part they assume the existence of a universal emotional response that clearly *precedes* any attempts at regulation. In this vein, they tend to dispute that the *primary* genesis of facial expression is significantly influenced by sociocultural factors (Matsumoto, Yoo, and Fontaine 2008). Early sociologists of emotion, meanwhile, convincingly argued that such factors do in fact play a critical role (Thoits 1989). Since then, however, few attempts have been made to empirically demonstrate the influence of such factors. As a result, even sociologists of emotion sometimes (uncritically) adopt the prevalent view that facial expressions are universal (e.g., Turner 2002:86).

Recent research in neighboring disciplines, however, indicates that facial expression is highly dependent on social context, with respect to both the long-term, persistent molding of expressive behavior and short-term adaptation in specific situations (see Zaalberg et al. 2004). These studies suggest revising the

hitherto dominant and dichotomous conception of universals versus social constructs in facial expression in favor of a model that avoids marginalizing the evolutionary and corporeal specifics of emotional expression by accounting for processes of social adaptation also on the level of physiology. Supplementing Turner's (2002, 2007) approach with these assumptions shows that the role of emotions in social interaction goes far beyond the mere signaling of transactional needs and entails a sui generis potential for the emergence of micro-social order.

# THE ENCODING OF FACIAL EXPRESSION

Facially expressive behavior occurs in a wide variety of situations and under varying conditions, not only as a consequence of an emotion but also as an intentional communicative sign, as the expression of cognitive activity (furrowed brows during intense concentration), or as a learned symbol such as raised eyebrows (see Hess 2001; Keltner et al. 2003:418f; Scherer 1992:141ff). The fact that actors mutually attribute emotional states on the basis of facially expressive behavior has led not only to the everyday theory that expressive behavior is an unambiguous indicator of an underlying discrete emotion but also resulted in a remarkable situation in scientific debate: "Surprisingly few studies have tested the basic claim of EEs [expressions of emotion]: Emotions cause them" (Russell et al. 2003:336). That emotions go hand in hand with characteristic facial expressions is constitutive of the universality hypothesis. In this view, specific patterns of facial expression are part of biologically hardwired configurations of certain components of an emotion and are triggered automatically upon emotion elicitation. According to this model, facial expressions allow unequivocal and universal inferences about underlying emotional states (Carroll and Russell 1996:206; Parkinson 1995:121ff).

Scholars promoting this view generally rely on studies demonstrating correlations between a particular type of expressive behavior, subjective experience, and other physiological indicators of emotion (Levenson 2003). These results are supported from a cross-cultural perspective as well: Given that individuals in different cultures exhibit identical facial expressions when experiencing the "same" emotion, it seem reasonable to assume that emotions are (a) the cause of specific expressions and (b) linked to them biologically and that (c) expressions are reliable indicators of emotional states (Keltner et al. 2003:419f).

As clear as these connections between emotion and facial expression may appear, they become problematic on closer examination. A smile, goose bumps, and a reddish complexion are neither necessary nor sufficient conditions for joy, fear, or shame. Critics of the universality hypothesis therefore claim that it is not biological linkage but above all the social context that is crucial to which expression is actually displayed (Hess 2001; Kappas 2002). For example, Russell and colleagues (2003) cite studies showing that winners of Olympic gold medals smile particularly often only when involved in social interaction. Children smile just as often whether they have mastered a task particularly well or failed at it—the sole modifying factor is the presence of other actors (Holodynski and Friedlmeier 2005). Also, independent of phenomenal feeling, the frequency and intensity of smiling when watching TV comedies is highly dependent on the social context and the relationship with co-present actors (Hess, Banse, and Kappas 1995).

These "audience effects" largely tally with some evolutionary views on expression. Fridlund (1994), for example, argues that facially expressive behavior has evolved primarily because of its functions in social interaction. For him, it chiefly serves the purposes of the transmitter by communicating action requests and intentions or information about the status of an interaction. This position is also backed by studies that were unable to demonstrate linkages between subjective feeling and facial expression in many situations and instead found that expressive behavior occurs significantly more often in social than in nonsocial situations (see Hess et al. 1995). In line with these findings, sociology has highlighted the social and cultural determinants of facial expression, though this is mainly discussed in connection with the (intentional) regulation of expressive behavior (Heise and Calhan 1995). However, the primary encoding of facial expression is unlikely to be systematically modulated *solely* through intentional attempts at norm-based regulation, as suggested by concepts such as emotion work (Hochschild 1983). In principle,

the potential to consciously influence the encoding of emotional expression is limited (see Baumeister et al. 2007).

Taking an overall look at the persuasive criticism regarding biologically hardwired links between emotion and facial expression, it is implausible to fully endorse the universality hypothesis (see Kappas 2002:229). But the reverse conclusion, that facially expressive behavior is in no way linked with emotions, seems equally implausible: "Of course, there is some association between EEs [expressions of emotion] and emotion; the question is the nature of that association" (Russell et al. 2003:341). One way of explaining this connection emerges by drawing on the definition of emotion as a multicomponent and episodic process. According to this view, facial expressions do not necessarily reflect *discrete* emotions but may in principle also occur in nonemotional situations. In cases of emotion as a cause, however, such behavior usually goes hand in hand with other components of an emotion, namely, physiological reactions, phenomenal feeling, and cognitive appraisals (Scherer 2005).

In any case, the assumption that the linkage between emotion and facial expression is biologically fixed not only squanders explanatory potential for sociology but also conflicts with a number of empirical findings. Sociologically, the crucial benefit of taking physiological processes and mechanisms into account is that they are key to understanding the unconscious and involuntary behavior that is a major part of social interaction (see Turner 2002). Interestingly, sociological theory tends to assume that unconscious and automatic behavior cannot be subject to systematic social shaping or "construction" and is thus of limited explanatory value (as opposed to intentional social action). The findings outlined above, however, suggest that expressive behavior is highly context specific and that the linkage between context and expression is the result of practices and the internalization of expressive norms. There is no reason to believe that this specificity can be put down solely to intentional, norm-oriented regulatory strategies. Rather, it is also present within automatic and involuntary expressive behavior.

What are the possible consequences of this plasticity of the encoding of facial expression for sociological arguments on the emergence of micro-social order? Given existing and stable systems of social order, it is safe to assume that actors' facial expressions are "calibrated" or attuned to these orders in a comparable fashion, that is, based on compatible practices, norms, and socialization conditions.

In face-to-face interaction, calibrated facial expressions serve as indicators of membership and socialization in a certain social unit (e.g., a group, community, or nation) and can be understood as parts of a habitus. Within social units, the functions of socially calibrated expressions should equal those of presumed biologically hardwired expressions. In light of this, the question arises on which levels of social differentiation distinct "patterns" of calibration emerge, for example, on the basis of cultural affiliation, social class, or milieu. Furthermore, it is important to identify the possible consequences of the calibration of facial expression for interactions involving actors from different social units. In what follows, I will explore the hypothesis that the social calibration of facial expression, especially in view of the automatic and involuntary nature of expression, is a crucial factor in the reproduction of existing social orders, because the closer actors are to one another within the social space, the more smoothly the recognition and interpretation (decoding) of facial expression proceeds.

# THE RECOGNITION AND INTERPRETATION OF FACIAL EXPRESSION

The question of whether facial expressions can be universally decoded (recognized, interpreted) in different social and cultural contexts has prompted a number of comparative cross-cultural studies since the 1970s. In particular, Paul Ekman and colleagues (Ekman 1972) examined this question by having individuals look at photographs that were intended to show (Westerners') prototypical expressions of basic emotions. Results show that the probability of recognizing these expressions (by verbally labeling them) in different cultural contexts is fairly high. Much the same applies to other components of emotion, such as possible trigger situations, their cognitive appraisal, and action tendencies (Elfenbein and Ambady 2003a:160; Keltner et al. 2003:420f; Russell 1994:108). However, these studies have been criticized not only from a

methodological standpoint but also with regard to their far-reaching conclusions, which are crucial to the universality hypothesis (see Ekman 1992; Elfenbein and Ambady 2002; Haidt and Keltner 1999; Russell 1994). It is largely uncontested that facial expression correlates with other components of an emotion. But that facial expression in a decontextualized and artificially created situation, as in photographs, is sufficient to make reliable inferences about a discrete underlying emotional state is subject to dispute. Doubts have been expressed primarily about the thesis of *facial dominance*, according to which the decoding of facial expression and the attribution of discrete emotions not only occur independently of contextual information but are successful even when facial and contextual information are contradictory (Ekman 1972; Izard 1971). According to the critics, the ability to reliably recognize emotion expressions requires both shared experiential knowledge and situation-specific contextual information (Barrett, Mesquita, and Gendron 2011).

Ekman and colleagues have explained the comparatively high variation and modest significance of some of their data with reference to display and decoding rules, that is, social norms that regulate expressions and also lead to commensurate expectations regarding their decoding (Buck 1984; Ekman 1972). In this view, these norms are also the primary cause of cross-cultural differences in inferring discrete emotions from facial expressions (Keltner et al. 2003:421).

One possible explanation for the fact that cultural universality and facial dominance are still leading paradigms among many emotion researchers, despite the inconsistencies and critique, is that existing empirical studies have focused mainly on finding similarities between cultures, not differences (Elfenbein et al. 2002). Recent meta-analyses of existing data, however, paint a markedly more differentiated picture and put forward a number of alternative, more sociologically relevant explanatory concepts (see Elfenbein et al. 2002; Hess and Thibault 2009; Russell 1994, 1995): a "gradient" in recognizing facial expressions (Haidt and Keltner 1999), "minimal universality" and limited "situational dominance" (Carroll and Russell 1996; Russell and Fernández-Dols 1997), and an "in-group advantage" in emotion recognition (Elfenbein and Ambady 2003a, 2003b; Elfenbein, Beaupré et al. 2007).

While they do not necessarily place less importance on biologically determined universals in expressive behavior, these perspectives view universals merely as specific configurations of the microcomponents of facial expression (e.g., specific combinations of activity in the facial musculature) and not as invariable elements of a discrete (basic) emotion. These models thus attribute a much greater flexibility to facial expressions, though without abandoning the idea that a given expression has a certain universal core. In view of explaining the emergence and reproduction of micro-social order, however, these approaches give rise to two key questions: First, what are the moderating factors that bring about this presumed systematic variation (i.e., social calibration)? And second, which mechanisms ensure that expressions can be reliably decoded, at least within preexisting systems of social order (i.e., within stable social units)?

There is much to suggest that not only culture in an anthropological sense but also cultural variation associated with indicators of social differentiation and inequality may play a long-term moderating role, such as minority and majority status, socioeconomic status, or gender (Elfenbein, Beaupré et al. 2007). Short-term moderators are primarily found in the situational context: Whether a smile is interpreted as embarrassed or polite depends not only on the facial expression but also on situational information, especially on shared implicit and explicit knowledge about these situations, in particular familiarity with relevant decoding rules (Barrett et al. 2011).

With respect to the mechanisms leading to systematic differences in the ability to decode facial expressions, the supposed "gradient" of recognition is comparatively conservative. This view rests on the assumption that expressions of only certain emotions can be decoded universally (Haidt and Keltner 1999). It is, however, difficult to define these emotions, as they vary depending on the methods used. According to the proponents of the recognition gradient, at the least anger, disgust, happiness, surprise, sadness, fear, and embarrassment can be reliably decoded cross-culturally. Shame, contempt, pity, and pleasure are often interpreted differently (Haidt and Keltner 1999:257). The concept of "minimal universality" seems much better suited to explaining the social differentiation and calibration of expressive behavior (Russell and Fernández-Dols 1997). Here, only certain components of an expression are considered universal, such as up- or down-turned corners of the mouth, open

or closed eyes, and straight or raised eyebrows. These components represent a necessary and, in connection with contextual information, sufficient condition for the reliable recognition of a discrete emotion, which suggests situational dominance as opposed to facial dominance (Carroll and Russell 1996; Russell 1995:382f; Russell et al. 2003). The third alternative also clearly relates to the social differentiation of expressive behavior. In a meta-analysis of 165 cross-cultural studies, Elfenbein and Ambady (2002, 2003b) show that the sociocultural proximity of encoders and decoders is crucial to the successful decoding of expressions. The greater the sociocultural "fit," the greater not only decoding accuracy but also decoding speed. This in-group advantage in emotion recognition obviously diminishes the more cultures come to resemble one another, for example, through spatial proximity or a high degree of communication. The in-group advantage has also been demonstrated in smaller and less stable social units such as work teams (Elfenbein, Polzer, and Ambady 2007).

The last two approaches in particular may serve as the sociologically most relevant explanations of systematic variation in the recognition of facial expression. First, they indicate that recognizing facial expression exhibits certain universal features, though this allows recognizing discrete emotions only in combination with socially shared stocks of experiential knowledge. It is thus not perfectly safe to assume that discrete emotions can, in general, be decoded automatically and independently from situational information. Second, they show that sociocultural differences in expressive behavior go hand in hand with an enhanced decoding accuracy *within* social units. These approaches thus provide a plausible argument for the existence of basic physiological mechanisms for encoding and decoding expressions, which, importantly, can be systematically modulated to generate expressive "dialects" or "accents," much like in verbal language (Elfenbein, Beaupré et al. 2007; Marsh, Elfenbein, and Ambady 2003). Although these accents differ from one another, within social and cultural units they develop the same precision, robustness, and decoding speeds of the supposed biological universals.

In summary, these approaches combine the explanatory potential of universalist and social constructionist models of emotion expression. They thus substantiate the hypothesis stated at the outset: In much the same way as symbolically mediated communication, pre-reflexive expressive physiological signs are attuned to cultural and social structural environments and contribute to the structuring of social interaction and the emergence and reproduction of micro-social order. In particular, the in-group advantage in emotion recognition indicates that the involuntary and automatic expression of emotion and the ability to decode facial expressions are crucially dependent on the social environment. Most interestingly for sociology, this influence also applies to those domains traditionally thought to be determined largely by biological factors.

# SOCIAL CALIBRATION AND EMOTIONAL CONTAGION

In the preceding sections, I have extended current sociological views on the role of emotions in the emergence of micro-social order by emphasizing the social calibration of the encoding and decoding of emotion expression. So far, however, this view primarily reflects the general plasticity of encoding and recognition but is relatively silent with regard to the emotional consequences in an ongoing interaction. In this section, I will therefore focus on the immediate effects of the social calibration of expressions on the experience of emotion. In contrast to Turner (2002), who largely relies on emotional gratification as a structuring force in social interaction, I will emphasize processes closely linked to facial emotion expression, in particular the spontaneous transfer of emotions between actors, which Emile Durkheim ([1912] 1995) investigated under the notion of "collective effervescence." Some of these processes are familiar from everyday experience, such as laughing, which can be highly contagious.

In the scientific literature, these phenomena are usually dubbed "emotional contagion" (Hatfield, Cacioppo, and Rapson 1994). This means that actors in face-to-face encounters tend to involuntarily mimic the facial expressions of co-present others without necessarily consciously recognizing these expressions. In contrast to the verbal communication of emotion, emotional contagion is thus defined as the "tendency to automatically mimic and synchronize facial expressions, vocalizations, postures, and movements with those of another person and, consequently, to converge emotionally" (Hatfield, Cacioppo, and Rapson

1992:153f). This definition includes several components of an emotion, such as subjective feeling, physiological responses, and action tendencies. It can also adduce a large number of different mechanisms that may be conducive to emotional convergence or synchronization, for example, socially shared appraisals or interpretations of an emotionally relevant situation or the "mental simulation" of an emotion (Fischer et al. 2004). Importantly, emotional contagion is not limited to dyadic encounters but may affect several actors at once (Hatfield et al. 1992).

Emotional contagion must be clearly distinguished from certain forms of emotional reactance in which an actor responds (consciously) to other actors' emotions with certain feelings. This emotional reactance is generally caused by full-fledged processes of emotion elicitation—including cognitive appraisals of, for example, an event's goal relevance or norm congruence—as when an individual responds with anger and frustration to an acquaintance's joyful reaction to winning a prize because she herself is denied the pleasure of this coveted object. In contrast, emotional contagion is *not* based on fully fledged (conscious) appraisals of an event but largely represents involuntary facial responses to others' expressive behavior. Subjective phenomenal experiences triggered by emotional contagion are basically influenced by four factors: activity of the central nervous system, which is responsible for processes of unconscious mimicry; afferent feedback from these mimetically triggered facial expressions; interoception, which lets actors make inferences about their own emotional states and the expressions of others; and finally, the social context (see Bourgeois and Hess 2008; Hatfield et al. 1992:155; Hess, Philippot, and Blairy 1998:511).

In principle, emotional contagion is based on mechanisms comparable to motor mimicry, which is well documented empirically (Chartrand and Bargh 1999). Motor responses, including facial expression, have previously been defined as a key component of an emotion. The "facial feedback" hypothesis postulates that phenomenal feelings experienced in an emotion episode crucially depend on afferent feedback from the facial musculature (Hatfield et al. 1994). As a consequence of specific patterns of facial expression, the subjective feeling of joy, for example, differs from experiences of sadness or anger (Hatfield et al. 1992:161f; Hess et al. 1998:511). Given that motor mimicry occurs regularly in response to facial expressions, the facial feedback hypothesis would predict that the (involuntary) imitation of specific patterns of facial behavior triggers corresponding subjective feelings in the imitating actors (see Hess, Blairy, and Philippot 1999; Hess et al. 1998:512). Yet the facial feedback hypothesis has not gone uncontested. Studies on the role of peripheral physiological responses indicate that emotions may be experienced even without these physiological changes. Of primary sociological interest, however, is the fact that peripheral physiological processes triggered by facial mimicry at least foster specific kinds of emotional experience and may thus lead to emotional convergence among actors. Numerous experimental studies have confirmed that emotional contagion occurs as a result of the expression of happiness, sadness, anger, and fear, demonstrating that recipients display corresponding facial expressions and experience convergent feelings. These studies also suggest that actors mimicking perceived facial expressions tend to experience consistent discrete emotions, not merely diffuse positive or negative feelings (see Bourgeois and Hess 2008). Moreover, evidence indicates that the perception of an expression automatically triggers consistent activity of the recipient's facial musculature immediately following the perception (Lundqvist and Dimberg 1995). It has also been shown that facial mimicry occurs even if an expression is perceived without consciously recognizing it (Dimberg, Thunberg, and Grunedal 2002). In addition, unconsciously perceived expressions are clearly sufficient to initiate typical physiological processes, which in turn constitute the (necessary but not sufficient) components of the corresponding emotion.

Despite these findings, it is also clear that emotional contagion remains a comparatively basic process in social interaction, and evidence on situational factors that foster contagion is largely absent. With regard to the role of facial expression in the emergence and reproduction of micro-social order, it seems nonetheless plausible that emotional contagion plays a similarly adaptive and stabilizing role for larger social units, as do emotions on the level of the individual (Hatfield et al. 1992:153). This is all the more likely in view of the suggested social calibration of the encoding and decoding of facial expression and the in-group advantage in recognition, especially given that contagion may be viewed as a core physiological component of

decoding expressive behavior. Though we presently lack empirical evidence, it is reasonable to assume that emotional contagion is likely to occur more efficiently within social and cultural units (to which expressive behavior has been calibrated) than across the boundaries of these units.

This also makes emotional contagion a potential candidate for a mechanism capable of disseminating the sociocultural foundations of emotion elicitation between individuals, without significant friction losses caused by the symbolic and reflexive communication of emotion. Emotional contagion fosters the intersubjectively shared experience of social situations by making the situational interpretations and action tendencies of other co-present actors directly and immediately palpable for those in physical proximity. Through emotional contagion, certain physiological and affective components of social action can be interindividually attuned ("affective resonance") in social interactions, largely without actors' conscious involvement.

# CONCLUSION

The aim of this article was to examine the role of emotion in the structuring of social interaction and the emergence and reproduction of micro-social order. Departing from symbolic interactionist theories of emotion and corresponding theories in the sociology of emotion, I have argued that the hitherto underrepresented pre-reflexive, nonsymbolic components of emotion, particularly facial expression, are a crucial factor. In extending existing approaches, I have developed the hypothesis that the sociological relevance of expressive behavior becomes particularly evident not only when accounting for universals in facial expression and their function as a signal of emotional gratification but also when emphasizing their plasticity and social calibration, that is, their involuntary and embodied attunement to the practices and norms of systems of social order.

I first explored this possibility in light of the encoding of emotion expression. I have argued that facial expression rests on relatively invariable biological mechanisms that underpin the automaticity and immediacy of certain expressive components. The configuration of these components and their linkage to certain situational parameters, however, are crucially and systematically influenced by actors' embeddedness into social units and systems of social order, over both the long and the short term. Consequently, actors embedded in different social and cultural units exhibit marked nuances in facially expressive behavior, making it an extremely salient interactive indicator of social differentiation. In analogy to verbal language, this social calibration of emotion expression gives rise to nonverbal accents or dialects, which become part of a physiologically anchored "emotional habitus."

Second, I have shown that the decoding of emotion expression is also crucially determined by this linkage. The successful decoding of facial expressions of emotion, of discrete emotions in particular, is dependent on situation-specific information and socially shared experiential knowledge; only in some cases can successful decoding be achieved solely on the basis of an isolated facial expression. Actors' decoding abilities develop in analogy to the social calibration of the encoding of emotion expressions, and the closer encoders and decoders are within the social space and the more their shared experiential knowledge overlaps, the more precise this ability is.

Finally, I have argued that these encoding and decoding qualities systematically affect the potential for emotional contagion, such that emotional contagion is likely to occur more efficiently within social and cultural units (to which the encoding and decoding of expressions have been calibrated) than across the boundaries of these units. Emotional contagion has been shown to be an important factor in the structuring of social interaction and the reproduction of micro-social order, as it fosters the transfer not only of phenomenal feelings between actors but also of patterns of physiological arousal and action tendencies coupled to emotional states. This perspective complements the role of emotional gratification in the structuring of social interaction, as proposed, for example, by Collins (2004) and Turner (2007), since emotional contagion does not primarily depend on the satisfaction of needs and desires.

Ways in which these theoretical propositions can be tested empirically have been outlined by studies demonstrating the in-group advantage in emotion recognition (e.g., Elfenbein and Ambady 2003b). Using

experimental designs, these studies focus on maximally contrastive cultural differences (e.g., people raised in Asia and those raised in the United States). The same techniques could be employed to test the less conservative assumption of in-group advantages *within* societies, based on cultural differences between, for instance, social classes, lifestyles, milieus, or other groupings. Also, environmental factors such as urban or rural residency may be decisive factors. Here, the crucial question seems to be the choice of independent variables: Which dimensions of social differentiation are most likely to affect the encoding and recognition of expressions, and which are the timescales (e.g., in terms of socialization periods) on which the proposed social calibration of expression can possibly take place? In much the same way, the proposed effects on emotional contagion can be put to empirical test. Barsade (2002), for example, used an experimental design to investigate emotional contagion in groups. Here, the group properties can be modified to accommodate the relevant criteria of social differentiation, and a comparative design can be used to examine the effects on emotional contagion.

In summing up the multitude of theories and empirical findings on emotionally expressive behavior, what emerges for sociology is a picture sketched by Silvan Tomkins (1962): "The individual who moves from one class to another or from one society to another is faced with the challenge of learning new 'dialects' of facial language to supplement his knowledge of the more universal grammar of emotion" (p. 216). A system of facial expression that quickly and reliably provides information on the status of an ongoing social interaction and the parties involved, while nonetheless reflecting actors' embeddedness into systems of social order, is of crucial importance to micro-sociological analysis. When it comes to explaining the structuring of social interaction and the emergence and reproduction of micro-social order, emotion expressions are relevant not only as signals of actors' internal states and concomitants of social (and emotional) exchange but above all as a pre-reflexive means of intersubjective understanding, as well as an indicator of situational interpretations and action tendencies. Given that situational interpretations generally go hand in hand with emotional responses, which in turn result in characteristic facial expressions, we may assume that these expressions can be decoded quickly and automatically and thus allow actors to make mutual inferences of underlying emotional states, cognitive appraisals, and probable action tendencies. What is more, we can assume that processes of emotional contagion may lead to the convergence or attunement of emotional states and, consequently, corresponding action tendencies.

The three-stage process substantially increases the probability of the emergence of regular patterns of social interaction and the reproduction of micro-social order. This potential becomes even clearer given that this process occurs more smoothly within systems of social order than across their boundaries. When analyzing social interaction and the emergence of micro-social order, sociological theory and empirical research can undoubtedly benefit from considering a system of intersubjective understanding that deviates substantially from the widespread focus on the symbolic foundations of interaction while relating isomorphically to symbolic categories and semantic concepts of emotion (such as emotion norms).

Looking at established theories of social order, this view may contribute to further specification and augmentation, which I will very briefly indicate by referring to two paradigms. The first is the emergence of "spontaneous order" (Hechter and Horne 2003), in particular the evolution of cooperation, as outlined in Axelrod's (1984) seminal approach. Cooperation without a central authority is supposed to emerge when actors conform to a norm of conditional cooperation and reciprocity. The problem, however, is how to tell cooperators from defectors when communication is impossible or noisy. Robert Frank (1988) has suggested an original solution to this problem that applies to face-to-face encounters. He argues that the expression of certain emotions is a "commitment device" that signals the adherence to norms. If this is in fact the case, the proposed social calibration of expressions would support the emergence—but most importantly the reproduction—of social order. The inherent link to social norms also paves the way toward normative accounts of social order, as for example indicated by Crossley's (1998) and Habermas's concepts of order and communicative action. Both hint at the possibility of integrating the arguments advanced in this article into two key sociological approaches to social action and social order, namely, norms and rationality.

The second is the "duality of structure" view of social order found in many theoretical approaches to social practice (see Reckwitz 2002). These theories often do assign a critical role to bodily (i.e., physiological) phenomena in bringing about praxeological forms of action and behavior (e.g., the habitus) that reproduce or give rise to social order (cf. Lizardo 2004; Pickel 2005). However, the processes and exact mechanisms linking the social or cultural with the "bodily" remain little understood and opaque in many theories. The concept of the social calibration of emotion expression and the effects on emotional contagion provides a firm basis for a better understanding of this link and for complementing existing theories of social order more generally.

## **FUNDING**

This work was supported by the cluster "Languages of Emotion" at Freie Universität Berlin within the Excellence Initiative of the German Research Foundation (DFG).

### NOTE

 But see of course Max Weber's (1978) ideal type classification of social action or more recent developments in theories of social practices (Reckwitz 2002).

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