Social functions of emotions at four levels of analysis

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Abstract

In this paper we integrate claims and findings concerning the social functions of emotions at the individual, dyadic, group, and cultural levels of analysis. Across levels of analysis theorists assume that emotions solve problems important to social relationships in the context of ongoing interactions. Theorists diverge, however, in their assumptions about the origins, defining characteristics, and consequences of emotions, and in their preferred forms of data. We illustrate the differences and compatibilities among these levels of analysis for the specific case of embarrassment. We close by suggesting research strategies that incorporate a social-functional perspective.

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The primary function of emotion is to mobilize the organism to deal quickly with important interpersonal encounters (Ekman, 1992, p.171).

Emotions are a primary idiom for defining and negotiating social relations of the self in a moral order (Lutz & White, 1986, p.417).

Early studies of emotion tended to focus on the "intrapersonal" aspects of emotion, mapping the determinants and characteristics of emotional response within the individual[1]. Many of the initial functional accounts of emotion similarly highlighted how emotions solve problems within the individual, for example as "interrupts" that prioritize multiple goals of the individual (e.g., Simon, 1967; Tomkins, 1962).

Several developments have led researchers to examine more closely the "interpersonal" functions of emotions. Researchers have begun to uncover how emotions structure relationships between parents and children (e.g., Bowlby, 1969), siblings (Dunn & Munn, 1985), and romantic partners (Levenson & Gottman, 1983). Emotions such as anger and embarrassment have been shown to have systematic effects upon other individuals (e.g., Averill, 1980; Keltner & Buswell, 1997; Miller & Leary, 1992; Tangney & Fischer, 1995). Ethological studies have shown how emotions guide social interactions such as courtship and appeasement rituals (Eibl-Eibesfeldt, 1989). Finally, the growing contact between anthropologists (Abu-Lughod, 1986; Lutz, 1988; Lutz & White, 1986) and psychologists (Haidt, Koller & Dias, 1993; Markus & Kitayama, 1991; Mesquita & Frijda, 1992; Russell, 1991) in the new field of cultural psychology (Shweder, 1989; 1991) has led to greater awareness of the ways that emotions construct and are constructed by cultural practices and institutions.

These converging trends have inspired a wave of research and theory in a variety of disciplines on the connections between emotions and the social environment (Averill, 1980; Campos, Campos, & Barrett, 1989; Clark, 1990; Frijda, 1986; Frijda & Mesquita, 1994; Kemper, 1993; Lazarus, 1991; Lutz & Abu-Lughod, 1990; Markus & Kitayama, 1991; Plutchik, 1980; de Rivera & Grinkis, 1986; Tooby & Cosmides, 1990). Frijda and Mesquita (1994) have written usefully about the social and interactional functions of emotions, particularly anger, shame, and guilt. However we think the time is right for a more general discussion of the assumptions, claims, and empirical findings that can be brought together into a social functionalist perspective on the emotions.

Our aims in this review are as follows. First, we discuss what it means to take a social functional approach in the study of emotion. Second, we review claims about the social functions of emotion in anthropology, ethology, history, psychology, and sociology, highlighting illustrative empirical findings and conceptual issues. We then apply a social functional analysis to embarrassment, and conclude with a discussion of needed lines of empirical and theoretical inquiry.

We hope that this essay contributes some clarification to a growing field by distinguishing between social functions at four levels of analysis: 1) individual (intra-personal), 2)dyadic (between 2 individuals) 3)group (a set of individuals that directly interact and has some

temporal continuity), and 4)cultural (within a large group that shares beliefs, norms, and cultural models)[2] . As we describe below, researchers working at each level differ in the systems they refer to, their preferred kinds of data, and the theoretical traditions within which they explain the origins and defining characteristics of emotions. Our aim will be to specify the differences and similarities in the accounts offered at each of the four levels, and to show how these levels can be put together to create a more complete understanding of the social functions of emotions.

Social functionalist accounts of emotion

Functional explanations, although a bit more recent to the field of emotion (Keltner & Gross, this issue), have long been used in biology and the social sciences. Functional explanations refer to the history of some object (e.g., behavior or trait), as well as the regular consequences that benefit the system in which the object or trait is contained. As Merton (1949) stated, functionalist explanations hinge on "interpreting data by establishing their consequences for larger structures in which they are implicated".

Functionalist accounts vary according to the kind of system being analyzed. For biological systems within an individual organism, a strong functionalism is usually appropriate, in which features were shaped or selected for the consequences they bring about. For example, the heart can only be understood as a pump working within a circulatory system “designed” by natural selection to fulfill a specific function -- allocating blood at variable rates -- within that larger system. At the cultural level of analysis, however, greater caution must be observed when making functional claims. Some institutions and cultural practices may have been designed to benefit the rich and powerful, as a Marxist might say, or to perpetuate themselves, as a meme-theorist might say (Dawkins, 1976). But because there is no over-arching selection mechanism culling out inefficient or poorly adapted cultures, one cannot assume, as Malinowski did in his early pronouncements, that every practice and every artifact serves a “vital” function and “represents an indispensable part within a working whole” (Malinowski, 1926, quoted by Emmet, 1967). As a consequence, cultural anthropologists nowadays generally employ a milder functionalism. They look at cultural facts and practices to see how they may play self-regulating or self-maintaining roles within larger systems (Nagel, 1956). Not every cultural practice is assumed to have a conservative or stabilizing effect, however, and because people have agency in a way that biological sub-systems do not, it is now widely recognized that the best-laid plans of ruling elites are often contested and subverted by those they are meant to control.

Functionalist approaches to the emotions should therefore vary by level of analysis as well. Theorists working at the individual and dyadic levels of analysis, concerned with the effects of emotions within the individual or between interacting individuals (e.g., Bowlby, 1969; Ekman, 1992; Izard, 1977; Nesse, 1990; Ohman, 1986), espouse a functionalism that is consistent with adaptationist arguments found in evolutionary theory. These theorists argue that emotions were designed by natural selection, and that the core components of emotions are biologically based and genetically coded. Within an evolutionary framework it can be assumed that emotional expressions and action tendencies were selected because they produced consequences that improved the individual's inclusive fitness[3].

Many theorists working at the group and cultural levels of analysis, in contrast, are engaged in what Geertz (1973) called an “interpretive science” in search of meaning, rather than an experimental science in search of laws and mechanisms. Emotions are seen as cultural

products, constructed by individuals or groups in social contexts, and linked to construals of the self, patterns of social hierarchy, language, or requirements of socio-economic organization (Lutz & Abu-Lughod, 1990). Social constructions often have consequences, but there is no equivalent to natural selection, selecting the emotional constructions with the best consequences. Rather, socially constructed emotions fit with social structures and other cultural facts in ways that make sense from an interpretive viewpoint, rather than an efficiency viewpoint.

Despite these differences, theorists at all levels of analysis address a few common questions, such as: Why do people have emotions? What are the consequences of having and expressing emotions, and how might those consequences reveal what emotions were designed or constructed to do? In answering these questions, theorists at all levels also share a few assumptions. First, social functional accounts of emotions assume that people are social by nature, and meet the problems of survival in relationships (e.g., Fiske, 1991; Lutz & White, 1986). Second, social-functional accounts portray emotions as means of coordinating social interactions and relationships to meet those problems (e.g., Averill, 1980; Eibl-Eibesfeldt, 1989; Ekman, 1992; Lutz & White, 1986; Tooby & Cosmides, 1990). Emotions are thought of as relatively automatic, involuntary, and rapid responses that help humans regulate, maintain, and use different social relationships, usually (though not always) for their own benefit (Bowlby, 1969; Frank, 1988; Hazan & Shaver, 1987; Lutz & White, 1986; Nesse, 1990). Third, emotions are portrayed as dynamic processes that mediate the individual's relation to a continually changing social environment (Campos et al., 1989; Lazarus, 1991; Rosaldo, 1984), although the length of time that emotions are said to last varies from seconds or minutes (Ekman, 1992) to weeks or years (Frijda, Mesquita, Sonnemans, & Van Goozen, 1991).

Given these shared assumptions, there is every reason to believe that functionalist analyses of emotion will be "consilient" across levels (Wilson, 1998); that is, that emotion theorists can link and inter-relate the four levels of analysis. We offer such a multi-level account of embarrassment near the end of the essay. But first, we summarize the claims and findings relevant to each of the four levels of analysis.

Social functions of emotions at the individual level of analysis

At the individual level of analysis, researchers generally focus on the patterns of change of intra-individual components of emotion. The individual organism is the system with respect to which the functions of elements are interpreted. Research investigates emotion-related changes in the endocrine, autonomic, and central nervous systems (Davidson, 1993; LeDoux, 1996; Levenson, 1992) and emotion-related appraisal, action tendency, memory, perception, and judgment (Lazarus, 1991; Scherer, 1984; Smith & Ellsworth, 1985, Frijda, 1986, Clore, 1994; Schwarz, 1990). The preferred forms of data include physiological measurement, self-reports of emotion phenomenology, and the effects of emotion upon measures of judgment, memory, and social perception.

Although researchers interested in emotion-related physiology, experience, and cognition have tended to focus on patterns of intra-personal change, some of these changes are understood as preparations for or reactions to specific problems that arise in social interactions. Specific brain structures and neurotransmitter systems underlie emotion-related play and dominant aggression (Panksepp, 1982). Some emotion-related action tendencies are motivated by social concerns, such as sharing or providing comfort (Frijda & Mesquita, 1994).

Theorists have proposed that emotional responses within the individual serve two broad social functions (Oatley & Johnson- Laird, 1995). First, the conscious feeling of emotion produced by appraisal processes is believed to inform the individual about specific social events or conditions, typically needing to be acted upon and changed (Campos et al., 1989). Affect is a kind of information (Schwarz & Clore, 1983). As examples, theorists have proposed that the feeling of anger provides an assessment of the fairness of events (Solomon, 1990), love informs the individual of the level of commitment to another (Frank, 1988), happiness may signal the reproductive potential of certain social actions (Nesse, 1990), and shame informs the individual of his or her lower social status (Tangney, Miller, Flicker, & Barlow, 1996). As compelling as these claims seem, few empirical studies have directly examined whether specific emotions influence social judgments (for an exception, see Weiner, 1993, on the role of anger and sympathy in punitive judgments). Most studies of the effects of affect on cognition have examined more general positive and negative mood states (Schwarz, 1990).

Second, it has been claimed that certain emotion-related physiological (e.g., Levenson, 1992) and cognitive processes (Clore, 1994; Schwarz, 1990) prepare the individual to respond to problems or opportunities that arise in social interactions, even in the absence of any awareness of an eliciting event (Oatley & Johnson-Laird, 1995). For example, empirical studies show that anger involves a shift of blood away from the internal organs towards the hands and arms (Levenson, Ekman, & Friesen, 1990) and heightened sensitivity to the injustice of other's actions (Keltner, Ellsworth, & Edwards, 1993), which presumably facilitates responses to threat or injustice. More generally, it follows that emotion-related physiology and cognition will be finely tuned to the specific nature of social events, as evident in brain imaging studies showing that facial expressions of anger, disgust, fear, and sadness evoke activation in different brain regions in the perceiver (for a review see Keltner & Ekman, in press). It is also implied that emotional responses within the individual will change in response to changes in the emotion-eliciting event. A recent study reveals that the effects of anger upon social cognition appear to diminish when the anger producing injustice is redressed (Lerner, Goldberg, & Tetlock, 1998).

Social functions of emotions at the dyadic level of analysis

At the dyadic level of analysis, researchers focus on how emotions organize the interactions of individuals in meaningful relationships. The interacting dyad is the system with respect to which the consequences of behaviors are interpreted. Researchers here focus on the communication of emotion in facial, vocal, and postural channels (e.g., Ekman, 1984; DePaulo, 1992; Fernald, 1992; Fridlund, 1992; Klinnert, et al., 1983; Ohman, 1986; Scherer, 1986), properties of dyadic emotion, such as "contingency", "matching", "linkage", and "synchrony" (e.g., Cohn & Tronick, 1987; Field, Healy, Goldstein, & Guthertz, 1990; Levenson & Gottman, 1983), and how emotions operate in other social interactions, such as greeting rituals (Eibl-Eibesfeldt, 1989), discourse (Bretherton, Fritz, Zahn-Waxler, & Ridgeway, 1986), and attachment and caregiving (Bowlby, 1969; Hazan & Shaver, 1987). The preferred forms of data are laboratory and naturalistic observations of interactions in humans and other species, and manipulations of emotional behavior as social stimuli (e.g., Dimberg & Ohman, 1996).

Theorists working at the dyadic level of analysis have argued that emotional expressions help individuals know others' emotions, beliefs, and intentions, thus rapidly coordinating social interactions. Thus, relevant evidence indicates that the communication of emotion conveys

information to receivers about senders': current emotions (Ekman, 1993; Scherer, 1986), social intentions, (Fridlund, 1992), and orientations towards the relationship, for example as a dominant or submissive individual (Knutson, 1996). The communication of emotion also conveys information about objects in the environment: brief exposures to models' fearful behavior towards a phobic object (snake) leads observers to develop similar fearful responses to the phobic object (Mineka & Cook, 1993); and children rely upon parents' facial emotion to assess whether ambiguous situations, stimuli, and people are safe or dangerous (Klinnert et al., 1983).

Second, emotional communication evokes complementary and reciprocal emotions in others that help individuals respond to significant social events (Gibbard, 1990). For example, research has documented that anger displays elicit fear-related responses, even when those displays are presented below conscious awareness (Dimberg & Ohman, 1996). Similarly, displays of distress elicit sympathy-related responses in observers (Eisenberg et al., 1989). In turn, emotions evoked in others are associated with behaviors such as avoidance, helping, affiliation, and soothing, which help meet the goals of interacting individuals.

Third, emotions serve as incentives or deterrents for other individuals' social behavior (Klinnert et al., 1983). Developmental research finds that emotional responses reward others' shifts in attention (Cohn & Tronick, 1987) and goal directed behavior (Tronick, 1989), and thus play an important role in learning (Rothbart, 1973). In a similar vein, studies find that laughter occurs at the end of utterances (Provine, 1993), consistent with the general claim that laughter rewards desirable social behavior (Weisfeld, 1993).

Social functions of emotions at the group level of analysis

At the group level of analysis, researchers focus on how emotions help collections of interacting individuals who share common identities and goals meet their shared goals, or the super-ordinate goals of the group. Groups, such as families, work groups, or social clubs, are the systems with respect to which the functions of emotion are interpreted. Researchers focus on phenomena such as: the differential distribution of emotion across group members (e.g., Collins, 1990; Kemper, 1993); collective emotion (Durkheim, 1912/1954; de Waal, 1996); emotion directed at other groups (e.g., Bar-Tal, 1990); and role-related implications of emotional experience in group contexts (e.g., Clark, 1990). The preferred forms of data include the behavior of group members in naturalistic and experimental contexts (e.g., Sherif et al., 1961) and ethnographies of small groups of people (Abu-Lughod, 1986; Briggs, 1970) and animal groups (e.g., de Waal, 1996), although such descriptions can sometimes be placed at the dyadic and cultural levels of analysis as well.

Although few empirical studies can be placed at the group level of analysis, theorists have made several provocative claims worthy of empirical study. First, emotions have been claimed to help individuals solve the problem of defining group boundaries and identifying group members (e.g., Durkheim, 1965/1915). Collective ecstasy and awe may give group members the sense of communal identity (Heise & O'Brien, 1993), whereas fear, hatred, and disgust towards non-group members may sharpen group boundaries (Bar-Tal, 1990; Heise & O'Brien, 1993; Frijda & Mesquita, 1994). Consistent with these speculations, the experimental induction of fear of death has been shown to increase in-group solidarity and out-group derogation (Greenberg et al., 1990). Social anxiety additionally motivates individuals to avoid behaviors that would ostracize them from groups (Baumeister & Tice, 1990).

Within groups, the differential experience and display of emotion may help individuals define and negotiate group-related roles and statuses (e.g., Clark, 1990; Collins, 1990). Certain emotions are said to relate to or constitute different roles and social statuses, e.g., sympathy is part of playing a nurturant role, and displays of embarrassment mark lower status. Consistent with this view, empirical studies have documented associations between an individual's status in a group and differences in joking and laughter (Coser, 1960), and embarrassment, anger, contempt, and fear (Keltner, Young, Heerey, Oemig, & Monarch, in press). Several cultures have a word that describes both a feeling, related to shame or embarrassment, and a deferential action directed at high status individuals ("lajya" and "hasham"; see below). Additional research needs to establish whether the differential experience and display of emotion actually establishes an individual's role or status in a group, and whether these effects are independent of individual differences in the predisposition towards certain emotions.

Finally, recent animal evidence suggests that collective emotional behavior may help group members negotiate group-related problems. In a suggestive study, chimpanzee groups were observed to engage in exuberant, celebratory affiliation just prior to the allocation of valuable resources (de Waal, 1996). This behavior was believed to solidify social bonds that might be threatened by conflict related to distributing resources.

Social functions of emotions at the cultural level of analysis

At the cultural level of analysis, researchers have focused on how emotions are shaped by historical and economic factors, on how emotions are embedded in cultural institutions and practices, and on the cultural norms and scripts for the proper expression and experience of emotions. The culture is the system with respect to which the functions of emotion are interpreted. Cultures are sometimes equated with nations or societies, but more often a culture is restricted to a community of shared meanings, as in D'Andrade's (1984) treatment of culture as: "learned systems of meaning, communicated by means of natural language and other symbol systems, having representational, directive, and affective functions, and capable of creating cultural entities and particular senses of reality" (p.116, emphasis added). Culture not only creates the social world, it guides people in the affective reactions needed to function in that world. Some of the main areas of research include: how culture shapes emotion by shaping the self (Lutz, 1988; Markus & Kitayama, 1991; Shweder & Bourne, 1984); the social structures within which emotions are experienced (Abu-Lughod, 1986; Fiske, 1992); and culture-specific valuations of the experience and expression of emotion, for example in relation to gender, age, and social status (e.g., Lutz, 1990). The methodological emphasis is interpretive, and the preferred forms of data include ethnographies and "thick descriptions" (Geertz, 1973) of social practices; linguistic formations such as emotion lexicons (Russell, 1991), and metaphors (Lakoff, 1987); and historical documents and other meaning-laden cultural products, such as etiquette manuals (Elias, 1978) or cultural myths and legends (Miller, 1997).

Theorists working at the cultural level of analysis have attributed several social functions to emotion, some of which overlap with those at the group level of analysis. First, emotions are claimed to play a critical role in the processes by which individuals assume cultural identities. Culture-specific concepts of emotional deviance are believed to motivate culturally appropriate behavior (Thoits, 1985). Embarrassment (Goffman, 1967) motivates conformity and the proper playing of one's roles, while disgust motivates the avoidance and shunning of people who violate

key values within a culture (Rozin, Haidt & McCauley, in press).

Emotions are also embedded in socialization practices that help children learn the norms and values of their culture. For example, developmental (e.g., Bretherton, et al., 1986; Dunn & Munn, 1985) and cross-cultural studies (e.g., White, 1990) indicate that emotional conflicts engage individuals in conversations about cultural notions of right and wrong and redressing wrongdoing. Displays of disgust by parents, for example, are likely to be important in toilet training and negative socialization (Rozin, Haidt & McCauley, in press). The emotional reactions of parents and other "local guardians of the moral order" (Shweder, Mahapatra & Miller, 1987) may be the most important guides that children use in figuring out the contours of their moral world.

Finally, some theorists have asserted that cultural constructions of emotional experience reify and perpetuate cultural ideologies and power structures (e.g., Hochschild, 1990). Much as at the group level, the selective experience and expression of emotion for certain groups justifies their position within a culture. Thus, drawing on stereotypes of the emotions of subordinated groups, Lutz has argued that cultural discourses about female emotionality relegate women to positions of subordinate status (Lutz, 1990). It would be interesting to document how gender stereotypes of emotion are indeed used to justify subordinate positions for women, and whether these stereotypes correspond to, and perhaps create, actual gender differences in emotional response.

Case study: The social functions of embarrassment

We have reviewed evidence and theory about the many social functions of emotion. Emotions inform people about social events and prepare their bodies and minds for action. Emotions coordinate social interactions. Emotions help individuals define their identities and play their roles within groups, and emotions mark or strengthen boundaries between groups. Finally, emotions simultaneously create and are shaped by cultural practices and symbol systems. All of these functions, interpreted with respect to four different kinds of systems, can occur simultaneously and in mutually interlocking ways. While conflicts or incompatibilities across levels are possible in principle, in practice the social functions of emotion at one level are likely to work in tandem with the social functions of the adjoining levels. To illustrate the compatibility and consilience (Wilson, 1998) of these various functional perspectives, we will work through the case of embarrassment in detail.

Initially, most theorists ignored the social functions of embarrassment. Darwin's analysis of embarrassment focused on the blush, which he posited was simply a side effect of social attention (Darwin, 1872/1965). Although Goffman (1967) hinted at certain functions of embarrassment, he primarily concentrated upon its chaotic display and painful experience. Recent studies of the causes, characteristics, and social consequences of embarrassment, however, have led researchers to claim that embarrassment serves an appeasement function, reconciling social relations following transgressions of social norms (Miller & Leary, 1992; Keltner & Buswell, 1997). At each level of analysis, we see that embarrassment serves this appeasement function in a different way.

At the individual level of analysis, self-report narrative studies have revealed that embarrassment typically follows some social transgression and is defined by the sense of personal failure and lowered status (e.g., Tangney et al., 1996). The internal discomfort of

embarrassment may signal to the individual which social actions to avoid. Consistent with this claim, evidence indicates that people will forego personal gain to avoid embarrassment, and once embarrassed, they engage in corrective behavior that restores their social standing (see Keltner & Buswell, 1997).

Social transgressions require some form of appeasement or repair. Empirical studies at the dyadic level of analysis indicate that the display of embarrassment brings about reconciliation. Embarrassment is signaled by blushing, a controlled smile, face touching, downward movements of the head and eyes, and inhibited speech (Keltner, 1995). These behaviors have been shown to signal the embarrassed person's commitment to social norms, and to prompt forgiveness in others (for review, see Keltner, Young, & Buswell, 1997). More generally, the dramaturgic account of embarrassment (Parrott & Smith, 1991; Silver, Sabini & Parrott, 1987) shows how embarrassment keeps social performances flowing smoothly, motivating participants to stay within the bounds of their working consensus.

Theorists working at the group level of analysis have proposed, consistent with our general review, that embarrassment helps establish and maintain group hierarchies (e.g.,Clark, 1990) and norms (e.g,. Asch, 1956). How might this work? One possibility is that embarrassment is embedded in group practices, which have specific consequences at the individual and dyadic levels of analysis. Group practices such as teasing and shaming produce different levels of embarrassment in group members. For individuals, the differential experience of embarrassment in group contexts may signal their positions in the group hierarchy. Dyadic interactions in teasing and shaming may lead to reconciliation and enhanced group bonds.

Finally, recent ethnographies reveal how self-conscious emotions related to embarrassment are involved in the assumption of culturally appropriate identities and the perpetuation of cultural norms and values. Awlad-Ali Bedouins and Oriya Indians have long traditions of strong patriarchal authority in which open expressions of female sexuality bring dishonor and threaten to destabilize masculine authority. When in the presence of high ranking men, it is considered a virtue for women to display hasham among the Awlad-Ali (Abu Lughod, 1986) and to display lajya in Orissa (Menon & Shweder, 1994). Expressions of hasham and lajya honor patriarchal ideologies and hierarchies, and the possession of a well-cultivated liability to experience and express these emotions is a path to female honor and virtue in both cultures. Recent cross-cultural work demonstrates that if lajya must be equated with an English emotion word, that word is embarrassment (Haidt & Keltner, 1998). However because North American middle-class culture values hierarchy less and the expression of female sexuality more than do Oriyas, the experience of embarrassment cannot be equated with the experience of lajya. Embarrassment for Americans seems to lack the element of virtue and even pride that can be associated with the experiences of lajya and hasham.

Research strategies for the study of social functions of emotions

We have attempted to place many lines of research on the social functions of emotion into a taxonomy of four levels of analysis: individual, dyadic, group and cultural, all of which are complementary and inter-relatable. In this final section, we look to the future and ask how a social-functional perspective, cognizant of different levels of analysis, can guide research. Most generally, we believe that integrative, cross-disciplinary work may be furthered by working at multiple levels of analysis, looking to adjoining levels for ideas and hypotheses. As concrete research strategies, we offer two general suggestions.

First, social functionalist accounts assume that emotions solve social problems. It therefore is important to examine how emotions arise in the context of specific social problems. At the individual level of analysis, emotional responses can be linked to specific kinds and features of social events (e.g., Kemper, 1993), such as uncertainty. At the dyadic level of analysis, research should continue to examine how specific emotions emerge in response to relational problems, as has been done in studies relating the emergence of adolescent social hierarchies and the development of embarrassment, shame, and social anxiety (Ohman 1986). Finally, because emotions are dynamic and flexible means of solving social problems, it should be possible to predict and measure changes in the emotional life of groups and cultures as new problems arise. For example, as individualism, commercialism, and changing sex roles spread through the young generation of a traditional society, do elders try to elicit more shame, and engage in more teasing and shaming rituals? With so much of Asia rapidly adopting Western modes of commerce, dress, and even housing, it should be possible to document changes in the distribution and valuation of emotions (including patterns of use, and emotion concepts) over the course of a decade.

Second, social functionalist accounts assume that emotions do things beyond the self, so they generally look both at the expression of emotion and at its consequences on others. Model research and relevant analytic procedures for ascertaining the social consequences of emotions have emerged in the study of more naturalistic emotional interactions between siblings (e.g., Dunn & Munn, 1985), romantic relationships (Levenson & Gottman, 1983), and parent child interactions (e.g., Tronick & Cohn, 1987; Field et al., 1990). Experimental manipulations of emotional behavior, as has been done in studies of the responses evoked by depressive maternal style (e.g., Cohn & Tronick, 1983) and posed facial expressions (Dimberg & Ohman, 1996), are making similar contributions.

In sum, the expansion of scholarship from intrapersonal to interpersonal functions of emotion points to several promising lines of inquiry that may integrate the insights and strengths of different disciplines. This conceptually and methodologically varied work can be understood and integrated by distinguishing among the individual, dyadic, group, and cultural levels of analysis. All four are necessary to understand the social functions of emotions.

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Footnotes

1. The obvious exception to this statement is the research on the interpersonal or inter-organismic functions of facial expressions, beginning with Darwin (1872/1965), and carried on since the 1960's by Ekman (1984) and Izard (1977) and others.

2. Our framework was influenced by Averill's proposal (1992) that claims about emotions can be placed at the biological, psychological, or social levels of analysis. Although Averill's social level is clearly most relevant to the present paper, our review deals with studies that differ in their units of analysis, methods, and preferred forms of data, but would be classified at the social level. We therefore expanded Averill's social level into four different levels.

3. Although any particular feature might have begun as an accidental “spandrel” (Gould, 1996) or as a “serviceable associated habit” (Darwin, 1872/1965), which was later shaped by selection pressures.