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What's Social About Social Emotions?

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# Abstract

This paper presents a new approach to the demarcation of social emotions, based on their dependence on social appraisals that are designed to assess events bearing on social concerns. Previous theoretical attempts to characterize social emotions are compared, and their inconsistencies highlighted. Evidence for the present formulation is derived from theory and research into links between appraisals and emotions. Emotions identified as social using our criteria are also shown to bring more consistent consequences for social behavior than nonsocial emotions. We conclude by considering ways of validating and refining our classification.

# Keywords:

Social emotions, Social appraisals, Social concerns

It is widely acknowledged that the most common cause of emotion is some kind of social event (e.g., Averill, 1982; Kemper, 1978; Oatley & Johnson-Laird, 1987; Parkinson, 1996; Salovey, 2003; Shaver, Wu & Schwartz, 1992), that emotions are frequently communicated to other people (e.g., Fridlund, 1991; Rimé, Finkenauer, Luminet, Zech & Philippot, 1998; Rimé, Mesquita, Philippot & Boca, 1991), and that social processes more generally shape and are shaped by emotions (e.g., Frijda, 1986; Frijda & Mesquita, 1994; Leary, 2000; Oatley, 2000; Parkinson, Fischer & Manstead, 2005; Schachter, 1959). However, many theorists also distinguish a specific subset of emotions, usually including shame, embarrassment, jealousy, admiration and so on, as "social emotions" (e.g., Bennett & Gillingham, 1991; Hareli & Eisikovits, 2006; Hareli & Hess, in press; Hareli & Weiner, 2002; Leary, 2000; Oatley & Johnson-Laird, 1987; Smith, 1999; Tangney & Fischer, 1995; Weiner, 1986). What distinguishes this subset from the broader emotion category? What is special about "social emotions" if all emotions are, in some sense, social? And what would it mean for an emotion to be non-social?

In this paper, we argue that social emotions are social in a different way to other emotions. Shame, embarrassment, and jealousy are social emotions because they necessarily depend on other people's thoughts, feelings or actions, as experienced, recalled, anticipated or imagined at first hand, or instantiated in more generalized consideration of social norms or conventions. Each of these emotions derives its defining quality from an intrinsic relation to social concerns: at the conceptual level, it would not count as a proper instance of the emotion category in question, and at the empirical level it would not have its distinctive relational quality unless the relevant social concern was in play.

Social concerns are best conceived as matters that people care about because of their

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social importance (e.g., status, power and attachment). They define people's place and situation vis-à-vis different social entities such as social norms, other people, groups, teams or organizations. The explicit or implicit apprehension of an object or event's relevance to such social concerns is termed social appraisal. The idea that social appraisals are necessary causes and/or constituents of social emotions serves as the basis for our proposed characterization.

Such a characterization is important because available discussions of social emotions rarely offer any explicit demarcation of this category. Further, although existing classifications share some common features, inconsistencies in the proposed defining features of social emotions still remain. We believe that refining the conceptualization of social emotions will allow researchers to uncover their distinctive features and to further specify underlying processes. Finally, and most importantly, distinguishing social and non-social emotions can provide insight into the nature of emotions in general and their relation to social factors more specifically. In our view, treating all emotions as equivalent members of the same category, either by seeing them all as social or by ignoring distinctions relating to sociality blinds us to the possibility that emotions differ in the way they relate to social factors. Thus, this paper paves the way for more systematic investigation of the full range of cultural, group-related and interpersonal factors implicated in the causation, differentiation and articulation of emotions in a social world (Parkinson et al., 2005).

In the next section we outline some of the issues addressed in previous discussions of the characteristics of social emotions and related categories (e.g., "moral" and "self-conscious" emotions), and consider which emotions have most consistently been labeled as "social." Next, we review research suggesting that while certain emotions are characteristically determined by social appraisals, others are not. This research helps us to identify the most likely candidates for

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inclusion in the categories of social and non-social emotions. We then assess evidence that the emotions that emerged as social in our analysis are also closely linked to social behaviors and social action tendencies. Finally, we discuss the implications of our analysis for more general issues in the emotion literature.

# Previous Characterizations of Social Emotions

Researchers have taken a variety of approaches to the questions of what should count as a social emotion and what criteria imply membership of that category. The following discussion provides a brief review of these approaches. Table 1 lists the different emotions that psychologists have described as social emotions when attempting either to demarcate this conceptual terrain or to provide illustrative examples in other contexts. Its content may need to be revised after more extensive consideration of criteria dictating what should count as a social emotion.

Despite the wide variety of criteria used to define social emotions, a recurrent theme is that they serve important social functions. For many (but not all) writers these social functions are explicitly grounded in evolutionary considerations. Other views focus more on a common defining structure beyond shared function. Finally, a few discussions only list certain social emotions without offering any particular criteria for their categorization in these terms. In this section of the paper, we consider each of these three classes of approach in turn.

A notable example of the evolutionary functional approach is Buck's (1999) theory, which postulates that affective states (including emotions) generally serve as readouts of biological motivations when these are activated by relevant stimuli. In this view, social emotions signal motivations related to communicative challenges associated with social coordination. Thus Buck (1999) asserts the primacy of bio-physiological structures. That is, discrete emotions arise from Social Emotions <sup>6</sup> special-purpose biological mechanisms, with social emotions in particular developing from more basic attachment-related pro-social emotions.

The claim that social emotions developed from earlier-evolving and more basic emotions at later stages of human evolution than non-social emotions is also common in other theories that focus on the characteristic functions of social emotion. For example, Oatley and his colleagues (Ben-Ze'ev & Oatley, 1996; Oatley 2000; Oatley & Johnson-Laird, 1987) hold that all human emotions are (at least partly) social because they have evolved in a way that led to the incorporation of socio-cognitive considerations into evolutionarily older structures in order to deal with the complexities of human social life. Even the supposedly "basic" emotions of happiness, sadness, anxiety, anger and disgust are regarded as social because they involve mostly social objects (Ben-Ze'ev & Oatley, 1996).

The idea that social emotions are more complex than non-social emotions is also often reflected in the assumption that social emotions develop later in ontogeny (as well as phylogeny) than other emotions, due to their dependence on cognitively more sophisticated mechanisms such as self-reflection, the reading of others' minds (e.g., Bennett & Gillingham, 1991; Lewis, 1993; Oatley & Johonson-Laird, 1987), or attribution (Graham & Weiner, 1986).

Other approaches view the characteristic functions of social emotions as emerging from a combination of evolutionary processes and forces associated with the way social life has developed. For example, Parkinson et al. (2005) characterize social emotions as emotions that serve interpersonal (or intergroup, cf. Smith, 1999) functions mostly by affecting others' reactions. For instance, embarrassment deflects undue attention from someone else (Keltner & Buswell, 1997). Accordingly, the causes and consequences of social emotions relate to their central function of influencing other people. However, Parkinson et al. also argue that some so-

Social Emotions called basic and ostensibly non-social emotions often have similar features.

Other ways of characterizing social emotions emphasize structure more than function. One such characterization was proposed by Leary (2000; 2004), who defined social emotions as emotions that are aroused by real, imagined, anticipated, or recalled encounters with others. This view puts a strong emphasis on relational aspects as the common theme underlying all types of social emotions. A similar perspective is taken by Bennett and colleagues (Bennett & Gillingham, 1991; Bennett & Matthews, 2000) who assume that a common characteristic of many social emotions is their dependence on perceptions of others' actual or imagined view of the self.

Like Leary, Barrett and Nelson-Goens (1997) focus on emotions that other theorists have referred to as "self-conscious" emotions. In their view, all emotions serve as social signals to others, and are therefore relatively sensitive to the social context in which they emerge. However, unlike other emotions, social emotions always involve a real or imagined social object that may be either another person or a socially constructed self. The concerns underlying social emotions are also socially constructed as they involve social rules and norms. Because of this, social emotions serve social regulatory functions such as signifying the importance of certain relationships and helping to maintain and restore these relationships when need arises. However, this emphasis on social construction may be over-restrictive in its implicit exclusion of the possibility of biologically based social emotions (see below).

Perhaps the most comprehensive attempt to define "social emotions" to date has been provided by Barrett and Campos (1987). They use four different criteria to distinguish three classes of emotion. Social emotions are distinguished from "primordial" and "concurrent goal" emotions (both of which would be classed as "basic" by other theorists), on the basis of the fact that: a) their emotional object derives significance from social communication or goal relevance

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and not innate detection of survival relevance (unlike primordial emotions); b) the goals that are relevant are socialized goals; c) the appraisals (or "appreciations") associated with them involve other people in addition to the self; and d) the emotion is not communicated by any characteristic facial position. However, the classification is presented as a fuzzy one, and it is explicitly acknowledged that: "a particular member of an emotion family may fall in one class even though the majority of family members fall in a different class. Moreover, certain *families* (e.g., affection) 'fit' most criteria for one class but are characterized by one or two criteria for a different class" (Barrett & Campos, 1987, p. 563).

Other, more narrowly focused perspectives center on sub-categories of social emotions. While some of these perspectives also consider structure more than function, others fail to offer any account of why the emotions that they discuss should be considered as social. Notable among such analyses are those concerning moral emotions and self-conscious emotions. Moral emotions are defined as emotions that are intrinsically linked to the interests or welfare either of society as a whole or of persons other than the agent (Haidt, 2002; Rozin, Loewry, Imada, & Haidt, 1999). As such, moral emotions are readily evoked by the perception of moral violations in the context of interpersonal events (Haidt, 2001) and guide moral behavior (Tangney & Dearing, 2002). Included in this category in different writings are, shame, guilt, regret, embarrassment, contempt, anger, disgust, gratitude, envy, jealousy, schadenfreude, admiration, sympathy and empathy (Haidt, 2001; Harris, 2003; Rozin et. al., 1999; Tangney, 1991; Tangney & Dearing, 2002; Weiner, 2005). Self-conscious emotions, on the other hand, are seen as emotions that arise when individuals become aware that a certain event or situation impinges on their self-evaluation or welfare (Leary, 2004; Tangney & Fischer, 1995; Tracy & Robins, 2004). Frequently mentioned examples are shame, guilt, pride, and embarrassment (Leary, 2004; Tangney & Fischer, 1995;

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Tracy & Robins, 2004).

A totally different but also narrowly focused perspective on social emotions is offered by Barbalet (1996), who suggests that a defining feature of social life is "bringing future to the present". In other words, social life requires mechanisms for anticipating self-relevant events such as personal accomplishments and relationships. Accordingly, some social emotions serve both as "future predictors" and as motivators for actions and reactions whose focus is on times yet to come. Thus, Barbalet (1996) considers confidence, trust and loyalty as social emotions because of their future orientation. However, some of these phenomena are not even treated as emotions by many psychologists, let alone as social emotions (but see de Sousa, 1990; Kemper, 1978; Solomon, 1990, for contrasting views from other disciplines). In addition, it remains unclear whether other emotions that refer to the future (such as fear and hope) can also be considered as social emotions based on Barbalet's (1996) criteria.

Finally, many other writers also concur that the emotion labels considered so far represent social emotions without offering any explicit demarcation criteria. Additional emotions that have been mentioned in this context include, dislike, arrogance, respect, and flirtatiousness (Adolphs, Baron-Cohen & Tranel, 2002; Goddard, 1996; and see Table 1).

As this brief (and non-exhaustive) review demonstrates, the category of social emotions is inclusive and diverse. Some of the emotions it contains are widely acknowledged to be social emotions (e.g., envy, guilt and shame) whereas others feature only in a few characterizations (trust and grief). Social emotions are also often divided into different sub-categories according to different criteria. Frequently, these subcategories overlap so that, for example, an emotion that is considered self-conscious can also be categorized as a moral emotion (e.g., shame and guilt). All of the characterizations propose a social function, a social goal, or a social object as a defining

characteristic of social emotions, but the specific nature of this function, goal, or object varies across different writings. Further, many theorists believe that social emotions develop later and are more complex than non-social or basic emotions. However, some early-developing and supposedly basic emotions are considered to be social emotions by some theorists (e.g., anger, shame and disgust, see Buck, 1999; Hareli & Weiner, 2002; Leary, 2000; Oatley, 2000). Indeed, there seems to be no clear reason why early-developing emotions that serve social functions should not also be considered as social emotions (e.g., Buck, 1999). Further, recent reconsiderations of empirical evidence question the validity of the assertion that apparently complex "nonbasic" emotions develop later than non-social emotions (Draghi-Lorenz, Reddy & Costall, 2001; Griffiths, 2003), undermining the use of such a criterion to distinguish social and non-social emotions (see also Parkinson et al., 2005).

Missing from most discussions is a more explicit consideration of how social emotions differ from non-social emotions. This problem applies especially to proposed distinctions that in fact do not seem to discriminate consistently between the two varieties of emotion (e.g., seeing social emotions simply as responses to encounters with others, Leary, 2000; 2004). Also, some accounts fail to consider the full spectrum of emotions that should count as social emotions according to their own criteria (e.g., anger seems to fit Barrett and Nelson-Goens', 1997 specifications). There is also scant discussion of the common mechanisms that might enable social emotions to accomplish their goals. Finally, there is no clear consideration of the distinctive consequences of social emotions in comparison to non-social emotions or of the circumstances under which they might be activated.

In our view, specification of characteristics of social emotions (including antecedents and consequences) takes conceptual priority over consideration of when they developed in phylogeny

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respects, the present analysis goes beyond many approaches reviewed so far.

# Conceptual Characteristics of Social Emotions

Guiding our analysis of the characteristics of social emotions is the assumption that not all emotions are social in equivalent ways. Differences in their sociality reside mainly in their antecedent conditions but also in their outcomes. We discuss these aspects in turn below.

Emotions are closely associated with appraising situations as relevant to specific concerns (Frijda, 1986; 1987; 1988; Lazarus, 1991; Oatley, 1992; Ortony, Clore, & Collins, 1988; Scherer, 1984). Concerns can be seen as the goals, projects, or orientations that a person cares about. Some concerns are exclusively social because they are directly associated with the demands of social life (e.g., affiliation, the need for social status). Other concerns are not exclusively social because they are also relevant in non-social contexts (e.g., safety). Emotions depending on such concerns are not social emotions. For example, fear may be provoked by either social or nonsocial forms of danger.

By contrast, social emotions are based on exclusively social concerns. Accordingly, the appraisals associated with such emotions relate to social aspects of one's world inasmuch as they involve apprehending (implicitly or explicitly) the current situation's relevance to these social concerns. Indeed, assessment of social-concern relevance may have been the original function of these appraisals, unlike the appraisals associated with non-social emotions, which were not

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specifically designed to assess social relevance. However, non-social appraisals may still sometimes process socially relevant information, and social appraisals may sometimes process non-social information as if it were social information. For example, people may express anger, and attribute blame, towards inanimate objects (cars, computers, screwdrivers etc, see also below).

Like Barrett and Campos (1987), we believe that the appraisals and concerns associated with social emotions are intrinsically social and that they differ from those of non-social emotions. However, unlike Barrett and Campos, we do not assume that all social goals are based entirely on socialization rather than evolutionary pressures. Accordingly, we do not assume that "primordial emotions" (e.g., anger) are necessarily non-social. Further, we do not believe that what makes appraisals social is the fact that they take other people as their object, but rather that they process social information more generally (including information about legitimacy or fairness, see below) and that they were specifically designed to do so.<sup>i</sup>

In our view, then, some appraisals would not have developed unless social life existed and mattered. This claim is compatible with functionalist accounts that consider discrete emotions as specific adaptive solutions to particular survival problems (Buck, 1999; Buss, 2000; Ekman, 1992; Johnson-Laird & Oatley, 1992; Keltner & Gross, 1999; Leary, 2000; Levenson, 1999; Tooby & Cosmides, 1990). Accordingly, some emotions are associated with appraisals that are social by nature because they evolved to cope with social problems and/or because they developed over the course of socialization to serve these ends (e.g., Campos & Barrett, 1987). Consistent with this idea, several appraisal theorists (e.g., Frijda, Kuipers & ter Schure, 1989; Roseman, 2001) have proposed appraisal dimensions relating to fairness. Fairness appraisal can be seen as primarily social because it involves orientation towards issues that are only important

in the context of social life (cf. Barrett & Campos, 1987). Such an appraisal necessarily involves comparing the distribution of positively or negatively valued events between two or more people with respect to certain normative standards. By contrast, appraisal of novelty (e.g., Scherer, 1984; 2001) evaluates only if there is any change in the pattern of internal or external stimulation. The information processed by such an appraisal is not necessarily social (although it may be). In sum, social appraisals are appraisals that have developed to address issues relating to other people, including social comparison, the consideration of norms or social judgments such as responsibility and deservingness. By contrast, nonsocial appraisals are appraisals that are not designed to be oriented to social issues (but may still sometimes process social information).

The idea that some appraisals are social by design is consistent with the view that humans are equipped with, or develop, special psychological mechanisms whose main function is to deal with the unique demands of social life (Buck, 1999; Buss, 2000; Cosmides & Tooby, 1992; Levenson, 1999). As social life emerged in the evolution of human beings, certain core mechanisms responsible for certain emotions came to be influenced by other components. In addition, some new emotions were formed. This idea is consistent with Levenson's view of a core system and some later evolved control mechanisms comprising the human emotional system (see e.g., Levenson, 1999). Nevertheless, it also suggests that later-evolved social components may serve more than the goal of control as they may be generators of specific emotions as well (see also, Buck, 1999; Oatley, 2000).

Parkinson et al. (2005) have argued that emotions (including social emotions) have not evolved as intact packages, but that biology simply provides the necessary attunement to the social and practical environment that allows emotions to consolidate over the course of ontogenetic development (see also Griffiths, 1997). Infants start out with the relational capacities

to develop emotions but not with emotions as such. Even in this case, the biological preconditions for the development of social emotions might be seen as separate from the biological preconditions for the emergence of non-social emotions. According to such a view, interpersonal and cultural factors enter into the socialization of social emotions at the earliest stages because these emotions are responses to fundamentally relational processes. By contrast, non-social emotions derive from modes of engagement with the practical environment and make contact with the social world only when someone else's response starts to define their function (cf. Vygotsky, 1978) and appropriateness. All emotions are thus seen as incorporating social elements but it is only social emotions whose identity is specified by these social elements.

Empirical Characteristics of Social Emotions

# Social Emotions in Appraisal Theory and Research

A few previous reviews and empirical studies have also concluded that certain appraisals specifically weigh up social information (e.g., see Leventhal & Scherer, 1987; Reisenzein & Hofmann; 1990; Scherer, 1992). However, little attention has been given more generally to the social or nonsocial nature of appraisals and the relationship between each of these types of appraisal and specific emotions (Scherer, 1999). This may partly reflect difficulties in determining definitively whether a certain appraisal is social or not. However, we contend that the social nature of certain appraisals may be established theoretically by demonstrating their dependence on processes that can be relevant only within a social context. This includes appraisals that specifically relate to other people (e.g., when others are the object of the emotions, or these others' actions or evaluations are considered) and appraisals that take into account social rules, conventions or norms, or aspects of agency (e.g., responsibility or blame). The appraisal of fairness (discussed above) is one such example. Another example is responsibility or intention,

which many theorists (e.g., Frijda, 1986; Smith & Ellsworth, 1985; Weiner, 1985) suggest is important for differentiating several distinct emotions. Responsibility matters only in the context of appraising people's conduct in light of norms, conventions and limits posed by social life. Therefore, it is through social processes such as "reading others' minds", inferring intent, and acquiring social norms that appraisals relating to responsibility or intention become possible (Weiner, 1995; 2005). Note that unlike previous characterizations of social emotions, we do not assume that any such emotion necessitates direct reference to another person. In a nonsocial context, fairness, responsibility, and intention are meaningless. However, this does not imply that people cannot appraise nonsocial objects via the lens of a social appraisal. For example, people may feel bad about the weather, regard this situation as being unfair, and experience the social emotion of anger based on social appraisal of a non-social world (see also, Parkinson, 1999).

In our view, then, some appraisals are designed to process social information and these appraisals characterize the subset of social emotions. Evidence for this view should therefore be available in theories and findings associated with appraisal theories of emotions. Typically, this type of research seeks to determine the components of appraisal that are characteristic of certain emotions. If the present analysis is correct, some emotions should be seen as (or found to be) more strongly associated with appraisals relating to social factors and processes (e.g., involvement of others and considerations of norms), or that weigh up issues of a social nature. Reviewing appraisal studies also allows us to identify emotions that are not so strongly affected by social considerations (i.e., nonsocial emotions).

Conclusions from such a review are subject to four main caveats: (a) Available definitions may not provide the necessary information for determining whether an appraisal is social; (b) Current appraisal theory and research may not provide comprehensive coverage of all possible

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social and non-social appraisals (Ellsworth, 1994); (c) Appraisals identified in theory and research may have a probabilistic rather than invariant association with the identified emotions (e.g., Parkinson, 1999); and (d) The self-report measures of appraisal and emotion used in most of the research in this area have only indirect relations to the phenomena they purportedly index (e.g., Parkinson, 1997). Nevertheless, an analysis based on current appraisal research can serve as an initial test of the viability of our approach. Even though appraisal research does not cover the full spectrum of existing appraisals and emotions (b, above) and even though the social nature of certain appraisals is not always specified (a, above) or cannot be conclusively determined, our analysis can still help to assess the differential weight of social appraisals for different emotions. In the following section, theory and research relating to nine models of appraisal is reviewed. Each of the analyses reviewed attempted to determine which appraisals serve as antecedents for which emotions. We restricted our review to analyses deriving from models widely cited as appraisal theories (for relevant reviews see e.g., Scherer, Schorr & Johnstone, 2001). Because many of the theories have been successively refined, we focused only on the latest version of each model (only including more than one article by the same theorists if each article specified appraisals associated with different emotions). We also gave precedence to models that were tested empirically in the cited works themselves or in other studies. Nevertheless, to enable a broader coverage of emotions we also included three purely theoretical works. Wherever the examination of a given emotion rests mainly on the theoretical work cited, specific empirical examinations are mentioned to substantiate the links suggested by the theory (where such examinations exist). Maintaining this relatively tight focus allowed us to consider contrasting theoretical perspectives as well as findings gathered using various methodologies (e.g., judgments based on recalled emotion episodes and reported reactions to hypothetical scenarios).

The following studies were selected: Ellsworth and Smith (1988); Frijda (1986); Frijda et al. (1989); Lazarus (1991); Ortony, Clore, and Collins, 1988; Roseman (2001); Scherer (2001); Smith and Ellsworth (1987); and Weiner (1986). Overall these studies and discussions mention over 60 different labels of emotions. For the purposes of this review, we focused on the 21 of these labels that were mentioned by at least two of the papers (or that corresponded to a similar term across at least two papers). Each of the reviewed theories specifies several dimensions of appraisal said to determine the nature of various emotions (for fuller reviews and discussions of appraisal theories see e.g., Omdahl, 1995; Reisenzein & Hofmann, 1993; Scherer, 1999; Scherer et al., 2001). Although the studies mention over 80 appraisals in all, some of the distinctions between them overlap to some extent across different theories.

The first stage of analysis involved assessing which of the appraisals covered by the theory should be considered as social appraisals. By applying the conceptual criteria outlined above to the theorists' descriptions, we classified any appraisal explicitly related to another person or representing a social judgment (i.e., one based on social information, social norms or social conventions) as a social appraisal, yielding 23 apparently social appraisal dimensions (see details below). Some of these appraisal dimensions were quite similar across different theories. For clarity of presentation, we group these appraisals into two general categories (see Table 2): (a) Involvement of self or other: This category includes appraisals that explicitly address the involvement of other people and/or explicitly mention social agency (self or other) reflected in judgments such as responsibility, blame or intention. Some theories refer to cause rather than intention, responsibility or blame (e.g., Roseman, 2001). Because cause (unlike intention, responsibility or blame) requires no reference to relevant social norms, cause-related appraisal was only classified as social if it explicitly mentioned another individual (for a more detailed

Social Emotions <sup>1</sup> discussion of differences between notions related to causality see Weiner, 1995; 2005). Appraisals relating to the following considerations were included: causation by other (Roseman, 2001); other-agency (Ellsworth & Smith, 1988; Frijda et al., 1989; Scherer, 2001; Smith & Ellsworth, 1987); dependence on actions of other agents (Ortony, Clore, & Collins, 1988); intention (Scherer, 2001); intentionality of other or self (Frijda, 1986); "controllability" (conceived as personal responsibility, Weiner, 1986); blame or credit for other or self (Lazarus, 1991); consequences for others (Ortony et al., 1988); effects on someone else (Frijda et al., 1989); effects on other persons and their well-being (Lazarus, 1991); involvement of others' situation (Lazarus, 1991); and relevance to others' fate (Frijda, 1986).

(b) Application of social or moral standards: This category includes any appraisal that refers to social and/or moral standards, or to justice-based considerations, including: value relevance (Frijda, 1986); fairness (Frijda, et al., 1989); moral values, social esteem (Lazarus, 1991); deservingness, person-role expectations (Ortony et al., 1988); normative significance including internalized moral codes, and legitimacy (Smith & Ellsworth, 1987).

In the second stage of the analysis, two issues were addressed for each of the emotions: (1) Whether each theory referred to an appraisal falling in either of the above categories; and (2) whether that particular appraisal was considered by each theory to be important for that particular emotion. Table 2 presents the results of this analysis. We calculated the percentage of the papers specifying appraisals for each emotion that included at least one type of social appraisal in this specification. As Table 2 shows, there is complete consensus that admiration, anger (rage), contempt, envy, gratitude, gloating (schadenfreude), and jealousy are associated with social appraisals among the reviewed papers. Further, guilt, love, shame, pity (compassion) and pride are seen as involving at least one social appraisal by between 70 and 100% of these papers. In

addition, for nine out of these ten emotions, both types of social appraisals were found to be significant by the majority of the studies mentioning that emotion. An intermediate level of agreement among theories (between 66% and 50%) emerged for surprise, hate (dislike) and sadness (sorrow). This indicates that the question concerning the extent to which these emotions are related to social appraisal is unclear or undetermined. Finally, there was again a relative high agreement that disappointment, disgust, frustration, happiness (joy), fear and hope have relatively low relations with the social appraisals considered here. Only between 33% and 13% of the discussions mentioned that a social consideration is associated with these emotions.

Because four of the analyzed emotions (admiration, gratitude, envy and schadenfreude) are discussed mostly only in the theoretical work we cite, we present specific empirical evidence to substantiate the conclusions driven by the analysis in relation with these emotions. Unfortunately, admiration has been rarely studied and thus there is no direct data referring to its specific antecedents. However, some research clearly indicates that admiration has as its object the achievement of another individual (Hareli & Weiner, 2000). Similarly, there are only few studies and discussions concerning gratitude. According to McCullough, Kilpatrick, Emmons and Larson (2001) gratitude is elicited when the individual perceives him/her self as the beneficiary of another person's moral actions. In accord with this idea, Reisenzein and Hofmann (1990) showed that an appraisal that considers the situation as involving positive relationships underlies gratitude. Antecedents of envy, in contrast, were explored in a few studies which also revealed its social nature. For example, Parrott and Smith (1993) found envy to be associated with longing to have what another has and perception of inferiority, and Feather and Sherman (2002) found envy to be linked to perceptions of others' undeserved lot. Schadenfreude was also explored in a few studies that showed it to be linked with judgments of deservingness (Feather, 1989; Feather &

Sherman, 2002). Thus, there are empirical indications that support our conclusions in regard to these four emotions as reflected in our analysis. These studies are not included in our initial analysis as they studied only a few emotions (e.g., McCullough et al., 2001; or because they explicitly considered social appraisals, e.g., Reisenzein & Hofmann, 1990).

This preliminary review suggests that certain emotions are strongly associated with social appraisals whereas others are less so. We further propose that this first class of emotions would be classified as social emotions according to the criteria developed above.

As discussed previously, the present analysis is limited in its ability to assess the suggested distinction between social and nonsocial appraisals and their relationship with particular emotions. However, by considering appraisals whose social nature is reasonably apparent, a relatively consistent picture emerges that provides some support to the proposed view and also offers an initial list of emotions that are strongly determined by such appraisals. The results of the present review also converge with results obtained by Reisenzein and Hofmann (1990). These investigators found that there are specific appraisals explicitly reflecting social aspects of the situation and that these appraisals determine some of the emotions, most of which, classified as social emotions by the present analysis. More specifically, participants in Reisenzein and Hofmann's study reported that some emotion-differentiating attributes explicitly relate to social relationships (e.g., trust vs. distrust, positive vs. negative relationships). These attributes were associated with anger, gratitude, love, pity, jealousy, envy and contempt, all of which count as social emotions according to our criteria too. Thus, despite the differences in the kinds of social appraisal reviewed by Reisenzein and Hofmann and in the present paper, substantial consensus emerged concerning the types of emotions associated with social concerns.

There are some discrepancies between the emotions specified as social emotions in Tables

1 and 2. In particular, Table 2 specifies anger and contempt as strongly associated with social appraisals but only one theory reviewed in Table 1 includes these as social emotions. At least in the case of anger, this can be explained by the tendency to view anger as a basic emotion and therefore as non-social, at least in its rudimentary form (e.g., Izard, 1971). Correspondingly, disappointment and joy, which were considered as social emotions in one account, appeared to have only weak relations with social appraisals according to our analysis.

Despite the discrepancies, the degree of agreement between Table 1 and Table 2 is still relatively high. This is encouraging especially because the tables were derived in quite different ways; appraisal research was not designed to test the social nature of appraisals or emotions; and the views that offer characterizations of social emotions and lists of such emotions are typically not based on appraisal research. However, as acknowledged above, this type of analysis also has its limits. In particular, its results depend on how the social nature of appraisals is determined.

A further limitation is that an emotion's probabilistic association with social appraisals does not necessarily imply that the underlying concern is social. In some cases, relevance to nonsocial concerns may be apprehended by means of apparently social appraisals (e.g., a threat to the non-social concern of safety may be detected on the basis of perceiving other people as deliberately antagonistic). Substantiating dependence on social concerns in such cases may involve demonstrating that the association between the social appraisal and the emotion remains statistically significant even after controlling for other potentially relevant non-social appraisals (such as threats to safety in the example above), or by assessing active concerns more directly.

The present section has proposed a characterization of social emotions based on their associated appraisals and offered some evidence to substantiate this characterization. We now turn to what we view as the major implication of the distinction specified by this characterization.

Social Emotions As mentioned above, we believe that social emotions have a greater impact on social behavior than nonsocial emotions. We now present preliminary evidence to support these claims. Social Emotions Determine Social Behavior

An idea common to many theories is that emotions determine action readiness and behavior (Frijda, 1986; Graham & Weiner, 1991; Weiner, 1985; 1986). Accordingly, it is often suggested that social emotions are specific determinants of social behaviors and that certain specific classes of social behavior are dependent on certain social emotions. Social behaviors are behaviors that have others as their targets (e.g., help or aggression) and/or shape the nature of one's contact with them (e.g., cooperativeness, avoidance). We now briefly review evidence that some of the emotions that we have classified as social (leftmost part of Table 2) are indeed associated with particular social behaviors whereas emotions classified as non-social tend to lead to non-social behavior (rightmost part of Table 2).

Consistent with this claim, pity has been shown to determine help-giving across many different contexts (see e.g., Dooley, 1995; Reisenzein, 1986; Schmidt & Weiner, 1988; Weiner, 1980; 1985; 1995). Shame seems to be associated with the desire to disappear from others' view as well as with actions that signal submissiveness as part of appeasement efforts (e.g., Frijda et al., 1989; Hareli & Eisikovits, 2006; Keltner & Buswell, 1996; Tangney, 1995). Anger and contempt involve the tendency to hurt or antagonize others (Frijda, 1987; Frijda et al., 1989; Roseman, Wiest & Swartz, 1994) or to abstain from helping others when need arises (Weiner, 1985). Guilt often implies apology (Roseman et al., 1994) and other remedial action such as offering compensation (Baumeister, Stillwell & Heatherton, 1994; Hareli, Shomrat & Biger, 2005; Keltner & Buswell, 1996; Keltner & Haidt, 2001; Tangney, 1991). Envy is often associated with reduction in cooperativeness (Parks, Rumble, & Posey, 2002) and jealousy frequently leads

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to aggression (Hansen, 1991; Parker, Low, Walker, & Gamm, 2005). Love is associated with the desire to approach the object of love (Frijda et al., 1989) and pride with showing worthy action or worthy self to others (Mascolo, Fischer & Li, 2003). Thus it seems that most of the emotions that we characterized as social emotions are also associated with a characteristic social behavior<sup>ii</sup>.

In contrast, emotions classified by our analysis as non-social seem to be associated with non-social behaviors and action tendencies. For example, Roseman et al. (1994) found that running away is the most distinctive action tendency associated with fear, and apathy ('feeling like doing nothing') is the most distinctive action tendency associated with sadness. However, in the same study dislike tended to be associated with 'feeling like not associating with someone'. This fits the fact that dislike seemed to be somewhat related to social considerations at least according to some of the appraisal research reviewed above (see Table 2).

These findings support the view that specific social emotions are associated with specific social behaviors. In addition, many emotions that were not associated with any social appraisals according to our review and that would be classified as nonsocial according to our conceptual criteria seem to be associated with behavior that is not necessarily social. Overall, these findings are consistent with the present view. However, our claim that social emotions determine social behavior should not be taken to imply that nonsocial emotions can never affect social behavior. Correspondingly, the idea that specific social emotions are associated with specific social behaviors does not indicate that other social or non-social emotions never affect these same behaviors. For example, although help is closely and reliably associated with pity, guilt can also motivate helping behavior (Carlson & Miller, 1987). Likewise, happiness seems to enhance the tendency to help others (Isen, 1987). Nevertheless, we contend that help is a less typical reaction of guilt and happiness than of pity. Thus, certain social emotions have more direct and consistent

This conclusion also carries implications for the functions of social and nonsocial emotions. Although social functions can be attributed to most emotions (e.g., Keltner & Haidt, 1999; 2001; Parkinson, 1996), only social emotions have distinctive and specific social functions. This idea is consistent with a strict definition of function that considers the most typical consequences of a certain emotion and not the entire set of their possible consequences (Parrott, 1999).

The social-nonsocial distinction and its reflection in behaviors typical of each class of emotion also relates to the difference between communicative and practical functions of emotions. All emotions serve to adjust relations between persons and objects. This may be achieved by practical actions directed specifically towards the object of the emotion, or by influencing other people who may intervene in some way (e.g., by offering practical assistance or emotional support). Our assumption is that nonsocial emotions have no necessary communicative component and need not be oriented to the (actual or imagined) responses of others. For example, although fear may take a social object and although its expression may be a means of recruiting social support, it may also operate as a relatively direct response to a survival relevant object. The communicative aspect of social emotions is not similarly dissociable. Thus, different principles of explanation and different modes of regulation may apply to social and nonsocial emotion.

In this section, we have concluded that emotions identified as social on the basis of their associated appraisals also tend to be associated with social action tendencies. In some ways, this might seem an unsurprising conclusion. According to many theories, the function of appraisal is precisely to activate an appropriate action tendency oriented to the concern to which the appraisal is relevant (e.g., Lazarus, 1991). If the appraisal is a social one, the relevant concern is also likely

to be social and addressing it is also likely to require social action. According to this reasoning, we might equally well have classified emotions as social according to their associated action tendencies and then assessed whether the same emotions relate to social appraisals. However, since appraisals are thought to represent the most direct mechanism for emotion differentiation, it therefore seems as a more appropriate starting point for the classification task. Further because evidence relating to characteristic appraisals is more extensive than that relating to action tendencies, appraisal research provided a more comprehensive basis for our initial characterization. At any rate the correspondence of appraisal and action readiness criteria for demarcating social from non-social emotions provides some convergent evidence for its validity.

# Conclusions

The crucial characteristic of a social emotion is that its primary goal is to serve a social function (see also, Barrett & Nelson-Goens, 1997; Leary, 2000; Parkinson et al., 2005). That is, it works in the service of a social concern. This aspect of social emotions is reflected in the fact that social appraisals play an essential role in social emotions, as our analysis of appraisal research suggests. A review of relevant studies provided considerable support for this view and also suggested a preliminary list of social emotions based on appraisal research. Preliminary evidence supporting our thesis was also derived from studies of the consequences of social emotions, in particular, their determination of social behaviors.

By suggesting this general characterization of social emotions, the present framework complements and extends previous accounts of social emotions. Some of these previous accounts only considered a sub-set of social emotions and were therefore limited in scope (e.g., Barbalet, 1996; Tangney & Fischer, 1995). Other accounts have stressed the social nature of all emotions while ignoring some important differences between emotions concerning the nature and extent of

their relationships with social factors (e.g., Ben-Ze'ev & Oatley, 1996; Parkinson, 1996). Still other views are somewhat fuzzy in characterizing the unique features of these emotions (e.g., Barrett & Campos, 1987; Leary, 2000; Oatley & Johonson-Laird, 1987). Our approach was somewhat different because we considered variations in the nature of concerns characterizing emotions as our conceptual starting point for distinguishing between social and non social emotions. We believe that this is a sounder basis for distinguishing between subtypes of emotions because concerns provide the central criterion for distinguishing the qualities of different emotions (e.g., Frijda, 1986). Any other difference between different emotions is derivative of this more basic distinction. Accordingly, differentiation should be potentially evident in any component associated with concerns (e.g., appraisals, action tendencies). Other potential differences such as in the complexity of a given emotion, its time of appearance in ontogeny or phylogeny or its typical object do not necessarily reflect important differentiates emotions.

Distinctions between other subclasses of emotion might also profitably use concerns as their central differentiating criterion. Many classifications already follow this path by referring to the core evaluations or appraisals that underlie different emotion categories and represent their associated concerns (e.g., Ortony et al., 1988). This is not to say that under certain circumstances or for certain purposes other distinctions are of no value. All that we are suggesting here is that when it comes to distinctions that are based on families of functions that emotions serve (e.g., social vs. non-social), a concern based approach is the right starting point. Such classifications are also more amenable to empirical examination (as our preliminary analysis suggests) than other approaches. For example, the complexity or basicness of different emotions is difficult to test directly. In our view, greater attention to the concerns underlying emotions would be an

Social Emotions important step towards understanding differentiation of emotion classes more generally. To date, such attention has been cursory at best.

Although the present analysis and review yielded support for the proposed distinctions, some limitations and clarifications should be addressed. First, our empirical classification of social emotions was based on findings from appraisal research. None of this research demonstrates more than a probabilistic association between a social appraisal and a corresponding emotion rather than the necessary and intrinsic link proposed by many appraisal theorists. In fact, a substantial proportion of variance in emotion self-reports usually remains unaccounted for by appraisals (Parkinson & Manstead, 1992). Further, there is evidence that some instances of any given emotion may not show the usual appraisal structure (Parkinson, 1999). However, none of the evidence rules out a necessary connection between some appraisals and some emotions (see also below), and appraisal-emotion dissociations may reflect invalid measurement or experimental error, partly arising from the common use of self-report methodology. Such reports may underestimate actual linkages between emotions and unconscious or implicit appraisals (Parkinson, 1995), thus explaining the lack of support for the necessary relation suggested by the present view. In addition, we have suggested that only emotions that are directly linked to social appraisals should be considered social emotions. Nevertheless, non-social emotions are also affected peripherally by social factors and this happens via the mediation of the non-social intrinsic factors associated with non-social emotions. Appraisal research at present is mostly insensitive to expected differences between direct and indirect effects like the ones we have suggested. We expect studies that assess differences in aspects such as reaction time or involvement of brain structures to be more sensitive to such a difference. In particular, we expect that effects of social information on non-social emotions to be

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Social Emotions slower than the effects of social information on social emotions, and we expect that better methodologies will permit the discovery of more reliable (i.e., less variable) relationships between social appraisals and social emotions.

In relation to this issue, there may also be concerns about whether the relationship between social emotions and social appraisals reflects the phenomena themselves or simply the ways in which they are represented by participants (e.g., Parkinson, 1995). By claiming that some emotions are intrinsically based on social appraisals, do we simply mean that the emotion word automatically implies a corresponding social appraisal, or do we also mean that a real emotion occurs whenever a real appraisal of this kind happens? Is the proposed necessary connection between the social appraisal and the social emotion at an empirical or only at a conceptual level (see Parkinson, 1997). Perhaps we simply label our experience in terms of the social emotion in question whenever we believe that a semantically associated social appraisal is present. Such an analysis certainly seems viable when considering a social emotion such as "schadenfreude." Perhaps the psychological content of our experience when we apply this label to what we are feeling is simply pleasure, but we call it schadenfreude because that pleasure happens to have occurred in response to someone else's suffering (cf. Russell, 2003). In this case, the appraisal may be necessarily related to the representation of "schadenfreude" but not to the emotion we are actually experiencing. In our view, some of the words that we use to describe emotions do carry strong connotations about associated appraisals while others are more experience-focused and open to alternative modes of causation. The upshot is that some of the apparent psychological conditions or processes that we have classified as social emotions may turn out to be artifacts of our contemporary linguistic categories. However, while this may be true for certain emotion labels such as "schadenfreude," we believe that it is unlikely to hold for the entire set of human

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emotions. After all, representations of emotions cannot be totally detached from the real phenomena that they represent (although they may have some degree of bias). Accordingly, we believe that there are emotion syndromes that have an independently verifiable status as social emotions even when non-self-report evidence is used.

A related issue concerns whether it is better to determine the sociality of emotions at the level of individual instances or by reference to currently available emotion categories, as we have done here. Perhaps not all of the emotion exemplars commonly allocated to our categories of social emotion involve social appraisals or relate to social concerns. For example, Parkinson (1999; Parkinson, Roper, & Simons, in press) found that participants sometimes labeled their experience as "anger" even when in the absence of reported other-accountability appraisal and when the object of the emotion was apparently not being treated as a social agent. According to our criteria, this finding either implies that reports of appraisal and emotion were inaccurate, or that "anger" should not be seen as a social emotion. Alternatively, it may become necessary to abandon or revise some of our existing emotion categories if they do not map meaningfully onto conceptually coherent and empirically specifiable domains. Finally, given that our analysis is based on the idea that there is a close relation between appraisals and concerns so that a social appraisal weighs the relevance of events to social concerns, it will be of value in future research to test this idea more closely.

Considering these reservations and the provisional nature of our analysis, future research should address the assumptions underlying the suggested view more directly, and should consider other emotions (or emotion labels) not included in the present analysis. More attention also needs to be given to additional factors that may be characteristic of social emotions (e.g., intentional objects, facial movements, neural activity, others' responses etc). The results of such research may lead to modifications to our preliminary analysis. Nevertheless, we believe that our general approach to characterizing social emotions based on the social or non-social nature of their underlying concerns is promising and that our initial characterization can be refined in productive ways. We believe that all emotions are sometimes social, but some are social by their very existence and hence more consistently social than others. Identifying the characteristics of the latter category permits more intensive examination of what underlies these differences.

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Table 1: Emotion Labels Explicitly Considered by Different Authors as Representing Social Emotions

<u>Author</u>	admiration	anger	arrogance	bitterness	confidence	contempt	delight	depression	disappointment	dislike	distaste	embarrassment	envy	* fago	flirtatiousness	gratitude	grief	Guilt	hatred	horror	hurt feelings	jealousy	joy	like	loathing	loneliness	love	loyalty	pity	pride	Respect	scorn	schadenfreude	shame	sexual love	social anxiety	social sadness	sympathy	trust	vengefulness
(1)																																								
(2)																																								
(3)																																								
(4)																																								
(5)																		$\checkmark$																						
(6)																																								
(7)																																								
(8)																																								$\checkmark$
(9)																																								
(10)																											$\checkmark$		$\checkmark$											

Authors key: (1) Adolphs, Baron Cohen & Tranel, 2002; (2) Barbalet, 1996; (3) Barrett & Campos, 1987 (4); Barrett and Nelson-Goens, 1997; (5) Buck, 1999; (6) Hareli & Weiner, 2002; (7) Leary, 2000; (8) Oatley & Johnson-Laird, 1987; (9) Parkinson, Fischer & Manstead, 2005; (10) Goddard, 1996.

\* Note: fago is an Ifaluk word denoting a combination of compassion, love and sadness.

Social appraisal							Cons	sidera	ation (	of oth	er's i	nvolve	ement	t or ag	gency						
Author	Admiration	Anger / Rage	Envy	Gratitude	Gloating / Schadenfreude	Jealousy	Guilt	Contempt	Shame	Pity / Compassion	Pride	Love	Surprise	Hate / Dislike	Sadness / Sorrow	Happiness / joy	Disappointment	Disgust	Frustration	Fear	Hope
Ellsworth & Smith (1988)		_	_	_	_	_	_	_	_	_	_	V	V	_	_	_	_	_	_	_	N
Frijda (1986)			_	_		_		Ν	_			Ň	_	N	Ν	Ν	$\checkmark$			Ν	N
Frijda, et al (1989)	_	Ň	-	-	_		Ň			_	Ň			-			Ň	Ň	_	N	N
Lazarus (1991)	$\checkmark$	Ń		-		Ń	Ń		Ń		N	V	_		N	N	_	N	-	N	N
Ortony et al (1988)	$\checkmark$			$\checkmark$					N		N	N	-	N	Ν	N	Ν	N	Ν	N	Ν
Roseman (2001)	-		-	-	-	-	Ν		Ν	Ν	Ν		Ν		-	Ν	-	Ν	Ν	Ν	Ν
Scherer (2001)	-		-	-	-	-	Ν			-	Ν	-	-	-	Ν		-	Ν	-	Ν	-
Smith & Ellsworth (1987)	-		-	-	-	-	Ν	-	-	-	-	-	-	-	-	Ν	-	-	-	Ν	Ν
Weiner (1986)	-	$\checkmark$	-	$\checkmark$	-	-	$\checkmark$	-	$\checkmark$		Ν	-	-	-	Ν	Ν	-	-	-	-	Ν
Social appraisal	Consideration of social or moral standards																				
Frijda (1986)		N	-	_	N	_		N	_	N	Ν	N	N	N	N	-	N	N	N	N	Ν
Frijda, et al (1989)	_			_	_	Ν	Ň		Ν	_			N	-	N		N	N	_	N	N
Lazarus (1991)	Ν	Ň	Ń	-	Ν	N	N	Ň	N	Ν	V	N	_	Ν		N	-	N	-	N	N
Ortony et al (1988)			_									N	-	N	N	N	Ν	N	Ν	N	N
Scherer (2001)	-		-	-	_	_				-		-	-	-		N	-	N	-	N	-
Smith & Ellsworth (1987)	-	$\checkmark$	-	-	-	-	$\checkmark$	-	-	-	-	-	-	-	-	$\checkmark$	-	-	-	$\checkmark$	$\checkmark$
% of theories mentioning the emotion that suggest involvement of one or more social appraisals	100	100	100	100	100	100	88	83	83	80	71	67	67	50	50	38	33	33	33	14	13

Table 2: Percentage of theories and studies in appraisal literature indicating a relation between social appraisals and specific emotions.

Note: - Emotion not considered by the work;  $\sqrt{At}$  least one social appraisal of that type was specified for the emotion by the work

N The respective type of social appraisal was not mentioned as linked to this emotion by the work Underlined emotions are discussed only in theoretical work presented in the analysis Emotions are ordered on the basis of how often they were seen as specified by a social appraisal.

## Footnotes

i

Our formulation of social appraisal should not be confused with Manstead and Fischer's (2001). Those authors consider social appraisal as a process in which people take into account other people's reactions to the emotional event when arriving at their own appraisals. In our terms, this referencing information is just one source of social information that may be processed either by a social or nonsocial appraisal.

Two exceptions are admiration and schadenfreude. However, the apparent lack of
 evidence for the hypothesis that these emotion are similarly associated with specific social
 behaviors or action tendencies may simply reflect the relative paucity of research into
 their effects and consequences.