

Feeling like a group member

Social identity, group-based appraisals, and group-based emotions

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Introduction

The general idea developed in this thesis is that emotions can not only be individual, but also group-based. We define group-based emotions as emotional reactions to group concerns (and individual emotions as reactions to individual concerns). In order to gather support for this idea, we will argue in the following theoretical chapters that

(1) people belong to groups because they depend on the group for certain advantages and therefore should be sensitive to the group's position to the extent that the group is important to them

(2) the most fundamental characteristic of individual emotions is that they result from an appraisal of the environment in light of the individual's concerns and that their function is to motivate adaptive behaviour

(3) the combination of these two ideas suggests that there is a process of group-based emotional appraisal in which people appraise the environment in lights of the group's concerns, i.e. people make group-based appraisals and feel group-based emotions.

The first chapter deals with group belonging, social identity, and intergroup relations. We start by spelling out the reasons why humans belong to groups, and the psychological consequences this has. The most important idea we develop in this chapter is that social identity is the psychological mechanism that allows individuals to function as group members and protect group interests when this is likely to be beneficial to them.

In the second chapter we discuss (individual) emotions. We present the general framework of appraisal theories of emotions and subscribe to their viewpoint that emotions evolved as a general motivational mechanism that leads to behaviour that is both flexible and adaptive.

The third chapter combines the basic ideas of the first two chapters and presents a theory of group-based emotions, defined as emotional reactions to group concerns. We highlight the theoretically central place of group-based appraisals and review the treatment of group-based appraisal in existing theory and research. We conclude that group-based appraisal has not received the attention it deserves, being the central concept in group-based emotion. We then formulate the research questions that will guide our empirical efforts in the subsequent chapters. All research is concerned with the role of group-based appraisal in group-based emotion.

In chapter 4, we criticize recent work on chronic group emotions (E. R. Smith, Seger, & Mackie, 2007). These chronic group emotions have been conceptualized as group-based emotions, but we propose that they are emotions about belonging to a group.

Chapter 5 presents three studies that test the hypothesis that changing social identity salience affects group-based emotions and that this effect is mediated by a change in group-based appraisals. Chapter 6 builds upon the results of chapter 5 by using a more ecologically valid manipulation of social identity salience as well as an open-ended measure of group-based appraisals.

The seventh chapter contains two studies that have used a novel way of testing whether group-based emotions are stronger when the group is more important to the individual. In previous research on group-based emotions, the importance of the group is represented by the concept of social identification and there is evidence that identification is indeed correlated with group-based emotions. In contrast, we experimentally increase the importance of the group by inducing feelings of social exclusion and then measure people's emotional reactions to group versus individual concerns. We thus manipulate both the importance of the group and the level of the appraisal process.

In chapter 8, we investigate whether there are groups that have a particularly strong association with one particular type of appraisals and emotions. Specifically, we test whether anger is more strongly related to ethnic groups than to gender groups.

In chapter 9, the general discussion, we explore some consequences of giving group-based appraisal a central role in group-based emotion. Specifically, we discuss classifications of group-level emotions, ways to measure group-based emotions, the adaptive nature of group-based emotions, and how our research on group-based emotions might inform attempts to change group-based emotions and intergroup relations. We end with an overview of limitations and future directions.

Finally, the appendix presents the details of the statistical model that was used to analyze the data of chapter seven. It constitutes an adaptation of multilevel analysis for multivariate data. More generally, the appendix discusses advantages and pitfalls of using multilevel analysis for within-subjects designs.

Chapter 1. Group belonging and social identity: Old wine in new bottles

In this chapter we introduce groups and we focus on psychological factors of group belonging and intergroup relations, hereby mainly relying on the social identity perspective. In this dissertation, we define a group as a collection of individuals that see themselves as members of the same social category, when that group or category is recognized by at least one other person (Brown, 2000). Our main goal in this chapter is to argue for the importance of the material (i.e. instrumental, referring to resources) dimension in social identity and intergroup relations. First we present theories on intergroup bias and intergroup relations to illustrate that there are large differences between them in the amount of attention that is given to the material dimension. We then take a functional perspective on group belonging and explain how this logically leads to an emphasis on material issues. The heart of this chapter will be our discussion on how the social identity concept integrates psychological with material factors in intergroup relations. Finally, we argue for the primacy of the material dimension over merely cognitive or psychological dimensions in real-world intergroup relations.

1.1. The role of conflicts for resources in intergroup relations

Theories on intergroup relations differ substantially in how much attention they give to the role of group interests and conflicts for resources in shaping intergroup attitudes and behaviour. On the one extreme, *realistic conflict theory* (RCT, Sherif, 1966) states that intergroup attitudes and behaviour are a direct consequence of the material dimension of intergroup relations, and that they reflect the objective interests of the group. Groups that have incompatible goals will be in competition and will develop negative attitudes about each other and positive attitudes toward their own group. Groups that have compatible or superordinate goals will not be in conflict and will think positively about each other, in the interest of between-group cooperation. There is indeed plenty of evidence for the role of conflicts for resources and intergroup threats in shaping intergroup attitudes and behaviour, independently of whether the conflict is real or perceived (Esses, Jackson, Dovidio, & Hodson, 2005; Meuleman, Davidov, & Billiet, 2009; Quillian, 1995; Riek, Mania, & Gaertner, 2006; Sherif, Harvey, White, Hood, & Sherif, 1961; Stephan & Stephan, 2000). One example of real intergroup conflict impacting on intergroup attitudes is the Robber's Cave experiment in which researchers imposed incompatible or compatible goals on groups of boys participating in a summer camp (Sherif, et al., 1961). Incompatible goals (i.e., intergroup conflict) led to

very negative attitudes toward the out-group, whereas compatible goals led to more benevolent intergroup attitudes.

On the other extreme of the spectrum, there are many theories that appear to see intergroup attitudes and behaviour as a sort of “accident”, a mere by-product of certain cognitive or motivational mechanisms that just happen to exist. These theories exclusively study psychological mechanisms as causes of intergroup behaviour, and do not discuss material aspects. One example of such theories is *optimal distinctiveness theory* (Brewer, 1991). Brewer proposes that humans have two opposing needs. On the one hand, individuals need to belong and thus strive for inclusion in groups. On the other hand, individuals are motivated to feel different from others. According to optimal distinctiveness theory, individuals will identify with groups that “optimize” between these opposing needs (groups that are neither too large nor too small). One finding that could be seen as consistent with this reasoning is the fact that people prefer to belong to minority groups because they better satisfy the need for distinctiveness (Brewer, 1991; Leonardelli & Brewer, 2001), at least in matters of taste (Spears, Ellemers, & Doosje, 2009). Another example of such non-material theories is *uncertainty reduction theory* (Hogg, 2000), which predicts that people identify more strongly with groups when they are feeling uncertain. This uncertainty can be about cognition, perceptions, feelings, or behaviours and its importance derives from the fact that it touches upon individuals’ confidence in their sense of self. Self-categorization as a group member (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) is an efficient way to reduce subjective uncertainty to the extent that the group offers a clear and consensual group prototype that contains guidelines for beliefs and behaviour. Research indeed confirms the effect of uncertainty manipulations on group identification (Hogg, 2000). For example, people identify more with the group and discriminate out-groups more when the allocation task they had to perform was novel rather than familiar, or when they had to judge ambiguous rather than obvious pictures (Grieve & Hogg, 1999). Moreover, the effect of uncertainty on identification is stronger for highly entitative groups (Hogg, Sherman, Dierselhuis, Maitner, & Moffitt, 2007). A third example, and somewhat similar to uncertainty reduction theory, is *terror management theory* (Greenberg, Solomon, & Pyszczynski, 1997). According to this perspective, there is a risk that people live in constant terror because they are capable of realizing that their own death is inevitable. Because this terror may undermine normal functioning, people supposedly use strategies to manage the prospect of their own death. Belonging to groups and adhering to their cultural worldviews buffers against terrorizing death-related thoughts because they grant the individual symbolic immortality. Indeed, mortality salience increases in-group bias in minimal groups (Harmon-Jones, Greenberg,

Solomon, & Simon, 1996), but terror management theory has also received well-founded criticism (e.g., Navarrete, Kurzban, Fessler, & Kirkpatrick, 2004).

Given that there is clear evidence for the role of (material) group interests and psychological factors (for a review, see Yzerbyt & Demoulin, 2010), we do not question the value of either contribution for the understanding of intergroup relations. However, given the evidence for both approaches, both theories that *only* discuss real group interests as well as theories that *only* consider psychological aspects of intergroup relations can arguably be called limited in scope or even reductionist. Of course, not all approaches in social psychology have chosen one or the other extreme. We will argue below that the social identity perspective (Tajfel & Turner, 1979; Turner, et al., 1987) offers the basis for a more comprehensive approach that integrates both material and psychological aspects. We propose that social identity is a psychological mechanism whose function is to protect group-based interests. That will constitute the main point of this chapter. First, however, we present a functional view on group belonging, as we believe that a functional point of view is an important building block of any integrative theory. We believe that a broad theoretical framework is helpful in asking the right questions, and also provides a better chance of constructing cumulative knowledge. Therefore, we start with a simple question.

1.2. Group belonging

Why do humans live in groups? The fact that we live in groups is so obvious to us that we might forget to ask the question. Group living and especially the large amount of complex within-group cooperation of self-conscious individuals is one of the most salient characteristics of humans in comparison with other species. In order to understand group and intergroup behaviour, it is important to understand why people live in groups, and which psychological consequences this has.

Let us start at the beginning. Among extant nonhuman primate species, the primary function¹ of living in a group is protection against predation (Dunbar, 1988; Hill & Lee, 1998; Van Schaik, 1983). Nonhuman primates live in groups because living alone puts them at risk of being attacked by a predator. Group living in humans is much more complex and organized than in nonhuman primates. What is most striking about humans is the extraordinary level of cooperation that can be observed in human groups, and the fact that this cooperation is not limited to kin. It is clear that human groups provide much more benefits than mere protection

¹ “Function” here refers to the evolutionary or ultimate function, i.e., the advantage of a trait or behaviour in terms of survival and/or reproduction (or, more precisely, gene replication).

against predation. People depend on or use groups to fulfil a large number of needs. Even in the most primitive societies, these involve childcare, looking for food, defence against other groups, and intense cooperation to solve ecological and social challenges. Importantly, these cooperation-related advantages can sometimes also be provided by subgroups (or coalitions) within a larger group.

If the group offers important advantages to individual group members, this can be expected to have far-reaching consequences for human psychology and behaviour. If group living is advantageous, humans need to adapt their psychology to group living, because this will allow them to reap more benefits of group living². This is a crucial point, but in order to move beyond the general statement that “the group is important to humans”, we list in the following paragraphs what we think are the most important changes in opportunities and threats that follow from the fact that group living is adaptive for individuals.

First, if the individual ‘uses’ the group for certain resources, this means that the individual depends to some extent on the strength and viability of the group. If the group falls apart or stops functioning well, this might endanger the crucial advantages that individuals enjoy (see also Cottrell & Neuberg, 2005; Neuberg & Cottrell, 2003). We should thus expect group members to be sensitive to the group’s concerns. These group concerns include issues of cooperation or conflict with other groups.

Second, the more functions the group fulfils for the individual and the more intense within-group cooperation is, the more the individual should care about the group’s well-being (because more is at stake). As a consequence, people will care more about some groups or subgroups than about others.

Third, group living introduces within-group competition for food and other resources. For example, increasing group size leads to stronger within-group competition for food in nonhuman primates (Dunbar, 1988; Van Schaik, 1983). Living in a group can thus also have drawbacks. Starting very early on in our evolutionary history, we have thus been confronted with both advantages and disadvantages of group living. We should therefore not expect that people will want to join any group or act on behalf of the group all of the time.

Fourth, and related to the previous point, the proximity of other group members is not only a source of conflict, but transforms the others into possible resources. Individuals can use other group members as social tools to reach their goals. Without group living, there is no

² Caporael and Brewer (Brewer & Caporael, 2006; Caporael, 1997; Caporael & Brewer, 1990) have argued a similar point. However, they have not developed this idea further, and their rejection of the idea that traits like in-group altruism and group attachment can evolve by natural selection acting on genes puts them at odds with the entire fields of evolutionary biology (see e.g., Dawkins, 1999) and evolutionary psychology (Dunbar & Barrett, 2007; Sober & Wilson, 1998).

social influence, manipulation, forming of coalitions, or leadership. We can summarize these four consequences of group living by stating that, if group living is more advantageous than living alone, social groups become an important part of the selective environment, the ecological niche to which individuals have to adapt. This means that those individuals who adapt best to group living or who can take most advantage of it will have a selective advantage over others (and will thus survive and/or reproduce more, which results in natural selection of the advantageous traits). Related to this idea, we will argue in the next chapter that the rich emotional life of mammals but especially humans is likely to be an adaption to the complexities of a constantly changing *social* environment. For the remainder of this chapter, we concentrate on the first three points, i.e., that if people depend on the group, they should be sensitive to group concerns, but not the concerns of any group and that they should not unconditionally act on behalf of the group. These points are integrated in the concept of social identity.

1.3. Social identity: A functional perspective

While the functional questions we have just discussed provide an important theoretical background, this dissertation focuses on psychological mechanisms. Taking into account that (1) humans show remarkable within-group cooperation, depend strongly on the group, and thus should be sensitive to group concerns, and (2) group living has both advantages and disadvantages and thus individuals should not always be expected to act as group members unconditionally (and not on behalf of any group), individuals thus need a cognitive mechanism that allows them to switch between taking an individual or a group-based position, as both are likely to be important but in different circumstances. This mechanism basically allows individuals to act as group members when this is most beneficial. Moreover, large groups offer the possibility for building and changing coalitions according to differing opportunities, which adds extra complexity as individuals can shift from one coalition to another.

Two basic predictions follow from this functional point of view. First, the extent to which individuals take the group's perspective should depend on how important the group is to the individual. Individuals should not be expected to make great efforts for a group that is not very important to them. Second, taking the group's perspective should depend on relevant characteristics of the environment that indicate the need for and/or possible success of such a strategy. The central proposition of this chapter is that the concept of *social identity* represents the way in which individuals sometimes take the group's point of view. As will become clear,

the social identity approach has addressed the two issues we just mentioned (with the role of identification and social-structural variables, respectively). We will now give a short overview of the social identity perspective and discuss it in the light of the functional considerations we have developed so far.

1.3.1. Social identity theory

The social identity approach in social psychology refers to both social identity theory and self-categorization theory. Parts of *social identity theory* (SIT, Tajfel, 1981; Tajfel & Turner, 1986) first arose out of the desire to explain the results of minimal group experiments in the late 1960s and early 1970s (Tajfel, Billig, Bundy, & Flament, 1971). With the well-known minimal group experiments, Tajfel wanted to look for the minimal conditions necessary to produce intergroup discrimination. Minimal group studies showed that even when group membership was arbitrary and meaningless and in the absence of face-to-face interaction and intergroup conflict, individuals discriminated by allocating more money to anonymous in-group members than to anonymous out-group members (even if this meant that the in-group would get less in absolute terms). To explain this, SIT introduced the concept of *social identity*, which can be defined as “that part of an individual’s self-concept which derives from his [sic] knowledge of his [sic] membership of a social group (or groups) together with the value and emotional significance attached to that membership” (Tajfel, 1981, p. 255). SIT proposes that social comparison processes can occur at the group level and that social identity can thus have positive or negative value. People can derive positive self-esteem from their social identity if their in-group can be compared favourably to an out-group. Following this reasoning, discrimination in the minimal group situation serves to create positive intergroup differentiation and to increase self-esteem through a positive social identity. Consequently, the motivation behind discrimination in minimal groups is the desire for positive self-esteem (but see Spears, Jetten, Scheepers, & Cihangir, 2009 for a discussion of this issue).

One qualification of the results of the minimal group studies is that in-group bias only occurs in certain specific situations. For example, people often choose to benefit themselves personally when they are given the opportunity (e.g. Turner, 1975). Such shifts between personal and group-based motivation are interesting because the SIT that further developed out of this line of research describes the conditions in which people will act as individuals or as group members. Tajfel and Turner (1986) called this the interpersonal-intergroup continuum. They assert that this distinction is needed to explain why there is no one-to-one

relation between real group conflicts and intergroup behaviour, which according to them is a shortcoming of realistic conflict theory (RCT, Sherif, 1966). In fact, Tajfel and Turner (1986) clearly formulated SIT as an addition to RCT. RCT is unable to explain why intergroup discrimination exists in situations where there is no real material conflict between groups (such as in the minimal group experiments), or why some situations of marked material inequality do not lead to intergroup conflict. The psychological mechanisms of SIT are proposed to fill this gap. For example, sometimes in-group bias serves merely to positively differentiate the in-group from the out-group, without this having any material causes or consequences, and this can be explained by SIT but not by RCT. Note that this is the distinction between material and psychological factors that we started the chapter with. We will come back to this issue later.

Tajfel and Turner (1986) then applied SIT's psychological theory of positive differentiation to natural intergroup conflicts. They argue that a subordinate group position (which in SIT is not limited to material dimensions such as power or wealth) can motivate group members to collectively change the social situation, but only when some conditions are met. First, group members need to identify with their group, i.e., the group must be sufficiently important to them. Second, the dominant group must be a relevant comparison group (on a relevant dimension of comparison). In other words, members of the subordinate group must believe that the dominant group is sufficiently similar to them so as to make social comparison possible. One situation where this would not be the case is when there is a consensual and unchallenged ideology that justifies the existing status differences.

Tajfel and Turner (1986) also stress the importance of social structural variables in determining whether social change is likely to be sought. If group boundaries are *permeable*, members of the subordinate group will often choose a strategy of individual social mobility instead of collective social change (social mobility is at one extreme end of the interpersonal-intergroup continuum while social change is at the other end). Indeed, experimentally created impermeable boundaries between high status and low status positions lead people in low status positions to prefer more collective forms of action but collective action becomes much less likely even with minimally permeable boundaries (Boen & Vanbeselaere, 1998; Reynolds, Oakes, Haslam, Nolan, & Dolnik, 2000; Vanbeselaere, Boen, & Smeesters, 2003; Wright, Taylor, & Moghaddam, 1990). In the impermeability condition, collective action is even stronger when social identity is made salient (Lalonde & Silverman, 1994).

The security of intergroup status relations is also an important structural variable. If status differences are illegitimate or unstable, social identity is *insecure* and this can lead to the availability of cognitive alternatives for the current status relations. Without these

cognitive alternatives, individuals can not conceive of an alternative situation in which there is a better position for their in-group, and thus a collective strategy of social competition is not possible.

The important point to remember about the role of social-structural variables is that social identity is sensitive to contextual variables and can be flexibly activated depending on circumstances that influence the likely success of individual versus social change strategies. While it is the psychological mechanism of striving for positive in-group differentiation that is the proximate cause of seeking social change, it becomes clear that social identity closely follows the opportunities and threats present in the material dimension of intergroup relations. This is an important indication that objective and subjective dimensions are fundamentally intertwined.

We want to end this section on SIT with a few words about *self-esteem*. The need for positive self-esteem is a basic motivational factor in SIT (Tajfel & Turner, 1986). This of course raises the question of why people strive for positive self-esteem and, crucial for our reasoning here, why people care about having a positive *social* identity in the first place. Of all the things in the world that people could possibly care about, they feel good when they belong to a group that positively differentiates itself, a “better” group. However normal or natural this might seem to us, it is neither obvious nor trivial. We think that the motivation for positive social identity and self-esteem is ultimately linked to the fact that positive social identity means that one is doing well in attaining important goals. This of course goes back to our conviction that social groups provide important benefits to people, and that belonging to a good group thus means that one is likely to reap those benefits. This view is consistent with similar functional conceptualizations of happiness in appraisal theories (Lazarus, 1991, see also chapter 2) and in the literature on mood and information processing (Bless et al., 1996; Schwarz, 1990).

1.3.2. Self-categorization theory

Continuing the social identity approach, self-categorization theory (SCT, Turner, et al., 1987) further developed the interpersonal-intergroup continuum and puts more emphasis on the general mechanism behind social identity processes. More specifically, SCT aims to predict in which situation people define themselves as individuals or as members of one particular group. SCT is thus a more general and more cognitive theory than SIT. Self-categorization can occur at different levels of inclusiveness – from the personal level to the level of the whole human species. The salience of a particular self-categorization is predicted

by an interaction between the accessibility of that self-category and the fit between the category and the reality. *Accessibility* is the readiness of a person to use a particular self-category and this depends on a large number of factors such as identification with the group, past experience, and current motives, values, goals, and needs (Turner, 1987, 1999). Fit consists of comparative fit and normative fit. *Comparative fit* is determined by meta-contrast, the ratio of inter-category to intra-category differences. The larger the inter-category differences in comparison to the intra-category differences, the more likely it is that the category will be used as the basis for a self-categorization in the given situation. *Normative fit* refers to whether the observed inter-category differences are consistent with our normative beliefs about the categories. For example, when in an ongoing group discussion on sexism all women are defending a typically female point of view, women are more likely to self-categorize as women than when women defend atypical positions.

The main consequence of self-categorization in terms of a social identity is that individual self-perception becomes depersonalized (Turner, 1987). People perceive themselves as interchangeable group members instead of as unique individuals. They see more similarities between themselves and other in-group members and more differences between themselves and out-group members. Depersonalization is a process of self-stereotyping on dimensions that are important to the relevant social identity. Furthermore, the salient social identity depersonalizes self-interest into group interests and leads to an expectation of similarity in opinions and goals, and cooperation within the group. To illustrate with an example, employees of an Italian construction company rated themselves as more similar to their fellow employees in terms of work-related behaviour when their company's relation to a competing organization had been made salient, in comparison with a situation in which the ratings occurred in an intragroup rather than an intergroup context. This depersonalization in turn predicted in-group bias and turnover intentions (Voci, 2006).

Because people belong to many groups and the salient self-categorization is determined by a large number of individual and contextual factors, self-categorization is a very dynamic and context-dependent process. This flexibility is necessary given the complex organisation of human social groups and the fact that alliances and coalitions can change quickly (Cosmides, Tooby, & Kurzban, 2003; Kurzban, Tooby, & Cosmides, 2001; Van Bavel & Cunningham, 2009).

In this section so far we have described the social identity approach to intergroup relations. We want to emphasize a few important aspects before we move on. First, different social identities can be activated depending on which is the most relevant in the current circumstances, and this leads individuals to include themselves psychologically in the group

(SCT). Second, personal identity and social identity are two aspects of the self that are linked to interpersonal and intergroup behaviour respectively. The choice for one or the other depends on a series of social structural variables such as permeability of group boundaries and security of status relations (SIT). Finally, identification with the group also influences self-categorization because it indicates how important the group is to the individual, and more important self-categorizations will be activated more easily. In sum, social identity can be flexibly activated in what seems to be a functional way of dealing with social reality. We will now link this to what we said earlier about group belonging and the functions of group living and argue that social identity is the psychological mechanism that serves to protect material group interests that are important to the individual.

1.3.3. Social identity facilitates the protection of group interests

We propose that social identity is the psychological mechanism that enables a group-based response in situations where this is likely to be beneficial and that ultimately this is a consequence of the importance of the group to the individual. Given the benefits of a strong, well-functioning group, individuals must have evolved a way of dealing with intergroup situations. We conjecture that social identity is one of the psychological adaptations that humans have to optimize behaviour in intergroup situations. In other words, the ultimate function of social identity is to be found in material consequences it has for the individual. In fact, this interpretation is not so far removed from the original formulation of SIT. Tajfel and Turner (1986) wrote:

None of the arguments outlined in this chapter must be understood as implying that the social-psychological or "subjective" type of conflict is being considered here as having priority or a more important causal function in social reality than the "objective" determinants of social conflict of which the basic analysis must be sought in the social, economic, political, and historical structure of a society. (p. 23)

Tajfel and Turner (1986) clearly saw material ("objective") and psychological ("subjective") factors as fundamentally intertwined. A bit later, they add that the social-psychological factors discussed in SIT "may also acquire, in turn, an *autonomous* function that enables them to deflect in one direction or another the subsequent functioning of these processes" (Tajfel & Turner, 1986, p. 23, emphasis in original). Here, Tajfel and Turner even seem to suggest that the autonomous function of the psychological social identity mechanism is only secondary to the more objective, instrumental function. Whether secondary or not, we

agree with their point that objective and subjective conflicts will often be related to each other in real-world situations. In fact, for social identity to be even moderately adaptive to the individual, it is necessary that it tracks real interests quite well. A psychological mechanism that is completely at odds with reality would not be very helpful.³

The material function of social identity is not only compatible with original formulations of SIT, but also with recent developments in SIT, a point to which we turn now. A very interesting line of research on different types of conflict and the function of social identity and in-group bias is the work by Scheepers and colleagues (Scheepers, Spears, Doosje, & Manstead, 2002, 2003, 2006a, 2006b). These authors address the distinction between instrumental and identity functions of in-group bias. The *instrumental function* has to do with attaining certain material goals, for example social change. Clearly, this idea has its roots in RCT and in the objective conflicts mentioned by Tajfel and Turner (1986). The *identity function* refers to either creating or expressing a positive and distinct social identity. This identity function has its roots in the social identity tradition that we have just described. We can illustrate the two functions with a study on football supporters (Scheepers, et al., 2003). Highly identified fans prefer to sing identity-confirming chants after their team has scored (identity function), but chants that pep up the team when the other team scores (instrumental function). The basic idea of Scheepers and colleagues (Scheepers, et al., 2002, 2003, 2006a, 2006b) is that both functions are important, but that they are relevant in different situations. The identity creation function⁴ is likely to be relevant in empty intergroup situations in which there is merely a need for certainty or meaning. Minimal group situations constitute an extreme example of such empty situations. The instrumental function is more relevant to situations of realistic conflict over material resources.

Several studies show the relations between the different functions. Scheepers and colleagues (Scheepers, et al., 2002) found evidence for both the instrumental and the identity function of in-group bias. Interestingly, the instrumental function of in-group bias only

³ The fact that social identity has autonomous functions (like, for example, in minimal group situations) is not inconsistent with our contention that social identity's primary function results from its relation with a more material dimension. That a psychological mechanism has an ultimate function of protecting (objective, instrumental) group-based interests does not mean that it can not sometimes have proximate functions not related to material issues. Indeed, evolution does not lead to perfection and many evolved adaptations have side-effects that are selectively neutral or even maladaptive. The evolution of the teddy bear can be a case in point. The facial structure of teddy bears has evolved from bearlike forms in the early 1900s to faces that bear (no pun intended) much resemblance to baby faces (Hinde & Barden, 1985). The most likely explanation is that this is because the adults that buy teddy bears are attracted by facial features of baby faces. This preference apparently led to an evolution of the teddy bear, although it is clear that the preference for baby-like faces has originally evolved for a quite different task (i.e., nurturing and bonding with a child).

⁴ We leave aside here the *identity expression* function because it is the consequence of having high status and is thus arguably also linked to a more material dimension of intergroup relations (e.g., as in Scheepers, et al., 2003).

showed up when social identity had been previously established. In this experiment (that used minimal groups) this was achieved by creating the opportunity for participants to use ingroup bias for identity creation. For minimal groups that had not been given the opportunity for identity creation in the first phase, there were no signs of the instrumental function of ingroup bias in the second phase. This research therefore shows that chronologically, the identity creation function comes before the instrumental function.

Most importantly, this line of research (for a review, see Scheepers, et al., 2006b) shows that instrumental and identity concerns are relevant in different contexts, but that they are in no way incompatible with each other. For our goal here, it is interesting to consider which function is likely to be more important in the real world. The opportunity for identity creation functions is easy to create in the lab (e.g., minimal groups), but how prevalent is this kind of situation in real-world intergroup situations? The minimal group paradigm is an interesting tool to investigate psychological mechanisms, but this kind of groups hardly exists outside of the laboratory. Situations where the identity creation function is relevant are probably rare (but see also Spears, Jetten, et al., 2009). One does not develop new group memberships every day. Most natural group and inter-group behaviour occurs on behalf of established groups with a long history. We emphasize this point because it shows that although recent developments in the social identity tradition have focused on cognitive factors and the identity creation function (Brewer, 1991; Hogg, 2000), there are good reasons to think that the instrumental function has more consequences for real-world intergroup relations.

In the beginning of this chapter we mentioned theories of intergroup relations that focus exclusively on either the material or the psychological dimension of intergroup relations. We have discussed how the social identity concept can be the basis for an integrative approach. We conclude that social identity is a psychological mechanism whose function is to protect group interests, but that in some circumstances (that are probably rarer in real-world group conflicts than in the situations we create for experimental research) social identity clearly has autonomous effects not linked to material or instrumental issues.

After its original conception in the 1970s, the social identity approach has become increasingly cognitive. SCT had a more cognitive focus than SIT. This is evident from its focus on subjective stereotyping of the self, social influence, and concepts such as fit and meta-contrast ratio. Moreover, we have just discussed that other developments within the social identity approach, such as optimal distinctiveness theory (Brewer, 1991) and uncertainty reduction theory (Hogg, 2000) focus exclusively on cognitive mechanisms and are completely removed from instrumental aspects of intergroup relations and are most relevant in “empty” situations. One can ask whether such a cognitive focus is able to account for the

kind of (antagonistic or even violent) conflicts (for example, class struggles, wars, ethnic discrimination and conflict) that drove the scientific interest for intergroup relations in the first place (Billig, 1996; Tajfel, 1981, chapter 1).

This raises the question of whether there are also more affective consequences of self-categorization. These would seem more suitable to explain the “hot” conflicts we just mentioned. Emotions are important motivators of behaviour, so it would be interesting to look at their predictive value in intergroup relations. Already in the early 1990s, there was some converging evidence that emotions indeed are strongly related to intergroup attitudes (Esses, Haddock, & Zanna, 1993; Jussim, Nelson, Manis, & Soffin, 1995; Stangor, Sullivan, & Ford, 1991). Furthermore, in studies that would prove to be well ahead of their time, several authors reported that different emotions are related to different intergroup relations and different action intentions (Bizman & Hoffman, 1993; Dijker, 1987). Another question is whether and in what way emotions become depersonalized when a particular social identity becomes salient. Before we answer those questions (in Chapter 3) we will look more closely at emotions in Chapter 2. We discuss what emotions are, why they exist, and how they influence behaviour.

1.4. Summary

In this chapter we have argued for the importance of the material dimension in intergroup relations. The material or objective dimension refers to the influence of conflicts for resources on intergroup attitudes and behaviour. Our starting point was a functional approach to group belonging, and this inevitably point us to the tangible benefits that groups offer to their members. If group living is advantageous, people should be sensitive to threats to the group. We have argued that the social identity perspective describes and predicts how individuals will sometimes act “as a group member”, and that social identity is a psychological adaptation that ultimately serves to protect group interests. However, not all groups are equally valuable and people have personal interests that need to be reconciled with group interests. People should therefore not be expected to always act on behalf of the group. Again, the social identity perspective already takes this into account. In the social identity perspective, group identification (i.e., the psychological importance of the group) is an important determinant of the extent to which people take the group’s point of view. Furthermore, social-structural and contextual variables impact on when social identity will become activated, and there are many indications that social identity guides behaviour in an adaptive way (see also Spears, 2010; Turner, 1984). We can summarize this by saying that

social identity has an important material or instrumental function. This is not to deny the psychological or subjective function of social identity, and we discussed how both are seen as fundamentally intertwined both in original and recent work in the social identity tradition. We ended the chapter by arguing that the material function of social identity is likely to be more important for the explanation of real-world intergroup conflicts than the subjective or identity function. In chapter 3 we will argue that the activation of group-based emotions is one way in which social identity protects group interests. But first we turn to emotions and appraisal theories of emotion in chapter 2.

Chapter 2. Emotions

In chapter 1 we looked at the difference between individual and intergroup behaviour. We proposed that social identity serves to make intergroup behaviour possible and that aspects of social identity and intergroup behaviour are functional. In this chapter we discuss one important factor that influences human (individual or group) behaviour: emotion. We start with a short description of what emotion is. Then we discuss the process of emotional appraisal in depth, with special attention for the function of emotions and the causal role of appraisals.

Many emotion theorists adhere to a componential view of emotions, meaning that emotions are defined by the fact that they consist of several components. A first component is the physiological arousal that accompanies emotions. Action readiness is another component and reflects the fact that emotions drive behaviour. A third component is motor expression, such as facial expression or body posture. The cognitive component of emotions consists of cognitive evaluations of the environment, also called “appraisals”. A last component is the subjective experience of emotions, which can also be termed “feeling”. Scherer (2004) has argued that feelings integrate information of the other emotion components and that feelings have a monitoring function. Feelings integrate all available information in order to regulate the emotion process. It is also (part of) the feeling component of emotion that is available to consciousness and that might be partially assessed with emotional self-report measures (which we use in all empirical studies presented in this dissertation). The emotion components can mutually influence each other and can change over time. In this dissertation we are mainly interested in the cognitive or appraisal component of emotions. We will contend that the fundamental nature of emotions is that they are caused by an appraisal of the environment and that they steer behaviour appropriately. That is the basic message of appraisal theories of emotion.

Appraisal theorists assert that emotions are reactions to an evaluation of the situation in terms of opportunities and threats from the individual’s point of view. Because emotions are linked to specific action tendencies, emotions can help individuals to choose adaptive behaviour. Specific situations call for specific responses, and emotions seems to fulfil the function of integrating appraisals and guiding an appropriate behavioural response. Appraisal theories thus provide a functional view of emotions. Frijda (1984: 3) considers emotions as a “subsystem signalling the world’s state with respect to the satisfaction of the system’s driving forces, and indicating what, if anything, should be done about possible discrepancies between states desired and states obtained”. Cognitive appraisals are thus seen as the cause of

emotions, providing the starting point of an important process of motivating adaptive behaviour.

2.1. Appraisal

The appraisal process assesses the position of the individual in her/his environment and elicits the emotion that is most relevant to the current person-environment relationship. Appraisal has to be distinguished from perception (Arnold, 1960) or from knowledge (Lazarus, 1991). An object or event can elicit an emotion only if it is evaluated for what it means to the individual. Appraisal adds to mere perception or knowledge what the likely consequences of an object or an event are for the individual's goals and well-being. For example, physical pain can be appraised by some as being undesirable. For an athlete, however, it may be a sign that s/he is working hard and training well, and pain may thus be appraised positively. In this example the pain they feel might be the same, but the evaluation of what the pain means for the individual's goals is very different. It follows that knowledge does not elicit emotion in itself, but only does so if it is motivationally relevant. In what is regarded as the first text conceptualizing emotional appraisal, Arnold wrote that "to arouse an emotion, the object must be appraised as affecting me in some way" (Arnold, 1960, p.171). In each situation, appraisals are made on different dimensions and a specific pattern of appraisals elicits a specific emotion. We describe this process in the following paragraphs.

2.2. Models of emotional appraisal

Building on the pioneering work of Arnold (1960), several appraisal models have been proposed (Frijda, 1986; Lazarus, 1991; Roseman, 1991; Scherer, 1988; C. A. Smith & Ellsworth, 1985), but they share many similarities (Roseman & Smith, 2001). The appraisal dimensions that are proposed by each model are also quite similar. We now describe these appraisal dimensions in more detail. It is not our objective to provide a review of all different appraisal models, but rather to explain their common assumptions. For simplicity, we therefore rely mainly on the model of Lazarus (Lazarus, 1991, 2001).

Lazarus (1991) distinguishes between primary and secondary appraisals (so does Frijda, 1986). The primary appraisal process assesses whether something that is happening is relevant to the individual, and, if so, in what way. This first step will determine what (if anything) is at stake for the person in a specific situation. Lazarus distinguishes three primary appraisal components: goal relevance, goal congruence, and type of ego-involvement. *Goal*

relevance is the extent to which an event concerns the individual. If an event is appraised as being not relevant, it will not elicit an emotional reaction, and no further appraisals will be made (i.e., the appraisal process will stop). *Goal congruence or incongruence* refers to whether what is happening helps or hinders the individual in reaching her/his goals. In the case of goal congruence, positive emotions are expected. In the case of goal incongruence, negative emotions will follow. *Type of ego-involvement* refers to what exactly is at stake for the individual. Lazarus mentions six possible types of ego-involvement: self and social esteem, moral values, ego ideals, meanings and ideas, other persons and their well-being, and life goals. Ego-involvement is at stake in most or all emotions, but the type influences the specific emotion that is felt. For example, anger is a response to a threat of one's self- or social esteem, and shame results from a failure to live up to one's ego-ideals.

Secondary appraisal (Lazarus, 1991, 2001) focuses on how the emotion-eliciting situation should be dealt with. Secondary appraisal also consists of three appraisal components: blame/credit, coping potential, and future expectancy. *Blame and credit* are appraisals that follow from several pieces of information. There is a need to determine who is responsible for a certain situation or action, whether that person had control over the situation, and whether s/he had a benign or malicious intent. This knowledge can lead one to make an appraisal of blame or credit. *Coping potential* is the individual's evaluation of how well s/he can deal with the situation at hand (for instance to eliminate a pending threat). *Future expectancy* refers to the expectation that the situation is likely to change for the better or the worse.

A certain specific combination of appraisals will elicit a specific emotion and this emotion causes a control shift in the individual: more resources are devoted to that aspect of the environment that elicited the emotion and that thus has the most motivational relevance. Lazarus (1991) uses the term "core relational theme" to indicate that discrete emotions result from one fundamental characteristic of the relationship of the individual with its environment. A core relational theme is the key relational harm or benefit underlying each emotion. For example, Lazarus (1991) proposes that the core relational theme of anger is a "demeaning offence against me or mine". It is the core relational theme that produces similarity across cultures (and perhaps across species) for discrete emotions. In other words, anger looks similar across individuals and cultures because it is used to deal with the same adaptational problems and thus arises in circumstances that look similar in terms of the person-environment relationship (Lazarus, 1991, chapter 5). Emotions are thus not elicited by the same stimulus or event for all individuals in all cultures, but by a specific person-environment

relationship that can be summarized in the emotion's core relational theme or appraisal pattern.

Having discussed the different appraisal dimensions, we are now in a better position to understand appraisal theories' claim that discrete emotions result from a specific pattern of appraisals. For example, sadness is the emotional reaction to an event that is goal relevant, goal incongruent, includes the loss of any type of ego-involvement, but involves no blame. If coping potential is favourable, sadness may not occur or will be associated with hope. Lazarus (1991) adds that the core relational theme of sadness is an irrevocable loss. Anxiety, to give another example, results from an event that is goal relevant, goal incongruent and includes an existential threat to self or personal meaning. Furthermore, coping potential and future expectancy are uncertain in anxiety.

To end our description of appraisal models, we want to clarify that appraisal is not a one-shot affair, but a constantly ongoing process. The appraisal dimensions are not just evaluated once and the process does not stop when an emotion is elicited. On the contrary, individuals constantly scan their environment and their internal state for new information that could be relevant. This allows for possible reappraisal and a different interpretation of events on all appraisal dimensions. We are "constantly engaged in a struggle to make sense of what is happening to us" (Lazarus, 1991, p. 138).

2.3. The function of emotions

One obvious question is why we would need emotions and such a complex appraisal system in the first place. Why do individuals have to become emotional about things in order to choose appropriate behaviour? What is the added value of this particular process? In answering this question, it can be illuminating to compare emotional appraisal with other mechanisms that can guide action (and in so doing, to see humans not as a biological exception, but as a highly social and intelligent mammal). Apart from emotion as a motivational system, behaviour could also be determined by stimulus-response or fixed action pattern mechanisms, as is the case in lower animals (Tinbergen, 1951). These mechanisms link one specific input or piece of information to one specific action. Would it then not be more efficient to act like this and simply forget about emotional appraisal? Oatley and Johnson-Laird (1987), Lazarus (1991) and Scherer (1984) have argued that emotional

appraisal has evolved in mammals⁵ because it allows for a large amount of flexibility in behavioural reactions to a specific situation. In comparison with fixed action patterns, emotions provide merely a general motivation and action tendency, which still has to be translated into a concrete behavioural response. This is an important advantage in environments that can change and that are thus only partly predictable. Frijda (1986: 83) addresses a similar point when he states that “to the extent that action programs are fixed and rigid, the concept of action tendency loses much of its meaning”. Action tendency or action readiness is flexible by definition because it is merely “readiness” and thus allows for the action to be inhibited (for example if the action is non-normative or if supplementary appraisal points in a different direction).⁶

A system of emotional appraisal not only allows for flexibility on the behavioural side, but also for flexibility on what one becomes emotional about (the appraisal side). Appraisals are subjective interpretations and can thus be flexibly applied to a wide range of (even novel) stimuli. This is why the same emotion can arise in a similar way across very different situations or in response to very different events. Such an approach is especially useful when the individual has to adapt to a changing or novel environment. Many aspects of an animal’s environment can indeed change: climate, food sources etc. However, in the case of group-living species the environment is made infinitely more complex because it includes the social environment. As social environments can change much more quickly than material environments, social animals face much more complex decisions in an ever-changing social world. In such an environment, it is clear that an appraisal-emotion system has advantages over a fixed action pattern or stimulus-response system.

Of course, this reasoning is especially applicable to humans, who live in large social groups whose strong within-group cooperation adds extra complexity to the everyday decisions that they have to make.⁷ It should come as no surprise then, that human emotions are very often caused by or experienced within social relations (as forcefully argued by Parkinson, Fischer, & Manstead, 2005) and that emotions are often shared with others (Rimé, 2009). In addition, some specific emotions can only be understood in terms of their function

⁵ There is no claim here that the appraisal process occurs in the same way in other mammals as it does in humans. However, these authors agree that mammals show flexible behaviour that can be accounted for by (a simple version of) emotional appraisal.

⁶ Our emphasis on the flexibility of the behavioural response that is motivated by a process of emotional appraisal is not only important as part of a general theoretical framework, but will also prove useful in evaluating one specific model of intergroup emotions (Neuberg & Cottrell, 2003) in Chapter 5 of this dissertation.

⁷ In support of this idea, challenges associated with social complexity seem to have been a strong selection pressure in mammals and to have driven brain evolution (Dunbar & Shultz, 2007a; Shultz & Dunbar, 2007). In primates, larger brains are associated with larger social groups (Dunbar, 1992) and with indications of social complexity such as tactical deception and coalition formation (Dunbar & Shultz, 2007b).

in complex cooperative social groups. Guilt, for example, is linked to moral transgressions and serves to continue a relationship by motivating an individual to make reparations to the other (Lazarus, 1991; Tangney & Dearing, 2002), while contempt arises when one wants to exclude the other and does not wish to continue the relationship (Fischer & Roseman, 2007). To sum up, emotions offer much flexibility in interpreting and reacting to the environment and seem especially well-adapted to deal with the challenges of social living.

A function of emotion that has received a lot of scientific attention is the communicative function (Fischer & Manstead, 2008). The motor expression of emotions can be, and often is perceived by others. The existence of a motor expression component therefore can give emotions a role in interpersonal communication. By making emotions visible and recognizable, emotions communicate the psychological state of individuals to others. This is especially useful when the emotion is communicated in the same interpersonal relation in which it was elicited (for example, I see that something I did made you very angry at me). However, the communicative power of emotions ultimately still depends on what those emotions mean and thus which appraisals and action tendencies they are associated with (if I see that I just made you angry, I know that there is a risk of retaliation or physical aggression, which is valuable information to me). The fact that emotions also serve communicative purposes does not change the fact that the most fundamental aspect of emotions is that they follow from appraisals of one's relation to the environment. In fact, the communicative function depends on knowledge of what an emotion means in terms of appraisals and action tendencies.

2.4. Appraisals as cause of emotions

Given the attention we have given to appraisals, the cognitive component of emotions, it is worth considering whether this cognitive component is really that important. It could be argued that appraisal theories create an image of emotions that is too cognitive. This might give the impression that emotion is always preceded by carefully considering all available information. The emotion literature has seen a debate about whether cognition always comes before emotion or whether emotion without cognition/appraisal is also possible (Lazarus, 1984; Zajonc, 1984). However, this kind of debate ultimately depends on definitions (What exactly is an appraisal?). An elegant solution for this discussion is to consider that appraisals can occur at different levels of processing that differ in the amount of cognitive effort and sophistication they demand. Several authors have proposed this idea and most distinguished between associative and rule-based levels (e.g., Griffiths, 2004; Lazarus, 1991; Leventhal &

Scherer, 1987; C. A. Smith & Kirby, 2001). The latter involves reflection, abstraction, and drawing conclusions using propositional knowledge. This level benefits fully from the cognitive capacities of humans and it adds a more complex or sophisticated layer to the appraisal process. The point is that each appraisal can occur on each level of processing and that not all appraisals are cognitively sophisticated. Automatic appraisal can be combined with the very complex reasoning that humans are capable of, and both will be combined in the final appraisal or emotional reaction.

However, not everybody is convinced by the suggestion that the appraisal process can occur unconsciously or automatically. Zajonc (1984), for example, is clearly sceptical about the possibility of automatic appraisal and argues that appraisal theorists should show the existence of automatic appraisal or stop talking about it. Moors (2010) has taken up (part of) this task in a research programme aimed at investigating whether constructive appraisal (i.e., appraisals combining several inputs) can occur at the automatic level. In a series of studies that use modified versions of the affective priming task, Moors and collaborators (Moors & De Houwer, 2001; Moors, De Houwer, & Eelen, 2004; Moors, De Houwer, Hermans, & Eelen, 2005) showed that appraisals of motivational congruence can be rapid, unintentional, and efficient (which are features of automatic processes). This research does not prove that emotions can result from automatic appraisals, but it is one necessary step toward that goal. We conclude that it is still a plausible theoretical assumption that all emotions are caused by an appraisal process.

We have argued in this chapter that the most fundamental characteristic of emotions is that they result from an appraisal of the environment in light of the individual's concerns, and influence behaviour accordingly. Appraisal theories have conceptualized the appraisal process at the individual level. It is interesting to note that both Frijda (1986, p. 335) and Lazarus (1991, p. 28) have mentioned that emotions are adaptations for the good of the individual or for the good of the species (even though their work focuses almost exclusively on how individuals benefit from emotions). This rests on the assumption that adaptations for the good of the species can evolve because they ensure species survival. However, this "good for the species" argument (which used to be referred to as "group selection") has been entirely discredited in modern evolutionary theory (Dawkins, 1989; Grafen, 1984; G. C. Williams, 1966). We should therefore not expect that any aspect of emotions (or any other trait, for that matter) has evolved for the good of the species.

However, we will see in Chapter 3 that appraisal processes are not limited to the individual level, but can also occur on behalf of the in-group. In Chapter 1 we saw that social identity is a psychological mechanism that facilitates individuals to display group-based

behaviour, and that this is a consequence of individuals' dependence on the group. Integrating this idea with emotional appraisal then suggest that appraisal processes can also occur at the group level. This is what we will discuss in the next chapter.

2.5. Summary

This chapter dealt with emotions and, more specifically, with appraisal theories of emotion. We described emotion as a general-purpose motivational mechanism that offers great flexibility both in terms of what one becomes emotional about, and in the specific behavioural reaction that might result from the emotion. Emotions result from appraisals, evaluations of the environment in light of the individual's concerns. A particular combination of appraisals is associated with a particular emotional reaction. Appraisals represent the person-environment relationship and can be flexibly adapted to either changes in the person's goals or changes in the environment. On the behavioural side, emotions offer flexibility because they are associated with action tendencies or action readiness, not with specific fixed action patterns. We asserted that emotions are an adaptation to the ever-changing social environment of mammals, and that the enormous social complexity of human societies is why emotions are so important in humans. Our central point is that appraisals are the cause and thus the defining element of emotions. In humans, the appraisal process is particularly sophisticated because our great cognitive abilities add an extra propositional or rule-based layer to the appraisal process.

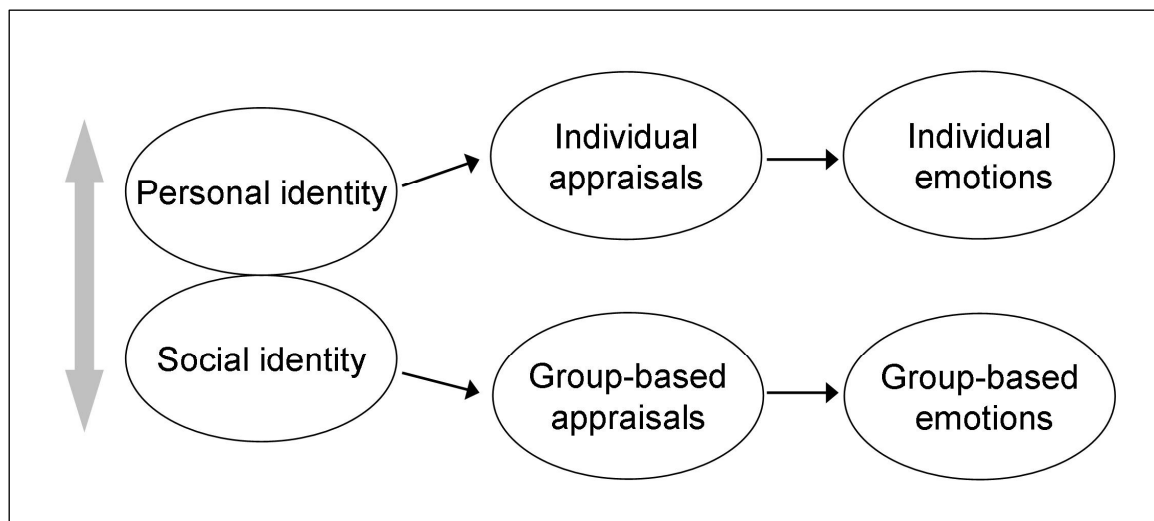
Although this chapter only discussed individual emotions, in our opinion the central place of appraisals should be similar in the case of group-based emotions. That is the topic of the next chapter.

Chapter 3. Group-based emotions

Let's summarize the main points of the two previous chapters. In chapter 1, we saw that people belong to groups and care about the group because groups can offer them important advantages. The social identity tradition describes how and when people act as group members, and social identity is the mechanism that makes (inter-)group behaviour possible. In chapter 2, we looked at emotions, which are a key factor in decision-making and behaviour in humans. According to appraisal theories of emotion, the most fundamental characteristic of emotions is that they result from a process of appraisals of the environment in light of the individual's concerns. The fact that emotions result from a complex appraisal process explains their functional role in guiding adaptive behaviour.

In this chapter, we will combine these two ideas. Our basic point will be that if social identity activates group-level aspects of cognition and behaviour, it can do the same with the appraisal process. Therefore, if social identity causes the appraisal process to function at the group level, this will lead to group-based emotions. If individual appraisals cause individual emotions, group-based appraisals cause group-based emotions (see the diagram in Figure 1). In the first part of this chapter, we conceptualize and discuss group-based appraisals and group-based emotions. In the second part, we discuss the less-than-central place of group-based appraisal in existing work on group-based emotion, and this will constitute the basis on which we formulate our own research questions regarding the role of group-based appraisal in group-based emotion.

Figure 1: Theoretical model of individual emotions and group-based emotions



3.1. Group-based appraisals and group-based emotions

We define group-based emotions as emotions that result from appraisals of the situation in light of the group's concerns. We have described the appraisal process in chapter 2 and what we said is also applicable to group-based appraisal; the only difference is that events are not appraised for how they affect the individual, but for how they affect her/his in-group. The crucial difference between individual emotions and group-based emotions is that the process of cognitive appraisal shifts from individual concerns to group concerns and from individual appraisal to group appraisal (see Figure 1).

3.1.1. Group-based appraisals

The central idea behind group-based emotions is that attitudes and behaviour are related to how individuals perceive the situation of their in-group. This idea is not new. Although the term "group-based appraisals" was first used in the context of group-based emotions (Mackie, Devos, & Smith, 2000; van Zomeren, Spears, Fischer, & Leach, 2004), the concept of appraisals of group concerns can be found in various earlier theories, even though none of them made an explicit link with appraisal theories of emotion. Given the centrality of group-based appraisals in this dissertation, we will now discuss these theories.

3.1.1.1. Group position model

An early approach to group-based appraisals can be found in Blumer's (1958) group position model. Blumer (1958) wants to make a general point about racial prejudice, but only details the case of a dominant racial group. According to Blumer, race prejudice can best be seen as a "sense of group position". The sense of group position is not based on individuals' personal experiences with out-group members but is determined by the relations between groups. Blumer emphasizes repeatedly that prejudice is not a consequence of individual differences but that it is a group phenomenon that is determined by the definition of the position of the in-group in relation with the out-group. Individuals might have different ideas and emotions about the out-group, but "to the extent they recognize or feel themselves as belonging to that group they will automatically come under the influence of the sense of position held by that group" (Blumer, 1958, p. 5). Two points are worth emphasizing here. First, the distinction Blumer makes between the individual and the group level corresponds with similar distinctions in social identity theory and relative deprivation theory, which we will discuss below. Second, Blumer allows for the fact that individuals can feel weakly or

strongly connected to a group, and that the group should have a weak or strong influence on the individual, accordingly. This is very similar to the idea of group identification in the social identity approach (as discussed in chapter 1). One unique feature of Blumer's theory is that he asserts that the sense of group position is formed through a long social process of communication, discussion, and persuasion within the group. Once consensus is reached on the group position, this becomes a powerful group norm to which group members have to conform.

The group position model influenced recent investigations into the link between the group threat posed by ethnic minorities and immigration attitudes. Indicators of group threat generally include economic conditions and size of the ethnic minority group. Recently internationally comparable representative survey data have become available and this has led sociologists to connect the anti-immigrant attitudes measured in those surveys with country or regional level indicators of ethnic minority group threat. Most studies indeed show that threat indicators are related to anti-immigrant attitudes (Coenders, Lubbers, & Scheepers, 2008; Meuleman, et al., 2009; Quillian, 1995; Schlueter & Wagner, 2008).

3.1.1.2. Group relative deprivation

A second and influential example of the concept group-based appraisals was developed in the framework of relative deprivation theory. Runciman (1966) distinguished between egoistic and fraternal relative deprivation. Egoistic relative deprivation means that one feels disadvantaged as an individual in comparison with other individuals. Fraternal relative deprivation (often also called group relative deprivation) is a negative evaluation of the position of one's group in comparison to other groups. Runciman saw egoistic and fraternal relative deprivation as mutually exclusive ideal types of relative deprivation (meaning that real-life situations are often a mix of individual and group-based relative deprivation). Empirical efforts have been devoted towards distinguishing these two types of deprivation. In a recent meta-analysis (H. J. Smith & Ortiz, 2002), group relative deprivation comparisons were found to be much more related to collective behaviour and attitudes than comparisons based on the individual. In one of the latest studies on this topic, Pettigrew, Christ, Wagner et al. (2008) showed that group but not individual relative deprivation is related to prejudice. Findings such as these clearly show that the conceptual distinction between taking oneself as an individual or oneself as a group member as a basis for comparison has important consequences.

3.1.1.3. Social identity

Seeing the world as a group member rather than as an individual is a key tenet of social identity theory and self-categorization theory (Tajfel & Turner, 1979; Turner, et al., 1987). For these theoretical approaches, personal identity and social identity are aspects of the self-concept that can become more or less salient as a result of individual and contextual factors. When social identity is salient, people undergo a process of depersonalization and see themselves as interchangeable group members. This is a much more general theory of group-based cognition and behaviour, and we have discussed it extensively in chapter 1. Self-categorization theory is one of the components of the recent perspectives on group-based emotions (Iyer & Leach, 2008; E. R. Smith, 1993, 1999; Yzerbyt & Demoulin, 2010; Yzerbyt, Dumont, Mathieu, Gordijn, & Wigboldus, 2006).

In sum, a recurrent theme in these three approaches is that people sometimes evaluate their situation from their in-group's point of view in light of the in-group's concerns. In other words, people make group-based appraisals. However, none of these three approaches present a complete theory of group-based emotions. They don't explicitly link group-based appraisals to a wide range of group-based emotional reactions. In the next section we will discuss theories that do.

3.1.2. **Group-based emotions**

3.1.2.1. Early ideas

Group-based emotions are emotional reactions to group concerns. Early evidence that people can become emotional about events in which they are not at all personally concerned comes from the behaviour of sports fans. Some well-known studies on "basking in reflected glory" showed that students were more likely to wear their team's clothing on days following a team victory (Cialdini et al., 1976). The group-based character is clear because fans do not play any role in the victory of the team. Unsurprisingly, there is also good evidence that sports fans' emotions are affected by their team winning or losing a game (e.g., Hirt, Zillmann, Erickson, & Kennedy, 1992; Wann, Dolan, McGeorge, & Allison, 1994). Closer to emotion research, Doosje, Branscombe, Spears and Manstead (1998) noted that some emotion theorists have suggested that guilt can be felt as a reaction to the behaviour of members of the in-group (Baumeister & Hastings, 1997; Feagin & Vera, 1995; Steele, 1990).

Finally, the emotional reactions of anger (Tyler & Smith, 1998) and resentment (Runciman, 1966) that are central to group or fraternal relative deprivation theory qualify as

an early conceptualization of group-based emotions (H. J. Smith & Kessler, 2004). Relative deprivation theory indeed has an important affective dimension and the relation between relative deprivation and collective behaviour is stronger when relative deprivation is measured using questions that assess feelings (H. J. Smith & Ortiz, 2002; M. C. Taylor, 2002). This means that the similarity between fraternal relative deprivation and group-based emotions goes beyond their shared concept of group-based appraisals and that it was probably the approach that came closest to developing a full conceptualization of group-based emotions.

3.1.2.2. Group-based emotions

The first to explicitly spell out a theory of group-based emotions was Smith (1993), although the term “group-based emotion” was not used until a few years later (Doosje, et al., 1998; E. R. Smith, 1999). In an influential chapter, Smith (1993) proposed to combine aspects of self-categorization theory (SCT, Turner, et al., 1987, see chapter 1) and appraisal theories of emotion (Scherer, Schorr, & Johnstone, 2001, see chapter 2) as a new way to conceptualize prejudice. Smith argued that because the self includes both personal and social aspects, appraisal processes can also exist at both personal and social levels. Emotional appraisal at the group level means that people evaluate the situation taking their social self as the reference point. He does not use the term “group-based appraisals” itself, but for example mentions the possibility of “emotions triggered by events that are group relevant rather than merely personally relevant” (E. R. Smith, 1993, p. 302).

Seeing prejudice as an emotion instead of as an attitude, as Smith (1993) proposed, has two important advantages. First, while attitudes are fundamentally stable, the emotion concept allows for much more flexibility. People are likely to be more prejudiced in certain situations than in others. For example, members of a group with an inferior status will probably not evoke negative reactions when they conform to their low status position. However, when the same people try to claim more benefits for their group, they might be met with fierce opposition. Similarly, the same out-group members can be treated very differently according to situation and context: as equals in one situation and as subordinates in another (e.g., Minard, 1952). Prejudice as a stable attitude can not easily account for this. The second advantage of seeing prejudice as an emotional reaction is that emotions are much differentiated while attitudes only vary from positive to negative. Seeing prejudice as an emotion thus allows for different types of emotional reactions to be distinguished. Fear, contempt, and anxiety can all be negative emotional reactions toward an out-group but they are likely to result from different intergroup situations and group-based appraisals, and to lead to different behavioural reactions. Actually, Dijkster (1987) was the first to suggest that

prejudice might be more adequately conceptualized as one of a set of possible emotional reactions. Dijker also made the link between appraisal theories and the emotional reactions to ethnic minorities, but he did not discuss the possibility that the appraisal process occurs at the group level, which is why his theory is not really a theory of group-based emotions.

Smith first used the term “social emotions” and defines prejudice as “a social emotion experienced with respect to one’s social identity as a group member, with an outgroup as a target” (E. R. Smith, 1993, p. 304). In another book chapter, Smith (1999) repeated his position, but now used the term “group-based emotion” instead of “social emotion”. Later, Smith and collaborators added the term “intergroup emotions” (Mackie, et al., 2000), which is consistent with the theoretical idea that “appraisals refer to the position of the outgroup *in relation to the ingroup*” (E. R. Smith, 1999, p. 187).

It is indeed important to note that in Smith’s (1993, 1999) theory social or group-based emotions always involve a target out-group that has a certain relation with the in-group. In contrast, we have up till now only emphasized the fact that group-based emotions result from appraisals of group concerns, and have not talked about the target of these emotions. In fact, group-based emotional reactions do not need to be limited to emotions toward an out-group. Other researchers (Dumont, Yzerbyt, Wigboldus, & Gordijn, 2003; Gordijn, Wigboldus, & Yzerbyt, 2001; Gordijn, Yzerbyt, Wigboldus, & Dumont, 2006; van Zomeren, Spears, & Leach, 2008; Yzerbyt, Dumont, Wigboldus, & Gordijn, 2003) have put less emphasis on the target of the emotion and more on the group on behalf of which the emotion is experienced. Their strategy has been to change the social identity that is salient in the context and see how that affects emotions. The group-based character of these emotions lies in the fact that they are influenced by the perceiver’s group membership that is made salient. The target of the emotions in these studies is not necessary an out-group but rather a particular event or decision.

To understand the importance of this point, we can mention the distinction that Parkinson, Fischer, and Manstead (2005) make between the subject and the object of an emotion. The distinction we have made between individual and group-based appraisals refers to the *subject* of the emotion. The subject of the emotion is the person who is experiencing the emotion in response to an event that has been appraised as relevant for her/his current goals. For individual appraisals (and individual emotions), the subject is an individual and s/he appraises the environment as an individual. For group-based appraisals (and group-based emotions), the subject is a group member whose social identity as a group member has been activated and s/he appraises the environment as a group member in light of the group’s concerns. Taking into account the *object* of the emotion allows for a second distinction to be

made. Group-based emotions that have an out-group as object are intergroup emotions, and they contrast with group-based emotions that do not have an out-group as object. Intergroup emotions are thus a special case of the larger category of group-based emotions.

3.1.3. Theoretical models and research on group-based emotions

3.1.3.1. Intergroup emotions theory

The most well-known model of group-based emotions is Intergroup Emotions Theory (IET). Early IET work built directly on the theoretical ideas of Smith (1993, 1999) that we discussed in the previous section. For example, Mackie, Devos, and Smith (2000, p. 603) clearly emphasize group-based appraisals: “When social identity is salient, appraisals of situations or events related to social identity focus on social rather than personal concerns”. Consistent with this idea, they found that the (perceived or manipulated) strength of the in-group led to anger and offensive action tendencies toward the out-group. The primary weaknesses of these studies are that (1) the manipulation of in-group strength can also be seen as a manipulation of social support (see Parkinson, et al., 2005, p. 123; van Zomeren, et al., 2004, p. 650), and (2) participants likely experience a mix of individual and group-based appraisals as they are concerned by the event both as an individual and as a group member.

IET researchers have also looked for evidence that emotions fulfil the same role at the group level as at the individual level. First, they found that intergroup emotion has a regulatory function in the sense that the emotion dissipates when it has led to an appropriate response (Maitner, Mackie, & Smith, 2006). Second, they confirmed that, apart from the level at which they operate, intergroup emotions are similar to individual emotions. For example, it was shown that intergroup anger involves arousal, decreases systematic processing of persuasive messages and increases risk-taking (Rydell et al., 2008). This suggests that intergroup emotions are not merely evident in emotional self-report, but are real emotions that are felt by the participants in those studies.

Recent work in IET has taken a different approach. Researchers have investigated so-called *chronic group emotions*. Chronic group emotions are measured by asking people to what extent they experience emotions as a member of a particular group, but without referring to a particular situation, event, or group characteristic. In one illustrative study, E. R. Smith, Seger, and Mackie (2007) asked “As an Indiana University student, to what extent do you feel each of the following emotions?” No context for these emotions was specified. Importantly, the authors argued that chronic group emotions are strongly related to group-based emotions.

In a more recent paper (Moons, Leonard, Mackie, & Smith, 2009), emotions measured in this way are simply called “group-based emotions”. The rationale is that group-based emotions are emotional reactions to specific group situations and concerns and that these feed into the more general chronic emotions. Chronic group emotions could thus be seen as a sort of summary of all group-based emotions, a summary of all emotional reactions to group concerns that people experience on behalf of a particular group. According to this view, there is a direct relation between group concerns and chronic group emotions. However, although Smith, Mackie, and colleagues have argued that chronic group emotions are closely related to group-based emotions, they have not directly investigated this aspect. As a result, it is currently unclear to what extent chronic group emotions reflect group concerns and group-based appraisals. We will have more to say on this issue in section 3.2.1 and in chapter 4.

Other models of group-based emotions have focused more on specific content. Consistent with Smith’s (1993; 1999) suggestion that prejudice should be reconceptualized as a group-based emotion, several models have described which emotions are typically felt in intergroup situations and to which cognitive appraisals these emotions are associated. All these models start from the idea that an intergroup situation affects group-based appraisals, which in turn lead to group-based emotions. We describe some comprehensive models as well as research on some specific emotions below.

3.1.3.2. Stereotype content model

The *stereotype content model* (Fiske, Cuddy, Glick, & Xu, 2002) and its more recent version, the BIAS map (Cuddy, Fiske, & Glick, 2007) assume that the nature of the intergroup relations determines the cognitive representation (stereotypes) of the out-group. Two dimensions of the intergroup relations are considered essential here: perceived status and competition. Perceived status predicts competence stereotypes: high status groups are considered competent. Perceived competition predicts warmth stereotypes (warmth stereotypes being associated with an absence of competition). Warmth and competence are seen as core dimensions of group perception (Abele & Wojciszke, 2007; Judd, James-Hawkins, Yzerbyt, & Kashima, 2005; Phalet & Poppe, 1997) and are hypothesized to lead to specific emotions. Emotions, in turn, lead to general classes of behavioural reactions (Cuddy, et al., 2007). Support for the stereotype content model comes from studies in which people assess a number of social groups on status and competition, warmth and competence, and emotional reactions (admiration, envy, contempt, pity). Results show that, between groups, differences in emotional reactions can be explained by differences in warmth and competence,

which in turn can be explained by differences in status and competition between groups (Cuddy, et al., 2007; Fiske, Cuddy, & Glick, 2003; Fiske, et al., 2002).

It is worth mentioning that *image theory* (Alexander, Brewer, & Herrmann, 1999, 2005; Bilali, 2010) is similar to the stereotype content model because it starts with the same two structural dimensions of intergroup relations (status and competition) and assumes that these lead to emotions, out-group images, and behavioural orientations.

3.1.3.3. Sociofunctional model

Neuberg & Cottrell's (2003) bio-cultural or *sociofunctional model* is another model that sees cognitive appraisals of intergroup relations as the first step in a causal chain that ultimately leads to intergroup behaviour. According to the authors, our dependence on the group during our evolutionary history has made us sensitive to threats to group-level resources and obstructions to efficient group functioning. They argue that specific group threats lead to specific, differentiated emotional reactions (which is very similar to Smith's (1993) position). These emotions help us to effectively deal with the group threats because they are associated with specific behavioural reactions directly aimed at removing the group-level threats. An important part of Neuberg and Cottrell's (2003) reasoning is thus that threat and emotion patterns are not the same for all social groups. Indeed, a study shows that different social groups elicit qualitatively different patterns of threat and emotion (Cottrell & Neuberg, 2005). However, the specificity of the threat-emotion-behaviour relations is less clear as Cottrell and Neuberg aggregate some threats in the analyses and not report data on behavioural tendencies. In a more recent study, Cottrell, Richards, and Nichols (2010) failed to show that specific emotions mediate the relation between specific threats and policy attitudes.

A possible theoretical shortcoming of the sociofunctional model is its lack of flexibility. This is especially the case on the behavioural side. The behavioural reactions proposed by the model are very specific reactions to specific intergroup threats. This seems to be at odds with the more general and unfinished character of action tendencies in appraisal theories (see chapter 2), a conceptualization that allows for more flexibility. For what concerns flexibility on the appraisal side, the model could be interpreted as if appraisals of intergroup threats directly lead to intergroup emotions. However, an out-group might be perceived differently depending on which social identity is contextually salient (Turner, et al., 1987). We will address both these theoretical issues (and especially the second one) in chapter 5.

The sociofunctional model's focus on intergroup threats reminds of models that conceptualize threats as precursors to prejudice and intergroup behaviour. Well-known examples are realistic conflict theory (Sherif, 1966) and integrated threat theory (Stephan & Stephan, 2000). If we reconceptualize intergroup threats as appraisals of intergroup situations, models of intergroup threat and prejudice can be easily integrated within the more general model of group-based emotions (see Riek, et al., 2006; Yzerbyt & Demoulin, 2010).

While the models presented so far have discussed a wide range of emotional reactions, other authors have focused on a more restricted range of group-based emotions.

3.1.3.4. Group-based guilt

There is a large literature on *group-based guilt* (see Branscombe & Doosje, 2004; Brown, 2009). Group-based guilt is guilt that people experience as a result of realizing that their in-group has behaved in an immoral way that has caused harm. Scientific interest in group-based guilt dates at least from right after the second world war when social scientists wanted to understand how ordinary Germans felt about the death of six million Jews, caused by the Nazi regime (Boerma, 1950; Janowitz, 1946). Group-based guilt is probably the group-based emotion that has attracted most scientific attention. It has been applied to well-known instances of group-based discrimination such as the unfair treatment of the Aboriginals in Australia (Halloran, 2007; Leach, Iyer, & Pedersen, 2006; Pedersen, Beven, Walker, & Griffiths, 2004), Apartheid in South Africa (Klandermans, Werner, & van Doorn, 2008), anti-Black racism in the US (Harvey & Oswald, 2000; Iyer, Leach, & Crosby, 2003; Powell, Branscombe, & Schmitt, 2005), sexism (Boeckmann & Feather, 2007; Miron, Branscombe, & Schmitt, 2006), and even global warming (Ferguson & Branscombe, 2009). The group-based nature of the emotions is clear as it often concerns event for which research participants have no personal responsibility at all. In accordance with emotions' links with behaviour, many studies show that group-based guilt is associated with intentions for restitution, such as an apology or affirmative action (Boeckmann & Feather, 2007; Branscombe & Doosje, 2004; Brown, González, Zagefka, Manzi, & Cehajic, 2008).

3.1.3.5. Group-based anger

Another group-based emotion that has received quite some empirical and theoretical attention is *group-based anger*. As we have discussed earlier in this chapter, feelings of anger are central to relative deprivation theory, and fraternal or group relative deprivation thus involves group-based anger. When measures of fraternal relative deprivation tap emotional reactions, these are indeed strongly related to collective behaviour (H. J. Smith & Ortiz, 2002;

M. C. Taylor, 2002). Another example of the role of group-based anger comes from a series of studies by Gordijn, Yzerbyt, and colleagues (Gordijn, et al., 2001; Yzerbyt, et al., 2003). These researchers presented university students with a fake newspaper article that described how the students of another university had suffered an unfair decision (that did not affect the participants themselves). As an experimental manipulation, they made salient either participants' identity as students or their identity as students from their particular university. It was predicted that group-based anger about the unfair decision would be stronger in the first condition because in that situation the victims would be perceived as belonging to the same group (i.e., students) as the participants. Indeed, when their similarity to the victims had been made salient, participants reported more intense anger. People thus reported feeling anger on behalf of others who suffered an unfair decision, even if they themselves were not concerned by that decision. This is a strong indication that the anger was indeed group-based.

In one study (Yzerbyt, et al., 2003) the social identity manipulation also increased "offensive" action tendencies, an effect that was mediated by anger. Group-based anger thus seems to motivate people to do something about an unfair situation. The relation between unfairness (experienced by the in-group), group-based anger, and intentions for collective action was replicated by Van Zomeren and collaborators (van Zomeren, et al., 2004; van Zomeren, Spears, et al., 2008), although in these studies individuals were also personally concerned by the unfair decision so some individual appraisals might have played a role as well.

3.1.3.6. Group-based emotional distress

A last example of group-based emotions is *group-based emotional distress*. At the individual level, discrepancies between the actual and the ought self lead to agitation-related emotions, while discrepancies between the actual and the ideal self lead to dejection-related emotions. Bizman and Yinon (2003; Bizman, Yinon, & Krotman, 2001) have extended this model to the group level and found that actual-ideal and actual-ought discrepancies based on group attributes were indeed independently related to group-based dejection- and agitation-related emotions, after controlling for the same individual-level discrepancies. This suggests that appraisal processes leading to emotions distinguish between individual and group levels.

3.1.4. **Other relations between emotions and groups**

In this dissertation we focus on group-based appraisals as precursors to group-based emotions. However, there are of course many other social or group-level aspects of emotions

that can be or have been the subject of interesting research. For example, one can investigate possible cultural differences in appraisal processes or emotion expression (Mesquita & Markus, 2004; Parkinson, et al., 2005, chapter 2 and 3).

One group-level aspect of emotion that is particularly interesting for our treatment of emotions here is the *shared* character of emotions. When we think about collective events such as parties, demonstrations, wars, or concerts, it is not surprising to state that emotions are often shared in a group. Several processes can lead to shared emotions. Parkinson, Fischer, and Manstead (2005, p. 91) have described four possible sources of emotion coherence in groups. Two of those sources focus on bottom-up processes. Individuals who engage in social interaction can agree, through that social interaction, on how to appraise a situation, or on which emotion should be expressed. This interaction-based social influence on how to appraise situations is also called social appraisal (Manstead & Fischer, 2001); the influence on emotion expression is emotion contagion (Hatfield, Cacioppo, & Rapson, 1994). Both of these possibilities received empirical support in a recent study by Parkinson and Simons (2009).

These bottom-up processes based in social interaction are very important in the shaping of real-world emotions. It is likely that most individual social judgments, and especially if they are group-based, have at some point been discussed with others. Indeed, about two thirds of relaxed informal conversation seems to be about social topics (Dunbar, Marriott, & Duncan, 1997) and it has been shown that emotional topics in particular are subject to social sharing (Peters, Kashima, & Clark, 2008). There is good evidence that when people experience emotional events, they will talk about these events with close others in a large majority of cases (Rimé, Finkenauer, Luminet, Zech, & Philippot, 1998; Rimé, Philippot, Boca, & Mesquita, 1992). The more intense the emotion, the more frequent will also be the social sharing. A remarkable finding is that about three quarters of the emotional events that have been shared with someone else, will be subject to secondary sharing, i.e. the target of the primary social sharing will in turn share the emotional episode with a third person (Christophe & Rimé, 1997; Curci & Bellelli, 2004).

This creates the possibility that information about important events becomes shared among many people. However, this is not merely “cold” sharing of information. If we combine this social sharing with the fact that people will tune to each other’s responses by means of social appraisal and emotion contagion, we have a picture of the social construction of meaning which reminds of the symbolic interactionism of Mead (1934) and Blumer (1958). This is very relevant for the case of group-based emotions because many instances of intense group-based emotions that arise in intergroup relations have probably been shared and

constructed in this way. Many naturally occurring group-based emotions result from a long process of interpretation and sharing that is constantly going on within the group. It is this process that produces emotions that are both shared and group-based. Once norms about appraisals or emotion expression are established in this way, this creates the possibility for a top-down process of compliance to norms (feeling rules or display rules). Compliance to norms further increases the emotional convergence in groups.

It is interesting to note that emotion sharing has still other consequences than the processes of social appraisal and emotion contagion. Social interaction concerning emotional topics forges interpersonal bonds (Collins & Miller, 1994; Peters & Kashima, 2007) and increases group cohesion (Espitalier, Tcherkassof, & Delmas, 2003). Increased group cohesion might enhance the group-based character of cognition, facilitating group-based emotions and intergroup behaviour. We can conclude that social interaction plays a major role in real-world emotion.

3.1.5. Summary

To summarize this chapter so far, we have argued that group-based appraisals are the key defining element of group-based emotions. We believe that this follows logically from the universally accepted idea that group-based emotion is a combination of appraisal theories and social identity. If individual appraisal is central to individual emotion, then group-based appraisal is central to group-based emotion. We have shown that the idea of group-based appraisal is certainly not new because it is clearly present in theories such as the group position model, group relative deprivation, and social identity theory. What is new about group-based emotions is that group-based appraisals are related to a wide range of differentiated emotional reactions. Seeing group-based emotion as a new conceptualization of prejudice allows for a more flexible and thus more realistic view.

We discussed some of the existing empirical work on group-based emotions, but one crucial question that is left unanswered is the current state of the empirical evidence for the role of group-based appraisals in group-based emotions. We address this in the next section and we will see that the role of group-based appraisals has been investigated less than would be expected given the centrality of group-based appraisals in theories of group-based emotions. That will be the opportunity to state the aims of our own empirical research.

3.2. Research questions and introduction to studies

This dissertation focuses on the role of group-based appraisals in group-based emotions. As we have seen, many definitions of group-based emotions imply that group-based emotions have their origin in group-based appraisals. If we accept the theoretically central place of group-based appraisals, two observations from the literature come across as surprising. First, although group-based appraisals are often part of the definition of group-based emotions, researchers have not always awarded group-based appraisals this crucial place in their theoretical models. Given that emphasizing group-based appraisals is analogous to the crucial role that individual appraisals play for individual emotions (see chapter 2) and directs our thinking on how we might change group-based emotions and intergroup relations, this is a fundamental issue. A second observation is that very little research has directly investigated group-based appraisals. We elaborate these two points below and in doing so establish the basis on which we formulate specific research questions that we try to answer in the empirical part of this dissertation.

3.2.1. The place of group-based appraisals in models of group-based emotions

Original conceptualizations of group-based emotions (E. R. Smith, 1993, 1999) clearly define them as the outcome of a process of group-based appraisal. Although virtually all subsequent research on group-based emotions refers to this definition or at some point discusses group-based appraisals, the actual work does not always incorporate the logical consequences of defining group-based emotions as resulting from group-based appraisal. While this stance is of course not necessarily wrong, it reveals the less-than-central place of group-based appraisals in researchers' view on the issue, and this is the point we want to make. We discuss four of these examples below.

First, Intergroup Emotions Theory (IET) clearly relies on a theory of group-based emotions that takes into account group-based appraisals. However, IET researchers have restricted their empirical efforts to intergroup emotions and chronic group emotions. *Intergroup emotions* are definitely one type of group-based emotions but equating the two, i.e., intergroup emotions and group-based emotions, takes away the emphasis from the process of group-based appraisal and gives more weight to the object of the emotion (the out-group). In our view, this unnecessarily narrows the theoretical interest to one type of group-based emotions.

More problematic, however, is IET's conceptualization of *chronic group emotions* (measured by asking people how they feel "as a group member" but without referring to a specific situation or group characteristic). We have already discussed the fact that IET researchers claim that chronic group emotions are (a summary of) group-based emotions, but that one is forced to note that no evidence is being offered for this claim (Seger, Smith, & Mackie, 2009; E. R. Smith, et al., 2007). Specifically, there is no support for the idea that chronic group emotions result from group-based appraisal. So, whereas IET researchers still refer to original conceptualizations of group-based emotions as resulting from group-based appraisals, they use a way of measuring emotions for which it is not clear to date whether it taps the process of group-based appraisal. There is thus a risk of a gap between the theoretical model that is used and the way that concepts are measured, which is of course a crucial issue. The results of research on chronic group emotions have been included in literature reviews as being research on group-based emotions without mentioning the possibility that chronic group emotions might in fact be something else than group-based emotions (Mackie, Maitner, & Smith, 2009; Mackie, Smith, & Ray, 2008; E. R. Smith & Mackie, 2008). In sum, knowing whether emotions result from group-based appraisal does not seem to be the first concern of IET researchers. In chapter 4 we investigate the nature of chronic group emotions, and we propose that they are not group-based emotions but rather emotions about group belonging. We asked participants which emotions they felt "as UCL students" and also measured their identification with UCL students. Although negative group-based emotions are usually positively correlated with identification, we found the opposite pattern in our data, showing that chronic group emotions are not group-based emotions.

A second example of a theoretical model in which the place of group-based appraisal could be clearer than it is, is the stereotype content model or its more recent version, the BIAS map (Cuddy, et al., 2007; Cuddy, Fiske, & Glick, 2008; Fiske, et al., 2002). In this model, the idea of appraisals leading to emotions is theoretically important because the structural relations between groups are the first step of a causal chain leading to stereotypes, emotions, and behaviours. What is less clear in this model, however, is whether these evaluations of the structural position of groups are group-based, i.e. whether people evaluate the position of groups in relation to their own group. The problem is that empirically, this research relies on asking respondents to indicate how they think people in general see other groups. It can thus be argued that it is more about stereotypes and stereotypical emotions than about group-based appraisals and group-based emotions. In sum, whereas the BIAS map clearly rests on group-based appraisals at a theoretical level, the measurement part of the model does so in a much less explicit way.

As a third example, we look at an integrative book on emotions in social relations (Parkinson, et al., 2005). For these authors intergroup emotions are group emotions that have an out-group as object. “Group emotion”, however, is not the same concept as group-based emotion. Whereas group-based emotion always involves group-based appraisal, this is not so clear for the term group emotion. Parkinson et al. (2005) do clearly talk about group-based appraisals when they mention that “under certain conditions at least, emotions are experienced by individuals because of things that have been done to them or by them as members of *social groups*” (Parkinson, et al., 2005, p. 116). However, it seems that these authors see group-based appraisals as only one way (among others) in which emotions are based in group membership, and they seem to find the shared character of emotions more important for the definition of group emotions (Parkinson, et al., 2005, chapter 4). According to these authors then, group emotions are emotions that are shared and in addition might result from group-based appraisals. In contrast, group-based emotions are defined only by their relation with group-based appraisals. Again, our point is not that the definition of group emotions by Parkinson and colleagues is wrong, but only that group-based appraisals do not take up a central place.

Fourth, the uncertain place of group-based appraisals is also apparent in a recent review on emotion in intergroup relations. Iyer and Leach (2008) use the distinction between individual and group-based appraisals as one of the criteria for their classification scheme of group-level emotions. Following Parkinson et al. (2005), they distinguish between the subject and the object of an emotion and they define group-based emotions as emotions for which the subject is an individual who self-categorizes as a group member. This definition is very similar to Parkinson et al.’s (2005) group emotions, but the most important difference between both is the concrete interpretation of what it means to feel emotions as a group member. Whereas group-based emotion in Iyer and Leach (2008) is primarily seen in terms of group-based appraisal, group emotion in Parkinson et al. (2005) involves both group-based appraisal and shared emotion (see previous paragraph). At first sight, Iyer and Leach thus seem to give a more important place to group-based appraisal. However, several problems with their treatment of group-based appraisals remain. First, Iyer and Leach do not use the term “group-based appraisal”, or an equivalent term. They do talk about appraisals of an in-group, an out-group, or an intergroup relation, but the theoretical difference between individual and group-based appraisals (i.e. in terms of personal versus group concerns) could have been made more explicitly. In fact, the one time that Iyer and Leach (2008, p. 98) do mention “group-level appraisals” is when they refer to appraisals of an out-group made by an individual whose personal identity is salient. As these appraisals are based in personal identity

and thus individual concerns, we would call them individual appraisals, consistent with our conceptualization of individual and group-based appraisal.

Another problem with the place that Iyer and Leach (2008) give to group-based appraisals can be found in their typology of group-level emotions. Although theoretically the difference between individual and group-based emotions in their model seems to be based on individual versus group-based appraisals (see previous paragraph), the concrete classification of research into the different types of emotions is merely based on whether researchers explicitly ask people to adopt a group perspective and to categorize themselves as group members when answering the emotion questions. Making salient the social identity like that is indeed a direct way of moving the appraisal process in the direction of the group level (see van Zomeren, Spears, et al., 2008; Yzerbyt, et al., 2006; Yzerbyt, Kuppens, & Mathieu, 2010 and chapters 5 and 6). However, it does not mean that there is a one to one relation between method and concept, i.e. even when we do not specifically ask people to report their emotions as group members, appraisal of group concerns might still influence the emotion reported.

Iyer and Leach (2008) also make the distinction between group-based emotions directed at an out-group and group-based emotions directed at an in-group. However, if the process of group-based appraisal lies at the heart of group-based emotions, both these types of emotions can be seen as reactions to appraisals of an intergroup relation. Putting group-based appraisal central would entail using the target of the emotion as a secondary classification criterion only.

As this overview shows, current models of group-based emotions do not give group-based appraisals the central place that we have awarded it here. We have defined group-based appraisals as the sine qua non of group-based emotions and believe that other theories underappreciate this point. Our point of view is analogous to the crucial role that individual appraisals play for individual emotions and the emphasis on group-based appraisals is of great interest because it has important consequences for how we might impact upon intergroup relations.

Now is the time to move from theory to research. We aim here to provide empirical support for the role of group-based appraisal in group-based emotion. It is therefore crucial to first look at existing research on group-based appraisal. That will allow us to identify specific topics or research questions that still need to be addressed.

3.2.2. Research on group-based appraisal

Up till now little research has focused explicitly on the role of group-based appraisal in group-based emotion. One issue that is likely to arise in such research is the fact that in most group-relevant or intergroup situations people engage in both individual and group-based appraisal. In other words, in these situations both individual and group-based appraisals about the same situation can be relevant to the same person. If one aims explicitly at investigating *group-based* appraisal, it is of course crucial to be sure that one is not looking at individual appraisal. We will discuss three empirical strategies that have been used to investigate group-based appraisal in particular and we build on the last one to develop some of our own empirical work.

3.2.2.1. Measuring both individual and group-based appraisals

A first strategy to make the distinction between individual and group-based appraisals is to measure both and see whether group-based appraisals have an independent effect on emotions when controlling for individual appraisals. One illustration can be found in the work on group-based emotional distress (Bizman & Yinon, 2003; Bizman, et al., 2001), that we have mentioned before. The authors measured both personal and group discrepancies between the ‘actual’ and the ‘ought’ self, and between the ‘actual’ and the ‘ideal’ self. Even after controlling for personal discrepancies, actual-ideal and actual-ought discrepancies based on group attributes were still independently related to group-based dejection and agitation emotions, respectively. This shows that group-based appraisals have an independent relation with group-based emotions.

There are two problems in generalizing these results to other group-based emotions. First, the correlational design of the study does not allow strong inferences about causal relations. Second, in many cases it will be very difficult to measure individual and group-based appraisals separately at more or less the same moment. In the studies of Bizman and colleagues (Bizman & Yinon, 2003; Bizman, et al., 2001) this was possible because participants could understand the difference between, for example, the actual personal self and the actual group self. For many other appraisals this will be problematic. If you ask people how threatening a situation is to them as an individual and then ask them how threatening it is to them as a group member, will they really report individual and group-based appraisals, respectively? People will most likely have difficulties with such questions because when a social self-categorization is salient, the concerns associated with that social identity will feel as real as individual concerns. The dynamic nature of the appraisal process means

that individual and group-based appraisals might quickly alternate and an appraisal measure might thus tap a combination of both.

In sum, the work of Bizman and colleagues does not provide strong evidence for the role of group-based appraisals and is arguably not applicable to many types of appraisals (but for another example see the work on individual versus group relative deprivation, Pettigrew, et al., 2008; H. J. Smith & Ortiz, 2002).

3.2.2.2. Changing the in-group's situation

In order to investigate the causal role of group-based appraisals, a straightforward option could be to manipulate the situation of the group and measure the effect on emotions. An immediate complication for this kind of research is that a situation that affects the group might also affect the individual simply because the individual is a group member and thus might be concerned by the situation merely as an individual (for illustrations, see Mackie, et al., 2000; van Zomeren, et al., 2004; van Zomeren, Spears, et al., 2008). How then to disentangle the part played by individual appraisals and the part played by group-based appraisals?

One solution is to manipulate both the personal and the group situation independently in the same experiment. For example, Doosje, Branscombe, Spears, and Manstead (1998) provided information that either participants themselves or participants' group members had harmed another group. Results showed that when participants had done nothing wrong as individuals, the alleged discriminatory behaviour of their group members still induced feelings of guilt (which must thus have been a reaction to group-based and not individual appraisals).

Another solution is to focus on situations where the individual is not personally concerned by the events and manipulate the situation of the group. Fans at sports competitions are a good example of this kind of situation. Fans identify with their team but they do not personally contribute to its results nor are they personally affected by the team winning or losing a game. People who have attended sports games will not be surprised that the outcome of the game has an impact on the emotions of the spectators. Wann, Dolan, McGeorge, Allison (1994) found that game outcome influenced positive and negative emotions of fans. They asked basketball spectators to fill in a mood measure before and after a game. Positive emotions increased following a win and negative emotions (a mix of anger and sadness items) increased following a loss, a pattern that was especially strong for fans that identified strongly with their team (see also Crisp, Heuston, Farr, & Turner, 2007; Hirt, et al., 1992; Kerr, Wilson, Nakamura, & Sudo, 2005). Winning versus losing can be considered as a quasi-

experimental manipulation of group-based appraisals, but it is a very crude one. Many factors could have influenced the game outcome and many emotional reactions are possible.

Other studies have used more specific manipulations of the group situation. Doosje, Branscombe, Spears and Manstead (1998, Study 2) manipulated the group's situation where this manipulation could not have been interpreted as a manipulation of the individual's situation. They presented their Dutch participants with information on the past behaviour of the Dutch in their former colony Indonesia. The research participants had not been born at the moment these events took place, so could not possibly be involved in them. The only link of the participants to the past behaviour of the Dutch was their group membership as a consequence of their Dutch nationality. Still, when the Dutch were presented as having behaved badly participants reported feeling more guilt than when the Dutch behaviour was presented as positive (although the pattern differed somewhat between high and low identifiers). Conceptually similar results were reported by Zebel, Pennekamp, van Zomeren, Doosje, van Kleef, Vliek, and van der Schalk (2007).

In another example of specific manipulations of the group situation leading to group-based emotions, Leach, Spears, Branscombe and Doosje (2003) took advantage of the 1998 soccer world cup to elicit group-based emotions. Leach and colleagues focused on *schadenfreude* (pleasure at the misfortune of others). They showed that manipulations of in-group inferiority at soccer (confronting participants with their nation's bad soccer results) led to feelings of *schadenfreude* toward an out-group that suffered defeat in a world cup game.

Finally, Iyer, Schmader, and Lickel (2007) induced threat to the country image of their American and British participants by confronting them with negative information about the occupation of Iraq. This manipulation increased feelings of shame among participants, and this shame is group-based because they are in no way personally responsible for their country's deeds.

In sum, there is some evidence that changing the situation of the in-group in such a way that it does not affect group members' personal situation still leads to a change in emotions. This change in emotions is assumed to be a consequence of the group-based appraisals people make of their in-group's situation. Even though only guilt, shame, and *schadenfreude* have been investigated in this way so far, these studies provide a crucial part of the puzzle because they show a causal link between the situation of the in-group and emotional reactions. However, group-based appraisals themselves (how participants interpreted the situation) were not measured (Leach, et al., 2003) or not used as predictor variable in the analysis (Doosje, et al., 1998; Zebel, et al., 2007). The third empirical strategy we discuss addresses this issue and does measure appraisals.

3.2.2.3. Manipulating social identity salience and measuring group-based appraisals

A third way of looking at group aspects of the appraisal process is to manipulate the salience of the relevant group membership and measure both appraisals and emotions. The idea here is that a change in social identity changes the perspective of the individual and makes them appraise the environment as a group member. This strategy thus attempts to change the perceived intergroup context and expects that this will lead people to appraise the situation as a member of a particular group. Differences between conditions then reflect group aspects of appraisal and emotion because the manipulation causes a shift toward one particular social identity without changing the situation at hand. One of the advantages of this empirical strategy is that it can be applied to a wide range of situations. The studies of chapter 5 and 6 use this approach to investigate group-based appraisal and they will be presented at the end of this section.

In an earlier study using this strategy, Gordijn, Yzerbyt, Wigboldus and Dumont (2006) led participants to categorize themselves in the same group as either the victims or the perpetrators of an unfair decision (participants were not personally concerned by this decision). Their analysis focused on appraisals of unfairness and feelings of anger. For both these dependent variables, the authors found an interaction between categorization (victim or perpetrator) and identification. Participants categorized as victims appraised the decision as more unfair and reported feeling more anger the more they identified with the group. In contrast, participants categorized as perpetrators reported less intense appraisals of unfairness and anger the more they identified with their group. The interaction effect of categorization and identification on anger was mediated by appraisals of unfairness (moreover, the reverse mediation did not hold).

Although this study is certainly supportive for the idea that group-based emotion involves group-based appraisal, there is one limitation in this and other similar research (Dumont, et al., 2003; Gordijn, et al., 2001; Yzerbyt, et al., 2003). The use of a so-called crossed categorization means that the target group can be seen as part of the in-group when we focus on one social category and as an out-group when we focus on another social category. The experimental manipulation of social identity thus entails changing the in-group or out-group status of the target group. Such a change can have consequences that affect group-based emotions without necessarily passing through group-based appraisals. For instance, when the target group is part of the in-group, this could increase empathy and lead one to adopt similar emotions to the target group, without therefore adopting group-based appraisals (Parkinson, et al., 2005, p. 130).

Two recent studies have addressed this issue, i.e. they have manipulated social identity salience for the perceivers without directly changing the in-group or out-group status of the target group. Ray, Mackie, Rydell, and Smith (2008) emphasized either participants' American or their student identity and they measured anger and respect toward Muslims and the police. According to the authors, a three-way interaction between social identity (American versus student), target group (Muslims versus the police), and emotion type (anger versus respect) showed evidence for the effect of social identity salience on group-based emotions. However, additional data presented by the authors strongly suggest that the change in emotions toward the police as a result of the identity manipulation may be due to the recategorization of the target group depending on the identity made salient in the context. For example, compared to what was observed in the student identity condition, the level of respect for the police was higher in the American condition, possibly because the police was now included in the in-group, i.e. Americans. In light of this recategorization of the police target, we are left with the Muslim target to test the authors' hypothesis. In other words, is the two-way interaction between participants' social identity (American versus student) and emotion type (anger versus respect) significant when only the Muslim target is considered? Unfortunately, this effect is only marginally significant ($p < .09$), and none of the simple effects of categorization are significant (D. G. Ray, personal communication, May 18, 2009). We conclude that the non-significant effects of Ray et al.'s study are suggestive, but certainly not conclusive.

Another experiment (van Zomeren, Spears, et al., 2008) provided better results. After participants' student or personal identity had been rendered salient, they learned that tuition fees would be raised. In response to the bogus tuition fee story, participants in the student identity condition reported stronger anger and increased intentions for collective action in comparison with the personal identity condition. Unfortunately van Zomeren and colleagues (2008) did not measure appraisals (neither did Ray, et al., 2008) so their study did not establish that the change in emotions was due to a change in appraisals. In conclusion, the question of whether changing perceivers' social identity without changing the in-group or out-group status of the target group affects group-based emotions *through group-based appraisals* is still open. In chapter 5, we present three studies that address this question. Specifically, we (1) manipulate the salience of one particular social identity of our participants without changing the in-group or out-group status of the target group, and (2) measure a wide range of group-based appraisals and group-based emotions with a series of two-item scales. The results show that changing the salience of one particular social identity indeed affects emotions and

that (1) this can occur without a change in the in-group or out-group status of the target group and (2) this effect is mediated by group-based appraisals.

In two follow-up studies, we addressed two related issues about the role of group-based appraisals. A first question that remains open is whether social identity salience increases the extent to which people make group-based appraisals rather than individual appraisals. In other words, does social identity salience shift the appraisal process from the individual to the group level? To investigate this, we need a different way to measure appraisals. The studies in chapter 5 assess group-based appraisal with statements to which participants have to respond using Likert-type rating scales. Although widely used, there are in fact several limitations to this method. First, it does not allow to measure and distinguish between individual and group aspects of the appraisal process. This is very difficult because in many situations people themselves might be unable to distinguish between appraisals they make as individuals and appraisals they make as group members (see also section 3.2.2.1). A second problem is that the similarity in format of appraisal and emotion questions risks to alert participants to the purpose of the study and might motivate them to give consistent answers on both, thereby artificially inflating the statistical relation between appraisals and emotions. For these two reasons, we decided to use an open-ended measure of appraisals, i.e. to let participants spontaneously report their thoughts instead of forcing them to answer on pre-formulated items. This is both a less obtrusive, more natural measure, and it allows us to assess whether thoughts are group-related or not. It will put us in a position to answer the question of whether social identity salience really makes people focus more on group concerns relative to individual concerns. The two experiments presented in chapter 6 use a thought-listing procedure as an open-ended measure of appraisals.

The second question is whether we can find a different, more natural manipulation of social identity salience that has similar effects on group-based appraisal and group-based emotion. In the studies we discussed above (Gordijn, et al., 2006; Ray, et al., 2008; van Zomeren, Postmes, & Spears, 2008) and in the studies presented in chapter 5, the manipulation of social identity salience is rather direct, i.e., people are reminded of their membership in one particular group. Although this is a convenient way of studying social identity salience in the laboratory, in real-life situations people are not often reminded of their group membership in this way. Oftentimes the salient social identity is a consequence of past and ongoing communication and social interaction. It seems then desirable to try to replicate our findings using a more ecologically valid manipulation of social identity salience. One example of a situation that is likely to lead to a high salience of a particular intergroup context is when in-group members discuss an issue that involves out-group members or affects the in-

group in some way. In such a situation, the intergroup context arises spontaneously due to the structure and content of the discussion (Blumer, 1958; Mead, 1934). An in-group discussion about an out-group is likely to lead to an increase in *fit*, to use a term of self-categorization theory (Turner, et al., 1987). There is indeed evidence that a group discussion can foster group-based cognitions and responses (Haslam et al., 1998; L. G. E. Smith & Postmes, 2007, 2010; Stott & Drury, 2004). Yzerbyt, Kuppens, and Mathieu (2010) used this method to investigate group-based appraisals and group-based emotions. They allowed some pupils to discuss a decision that affected foreign pupils (but not themselves) and that could potentially be seen as unfair (note that foreign pupils are in-group members when the pupil identity is salient). Other pupils discussed a neutral topic. As expected, discussing the decision with another pupil led to stronger appraisals of unfairness and to stronger anger (with the effect on anger being mediated by appraisals of unfairness). One of the experiments presented in chapter 6 uses similar group discussions on a group-relevant issue to elicit group-based appraisals (measured with a thought-listing procedure) and group-based emotions.

Apart from directly assessing group-based appraisals, there are other unanswered questions about the role of group-based appraisal in group-based emotions. In fact, two issues concerning group-based appraisal have received very little attention to date. The first is the role of group identification, and the second is the possibility of chronic links between groups and particular appraisals or emotions. We discuss both of these below.

3.2.3. Identification and group-based emotions

In chapter 1 we argued that social identity serves to protect group interests and that people do so to the extent that their social identity is activated. Taking the in-group's point of view, however, is not trivial, and this therefore does not occur on behalf of any group. The more important a group is to an individual, the more likely the individual should engage in thoughts or actions on behalf of the group. In the social identity perspective, the psychological importance of a group is reflected in and measured by group identification. There is indeed much evidence that identification has a wide-ranging impact on group behaviour (Ellemers, Spears, & Doosje, 2002, 1999).

We have defined group-based emotions as reactions to group-based appraisals of group concerns. Group concerns are, of course, the material group interests we discussed in chapter 1 and in the previous paragraph. It then becomes clear that group-based emotion is just one way in which people react as group members rather than as individuals. Consequently, because identification makes group concerns more relevant, group-based appraisal is more

important to the extent that people identify with the group, and this will intensify group-based emotions.

There is ample evidence that group identification is positively related to people's emotional reactions toward events that affect this group (Combs, Powell, Schurtz, & Smith, 2009; Gordijn, et al., 2006; Mackie, et al., 2000; Mackie, Silver, & Smith, 2004; Musgrove & McGarty, 2008; Petrocelli & Smith, 2005; Rydell, et al., 2008; Wann, et al., 1994; Yzerbyt, et al., 2003). One important exception to this relation are group-critical emotions such as shame and guilt. In this case high identifiers are motivated to protect the positive image of the group and as a consequence can be even less likely to report group-based guilt than low identifiers (Doosje, et al., 1998; Leach et al., 2008).

Even if we consider those emotions where a positive relation has generally been found (even though these findings are not universal, see Iyer & Leach, 2008), research on the relation between identification and group-based emotions is far from conclusive. Many important questions remain unanswered. First, identification is always measured rather than manipulated, which means that care should be taken when inferring a causal relationship. Second, no research to date has shown that identification is more strongly related to emotional reactions to group than to personal events. It is therefore possible (though maybe unlikely) that identification is in fact related to some general emotional sensitivity to any kind of event rather than a specific sensitivity to group events and group concerns. Third, identification has been measured directly using self-report questionnaires. This strategy entails the risk of alerting participants to the purpose of the study and might encourage them to give consistent answers on both identification and group-based emotion measures. To sum up, although the relation between identification and group-based emotions seems theoretically undisputed (except for the case of group-critical emotions), the empirical evidence is not entirely convincing.

In chapter 7, we propose a novel way of investigating this theoretically crucial link between the psychological importance of the group and the intensity of group-based emotions. Instead of relying on self-report questionnaire measures of identification, we experimentally and indirectly increased the importance of the group to the individual. We did not manipulate the importance of or the identification with one particular group, but rather the general importance of belonging to a group or the desire to affiliate with others. We used a social exclusion manipulation to obtain this effect. The experimental and indirect nature of this manipulation makes it a stronger test of the prediction that identification leads to stronger group-based emotions. In addition, we also manipulated the individual versus group level of the emotion. Specifically, we confronted our participants with an event that affected either

personal or group concerns, and then assessed their emotional reaction to this event. The process of evaluating personal and group concerns and reporting emotional reactions is of course nothing else than individual and group-based appraisal, respectively. We thus manipulated the level at which the appraisal process takes place. We predicted that social exclusion would increase emotional reactions to group, but not individual events.

3.2.4. Chronic links between groups and particular appraisals or emotions

If people do make group-based appraisals and feel group-based emotions, one intriguing question is whether some groups have a particularly strong association with one particular type of appraisal and emotion. In other words, are there groups on behalf of which group members more easily or spontaneously make specific appraisals and feel specific emotions? A related but essentially similar question is whether certain intergroup relations are characterized by one sort of intergroup appraisals and intergroup emotions. Interestingly, this idea is similar to what Smith, Seger, and Mackie (2007) wanted to investigate with their measure of chronic group emotions. However, chapter 4 shows that their measure is probably not related to intergroup appraisals. This question therefore remains largely open.

If there are reliable associations between one particular group (or intergroup relation), intergroup appraisals, and intergroup emotions, activating one of these elements might lead to the activation of the other elements as well and in this way affect the attitude toward that group. One possible way to investigate the chronic associations between intergroup relations, appraisals, emotions, and intergroup attitudes would then be to prime or activate appraisals or emotions (outside of the intergroup context), and assess whether this has a different effect on attitudes toward different groups. The prediction would be that appraisals or emotions only affect intergroup attitudes if they are relevant to the intergroup context at hand.

Such an effect of an incidental activation of appraisals or emotions on intergroup attitudes would be due to an attributional error, i.e. the individual somehow assumes that they are in fact relevant and informative for the judgment at hand. Indeed, this is the reason incidental emotions have an effect on information processing (see Sinclair, Mark, & Clore, 1994). Lerner (Lerner & Keltner, 2000; Lerner & Tiedens, 2006) has similarly explained the effect of incidental emotions by referring to “appraisal tendencies”, meaning that an incidental emotion leads to appraisals that are consistent with the emotion and in that way influences information processing. This can explain why incidental emotions have an effect on attitudes toward certain groups, but not others. If the appraisals associated with the incidental emotion can not readily be applied to the group at hand, there will be no effect of emotion induction on

intergroup attitudes. However, if the induced emotion fits well with existing intergroup appraisals, the emotion might activate those appraisals and lead to consistent attitudes.

Some research using emotion induction has started to explore this issue (although the theoretical rationale is still underdeveloped). For example, it has been shown that dispositional anger and disgust are specifically related to anti-Black attitudes and attitudes toward gay men, respectively, among male American college students (Tapias, Glaser, Keltner, Vasquez, & Wickens, 2007). Furthermore, inducing disgust leads to intergroup bias against gays and lesbians (in comparison to heterosexuals) whereas inducing anger leads to intergroup bias against Arab men (in comparison to White American men) in American college students (Dasgupta, DeSteno, Williams, & Hunsinger, 2009). Finally, among Dutch participants, inducing anger led to more negative evaluations of national out-groups, but only for out-groups that were already evaluated negatively in the control condition (Otten et al., nd).

These effects (Dasgupta, et al., 2009; Otten, et al., nd; Tapias, et al., 2007) of emotion induction on attitudes toward certain groups but not others can then be explained by the fact that those groups are chronically related to specific appraisals and emotions. Only if the induced emotion fits the intergroup appraisals that are chronically associated with a group, will emotion induction affect intergroup attitudes.

In order to investigate this issue, we chose to study intergroup attitudes between two types of social groups that have very different structural relations with each other, and that thus also entail very different intergroup appraisals and intergroup emotions (chapter 8). The first groups are ethnic groups, i.e. groups that typically compete for resources. The second groups are gender groups, i.e. groups that are structurally dependent on each other for many things (most importantly reproduction). We focused on anger because it is related to group-based conflicts for resources and taking action against the out-group (van Zomeren, et al., 2004; Walker & Smith, 2002). We induced anger or a neutral emotional state and assessed intergroup attitudes with an Implicit Association Test. Our main prediction was that anger induction would increase intergroup bias for ethnic groups, but not gender groups.

In conclusion, the theoretical and empirical work presented in the following chapters addresses novel research questions about the role of group-based appraisals in group-based emotions. This research is not only timely but also important given how contemporary researchers generally underappreciate the role of group-based appraisals.

Chapter 9. General discussion

9.1. Summary of findings

In chapter 1 we argued that social identity is a psychological mechanism that has evolved to make intergroup behaviour possible and that it ultimately serves to protect group interests when this is beneficial to the individual. In chapter 2 we discussed appraisal theories of emotion and we described emotions as a functional mechanism that flexibly motivates adaptive behaviour in the complex social environment in which humans live. In Chapter 3 we put these two ideas together and defined group-based emotions as emotional reactions to group concerns. Group-based emotions result from group-based appraisal when social identity is activated. Group-based appraisal is at the heart of group-based emotion because appraisal is at the heart of emotion and social identity simply shifts this process to the group level. Much research has recently addressed the role of group-based emotions in intergroup relations and group-based emotions are successfully used as a measure of intergroup attitudes. However, we have pointed at a lack of attention for the role of group-based appraisal in the literature on group-based emotions. Our main point in this dissertation is that group-based appraisal is theoretically underappreciated and seldom directly investigated in empirical research. We have tried to fill this gap and aimed to provide empirical evidence for the supposed role of group-based appraisals.

Chapter 4 dealt with the correspondence between theory and measurement in the case of chronic group emotions. Chronic group emotions are conceptualized as being (a summary of) group-based emotions, but the results of the study presented in chapter 4 call this into question. Although theory predicts, and many studies have shown, a positive relation between group identification and group-based emotions, we found a negative relation between identification and negative chronic group emotions. We proposed that the existing measure of chronic group emotions assesses emotions *about* group membership rather than emotions *because of* group membership, and provided supportive evidence for this claim.

In chapter 5 we have shown that making salient the woman identity led to a series of predicted changes in appraisals and emotions toward Muslims. Two facts make these results novel and supportive for the role of group-based appraisal. First, the effect of social identity on emotions was mediated by appraisals of group threat. Second, the social identity manipulation did not change the extent to which participants saw Muslims as in-group or out-group members. This second point is important because previously established effects of

social identity salience on group-based emotions were open to the alternative interpretation that they were due to a recategorization of the target group from out-group to in-group.

Chapter 6 builds upon chapter 5 and extends the results in two crucial ways. First, a thought-listing procedure was used as an open-ended measure of appraisals. This allowed us to test the relation between group-based appraisals and group-based emotions when both are assessed using different types of measures. Results revealed that social identity salience does lead people to spontaneously report more group-based appraisals (i.e. in the absence of questions explicitly mentioning group-based appraisals). A second important point in chapter 6 was the more indirect manipulation of social identity salience. Whereas in chapter 5 and in the first study of chapter 6 we manipulated social identity salience by directly reminding participants of one particular group membership, the second study in chapter 6 achieved social identity salience by letting small groups of participants discuss a group-relevant event. Discussion indeed led to social identity salience and group-based emotions, and emotions were related to group-based appraisals, as measured with the thought-listing procedure. Both of these extensions of the results of chapter 5 are important increases in the ecological validity of our results.

In chapter 7 we most clearly illustrated the difference between individual and group-based appraisals, and the role of the importance of the group (usually represented by the concept of social identification) in bringing about group-based emotions. We manipulated the importance of the group by inducing feelings of social exclusion. In addition, we manipulated the level of the appraisal process by presenting participants with vignettes that contained either individually relevant or group-relevant events. Social exclusion led to stronger emotional reactions to group events, but not individual events. This means that the importance of the group affected group-based, but not individual appraisal.

Chapter 8 investigated chronic links between emotions, appraisals, groups, and intergroup attitudes. We found that the effect of (incidentally induced) emotion on intergroup attitudes depends on the type of group, in a way that was predicted by taking into account the typical intergroup appraisals associated with that group. Specifically, induced anger increased ethnic intergroup bias, but not gender intergroup bias, an effect we explain by referring to the fact that ethnic groups are typically involved in conflicts for resources whereas gender groups are not. Interestingly, this effect was only obtained for male participants.

Taken together, these studies provide comprehensive evidence for the role of group-based appraisal in group-based emotion. We have shown that (1) spontaneous reports of group-based appraisal increase when social identity is made salient, (2) group-based appraisals mediate the effect of social identity salience on group-based emotions, and (3) the

importance of the group to the individual affects group-based, but not individual appraisal. We also provided some preliminary evidence that groups or types of groups can be chronically related to particular emotions and associated appraisals and attitudes.

If we accept the idea that group-based appraisal is at the heart of group-based emotion, what consequences does this have? We will explore some of these in the following section.

9.2. Group-based appraisal: Implications

The heart of this dissertation is that group-based emotions are emotional reactions to group concerns. We believe that accepting this definition has a series of conceptual and methodological consequences. First, it influences the construction of classification schemes or typologies of group-level emotions, and the related use of terms such as group-based, collective, or group emotions. Second and somewhat related to the first point is the difficult issue of the measurement of group-based emotions. Third, if group-based emotions result from group-based appraisals, this means that we can expect them to be largely adaptive rather than maladaptive. Finally, there are also implications for how to change intergroup relations.

9.2.1. Classification of group-level emotions

The most fundamental characteristic of emotions is that they result from appraisals. Most other aspects or functions of emotions depend on the fact that appraisals give informational value to emotions. It is then logical to argue that the most fundamental difference between individual and group-level emotions should be looked for in the appraisals. Therefore we have defined group-based emotions as emotional reactions associated with appraisals of group concerns, and we have also provided empirical evidence for the central role of group-based appraisal. The consequence for classification systems of group-level emotions is that the distinction between emotions resulting from individual appraisals and emotions resulting from group-based appraisals should be central in any classification.

In this section we will provide our own definition of different kinds of group-based emotion, giving a central place to group-based appraisal. We first address two topics related to the role of the object of emotions in classifying group-level emotions. Specifically, we discuss the conceptualization of intergroup emotions and group-based emotions toward individuals. Then we discuss the relation between group-based emotions and shared emotions and propose a classification of appraisal processes that lead to emotions.

9.2.1.1. Intergroup emotions

We define intergroup emotions as group-based emotions that result from an appraisal of an intergroup relation. Iyer and Leach (2008) have defined intergroup emotions more restrictively as emotions that are felt by an individual who self-categorizes as a group member and that are directed toward an out-group. The difference is that Iyer and Leach distinguish between group-based emotions directed at the out-group (i.e., intergroup emotions such as fear, anger, and contempt) and group-based emotions directed at the in-group (e.g., guilt and shame). However, both these types of emotions result from the same process of group-based appraisal of a relation between the in-group and an out-group. If we feel guilty about our country's past behaviour in its former colony, this guilt is as much about the suffering caused in the colony as it is about the blame that our fellow in-group members bear for this suffering. Indeed, the group-based guilt and shame in the literature arises almost always in an intergroup relation and can thus be called appropriately intergroup guilt and intergroup shame (as done by Parkinson et al., 2005). In this respect it is telling that Iyer and Leach's entire section on "group-based emotions directed at in-groups" (Iyer & Leach, 2008, pp 100-102) talks about intergroup relations. We therefore think there is no need to put group-based emotions directed at the in-group and group-based emotions directed at an out-group in different categories.

To summarize, intergroup emotions are emotions that result from group-based appraisals about an intergroup relation, and they can be directed at an out-group or in-group. One question left unanswered is the nature of group-based emotions that are *not* intergroup emotions. Can these be clearly defined and do they exist? This is the issue we turn to in the next section.

9.2.1.2. Group-based emotions toward individuals

Existing classifications of group-level emotions agree that group-based emotions can be felt toward individuals or toward groups (Iyer & Leach, 2008; Parkinson, et al., 2005). Iyer and Leach (2008) have noted that no research has been done on group-based emotions toward individuals. Although we agree that group-based emotions toward individuals are rather rare, we will propose two instances of this type of emotion in an attempt to fill this (theoretically) blank spot. We define group-based emotions toward individuals as emotions that result from group-based appraisal, and that are directed at an individual that is not primarily seen as an out-group member.

If we take the process of group-based appraisal as the defining element of group-based emotions, it is easy to see that group-based emotions do not need to be limited to intergroup

emotions. Group-based emotions can in theory be felt about many things – not only about intergroup relations (see Yzerbyt, et al., 2006). For example, group-based guilt can be felt about the damage that one's group has done to nature, in which case group-based guilt is not an intergroup emotion because it does not involve an intergroup relation. The target of group-based emotions can also be an individual. For example, religious people can feel grateful toward a God that has picked their group as the chosen people or is perceived to protect the group from evil.

In monotheist religions, God is not a member of any group. Humans, however, nearly always are. Therefore, if the target of the group-based emotion is an individual who is a member of an out-group, it is likely that the intergroup relations between that out-group and the in-group play a role in determining the exact nature of the emotion. This is especially the case to the extent that the out-group member is seen as a representative member of that group. The negative European reaction to former US president George W. Bush, for example, is most likely influenced by the relations between the US and Europe. Even group-based emotions toward an in-group member can be affected by intergroup relations, for instance in the case of a traitor. A similar case can be found in the second study of Chapter 6 where we assessed emotions about the decision of an in-group member, but where the existing intergroup relations clearly affected these emotions. The point we want to make is that it is often difficult to know whether the target of an emotion is an individual or a group member. As an example of group-based emotions directed at individuals, Iyer and Leach (2008) mention British citizens' mourning after the death of Princess Diana. However, these emotions would only be group-based to the extent that they are a consequence of the loss of an important country symbol rather than a personal heroine (and we therefore think this is not a particularly clear example of group-based emotion toward an individual).

In order to strengthen the case for group-based emotions toward individuals, we want to mention two interesting cases that we think qualify for this category of emotions. The first is altruistic punishment. The second is the emotional reaction toward a norm-violating in-group member, the so-called black sheep effect (Marques, Yzerbyt, & Leyens, 1988). Both examples are very similar because they are about reactions to deviant in-group members.

9.2.1.2.1. Altruistic punishment

Punishment of non-cooperators has been observed in cooperation dilemmas such as public goods or dictator games (Fehr & Fischbacher, 2004; Fehr & Gächter, 2002). Participants in those games often choose to punish other participants who do not cooperate or who make unfair offers, even if punishing is costly and can have no benefit to the punisher.

This kind of punishment can be called altruistic because it dramatically increases cooperation in groups (Fehr & Gächter, 2002), meaning that it has benefits for the whole group, while the punisher is the only one who bears the cost. Furthermore, it is also observed when the punisher is not even involved in the economic exchange that leads to the punishment (third-party punishment, see Fehr & Fischbacher, 2004). For altruistic punishment to qualify as group-based emotion, it needs to be shown that (1) it results from group concerns, and (2) it involves emotions. Concerning the first point, many studies on altruistic punishment have tried to make sure that there are no personal motives for the punisher. Altruistic punishment is group-based behaviour (a reaction to group concerns) because it is a reaction to a violation of reciprocity norms and its most likely function is to enhance in-group cooperation (Gintis, Bowles, Boyd, & Fehr, 2003; Kessler & Cohrs, 2008). Indeed, the fact that third-party punishment only occurs when the unfair behaviour affects in-group members (Bernhard, Fischbacher, & Fehr, 2006) is consistent with this idea. Concerning the second point, there is some evidence suggesting that the effect of unfair or non-cooperative behaviour on altruistic punishment is due to feelings of anger (Burton-Chellew, Ross-Gillespie, & West, 2010; Civali, Corradi-Dell'Acqua, Gamer, & Rumiati, 2010; Fehr & Gächter, 2002; Hopfensitz & Reuben, 2009; Elise C. Seip, van Dijk, & Rotteveel, 2009; Elise C. Seip, Van Dijk, & Rotteveel, 2009, August), although more research on this topic is needed because none of these studies has shown that emotions actually drive altruistic punishment in a group (instead of interpersonal) context. One idea for a study could be to manipulate identification with the group and assess emotions toward and punishment of non-cooperators. If these emotions qualify as group-based emotions, they should be stronger in the high-identification condition.

9.2.1.2.2. Black sheep effect

The second possible example of group-based emotions toward individuals comes from research on the black sheep effect. The black sheep effect refers to the finding that deviant in-group members are evaluated more negatively than equally deviant out-group members are (Marques, et al., 1988). This could be seen as a surprising effect because in-group members are usually evaluated more positively than out-group members (Hewstone, et al., 2002). Again, for the black sheep effect to qualify as a group-based emotion we need to show that the black sheep effect is a group-based reaction and that it involves emotions. Concerning the first point, the literature on the black sheep effect has indeed shown that the effect is driven by social identity concerns (Marques & Paez, 1994). For example, the black sheep effect only shows for highly identified group members (Branscombe, Wann, & Noel, 1994) and the effect disappears when a superordinate social identity is made salient (Marques, et al., 1988). The

purpose of negatively evaluating deviant in-group members is to maintain a positive social identity (which is the group concern at stake) by distancing her/him from the group.

There is some evidence suggesting that the black sheep effect is mediated by emotions. Chekroun and Nugier (2005) found that deviant in-group members elicited a stronger desire to confront them and to change their behaviour than deviant out-group members did. Importantly, this distinction in the treatment of in-group and out-group members was mediated by anger and shame/guilt, but unfortunately the researchers did not clearly specify the target of the emotions. Otten (2009) also describes some unpublished studies suggesting that emotions are involved in reactions toward in-group deviants.

In sum, to the extent that emotional reactions to deviant in-group members are based in threats to social identity or to group interests, these classify as group-based emotions toward individuals, because they are emotional reactions to group concerns. The next implication of putting group-based appraisal at the heart of group-based emotion we discuss here is the distinction between the group-based and the shared aspect of emotions. We have already dedicated some space to this issue in the general discussion of chapter 6, so we can be rather brief here.

9.2.1.3. Group-based emotions and shared emotions

Although the collective or shared nature and the group-based nature of emotions can be clearly distinguished at the conceptual level, in real life these aspects will often be intertwined. Group-based emotions can be shared in the group (as can individual emotions), but this is not a necessary condition to speak of group-based emotions. Emotions can be group-based without being shared. For instance, a Flemish nationalist in a bakery in Ghent, Belgium who hears a client ordering in French might find this irritating or even become angry. That would be a group-based emotion because it is based in the alleged lack of respect of Belgian Francophones for the language spoken by the Flemish (Dutch is the official language in Flanders). However, these emotions are not necessarily shared because maybe there are no other Flemish nationalists in the bakery. If the French-speaking client turned out to be from France, the Flemish nationalist would now feel guilty about the fact that he felt irritated before, because nobody expects the French to speak Dutch. Note that the guilt would be an individual emotion because it is a reaction to an individual transgression.

One can also argue for the distinction between the group-based and the shared character of emotions the other way round, i.e. by showing that emotions can be shared and/or influenced by group membership without being group-based (see the general discussion in chapter 6). Take the reaction to the 2009 swine flu pandemic. As it is nearly impossible for

most individuals to correctly estimate the real risk, many people's opinions and precautionary measures will have been influenced by the reaction of close others, the opinion of experts in the media, or, more indirectly, the 'information' given by companies that produce antiviral drugs. Still, the concern that elicits the appraisal process is an individual concern, i.e. what is at stake is the risk for the individual of being contaminated. Anxiety in response to the swine flu is thus an individual emotion, but one that is influenced by the reactions of others, which makes it likely that anxiety levels will be similar among individuals that interact frequently and discuss swine flu.

Regarding the overlap between shared and group-based emotions, Smith, Seger, and Mackie (2007) went a step further and have even asserted that the shared character of emotions is one of the criteria to determine whether emotions are group-level. We disagree with their point of view and can only conclude that whatever Smith and colleagues (2007) mean by group-level emotions is something different than what we have conceptualized as group-based emotions. The previous paragraphs demonstrate with simple examples that the group-based and the shared character of emotion are separate theoretical concepts (although often related to each other in natural circumstances). To sum up, both individual and group-based emotions can be influenced by social appraisals or by group norms, but that does not change their individual or group-based nature.

Table 20: Ideal types of appraisal and emotion

	<i>Level of appraisal process</i>	
	<i>Individual</i>	<i>Group</i>
<i>Emotion not shared</i>	Idiosyncratic appraisal	Group-based appraisal following top-down self-categorization
<i>Emotion shared</i>	Individual appraisal influenced by social appraisal and contagion	Group-based appraisal influenced by social appraisal and contagion (collective emotion)

For the sake of clarity, we end our discussion of the shared aspect of emotion with a description of our own classification of different processes leading to ideal types of emotion. In Table 20 we have simply crossed the shared and group-based character of emotion into a two by two classification. Emotions that result from processes described in the last column are group-based emotions because they result from group-based appraisal. New here is that we propose to use the term *collective emotions* for those group-based emotions that are also shared in the group. This is consistent with the current use of the term "collective guilt",

which refers to historical wrongdoings of one's in-group members and is thus clearly a group-based emotion. Together with our definition of intergroup emotions in section 9.2.1.1, this definition of collective emotions resolves the current ambiguity in the literature concerning the use of the terms 'group-based emotions', 'collective emotions', and 'intergroup emotions' by clearly separating individual appraisals from group-based appraisals and introducing the shared character of emotions as an extra dimension. Of course, collective emotions are an ideal type. Emotions are rarely shared by every single person in a group. However, this does not take away from the heuristic value of defining an ideal type.

Group-based emotions that are not shared (top right section in Table 20) have not been subject to social appraisal or contagion and thus result from pure individual self-categorization as a group member. Although these emotions are probably rare in the real world (i.e., limited to reactions to novel situations), most emotions measured in the studies of this dissertation belong to this category. Research participants respond individually to emotion items and have no chance to share their thoughts or emotions with someone else.

Regarding individual emotions (left section of Table 20), we make the same distinction between appraisals made in isolation and appraisals influenced by others, possibly leading to shared emotions.

9.2.2. Measuring group-based emotions

A major problem with the distinction between individual and group-based emotions is that it is often difficult to measure them separately. Individual happiness looks and feels the same as group-based happiness, so measures will have some difficulty in distinguishing between both. Moreover, events that affect the group will often also affect group members personally (see for example Mackie, et al., 2000; van Zomeren, et al., 2004), further blurring the distinction between individual and group-based emotions. How can researchers then be sure that they are looking at individual or group-based aspects of emotion? This may not always be an important issue, but for research that explicitly focuses on group-based emotions, it is crucial to show that the emotions that are measured are indeed the consequence of an individual taking into account group concerns and making group-based appraisals.

There are at least two solutions to this problem. First, we can investigate situations in which individual appraisals are not relevant because the situation does not speak to individual concerns. For example, we can feel guilty about the misdeeds of group members (as in the research of Doosje, et al., 1998). Another example would be the emotions experienced by sports fans. A second solution is to use an experimental manipulation that affects the salience

of a certain social identity. Differences between conditions in which social identity is or is not made salient then represent group-based aspects of emotions. This does not mean that there are no individual appraisals that are relevant, but these are equally relevant in all conditions. The point is that in the condition in which social identity is salient, group-based appraisals become more important whereas individual appraisals do not. Such social identity salience can be achieved in many different ways. Van Zomeren, Spears, and Leach (2008) asked participants to write about a typical day of their life as a student or as an individual before answering the actual questionnaire. Many similar procedures are possible. In the studies of Chapter 5 and 6, part of our social identity salience manipulation was to ask participants to answer a series of questions on how strongly they identified with the relevant group. Seger, Smith, and Mackie (2009) primed participants with either “America” or “Indiana University” using group-related songs or pictures. We can also simply include in the question a reference to the social identity we are interested in. In other words, we can ask people for their emotions *as members of a certain group* (e.g., E. R. Smith, et al., 2007).

Some researchers have used a combination of these two methods for assessing group-based aspects of emotions. Gordijn, Yzerbyt and colleagues (Dumont, et al., 2003; Gordijn, et al., 2001; Gordijn, et al., 2006; Yzerbyt, et al., 2003) used versions of a cross-categorization paradigm. In their scenarios, a particular group was affected by an event that did not affect the participants personally. Importantly, this group could be seen either as an in-group or as an out-group, and social identity was made salient in order to emphasize one or the other. That is, by bringing participants to define themselves in one of several ways, the target group was seen as an in-group or as an out-group. For instance, Yzerbyt and colleagues (2003) made salient to their participants either their social identity as students or their identity as students at the University of Louvain. Participants were then given a newspaper article that presented the students of another university being angry about a decision of the Board of Directors of that University. The point here is that, when the category of students is made salient, the students in the newspaper article are part of the participants’ in-group, but when the participants see themselves as students from Louvain, the other students are out-group members. This method thus includes both an event that does not concern participants personally, and a manipulation of social identity salience.

There is one important caveat about using a social identity salience manipulation to elicit group-based emotions. Even when social identity is made salient, in order to speak about group-based emotions, these emotions must still result from appraisals of events, situations, or actions that are relevant to the group’s concerns. Iyer and Leach (2008) have suggested that researchers wanting to tap group-based emotions should make sure that

participants self-categorize as group members, and they suggest this can be done by explicitly asking people for their opinion as group members. However, it is not clear what is tapped exactly when one asks people about their feelings as group members. Will they indeed report emotional reactions to group concerns, or rather emotions they think are felt by other group members, emotions they feel toward their group, or emotions they feel when they are with other group members? In other words, there is no guarantee that asking people about their emotions as a member of a certain group will make them report emotions that result from group-based appraisals. Indeed, we saw in chapter 4 that measures of chronic group emotions (Seger, et al., 2009; E. R. Smith, et al., 2007) tap people's feelings about belonging to a group rather than group-based emotions.

Yet another interpretation of the answers to questions about emotions people feel "as a group member" is that people will report emotions that are stereotypically linked to the group. It could be argued that participants might not report what they are actually feeling in response to group-based appraisals, but what they think that group members feel in general. Robinson and Clore (2002) have reviewed evidence showing that these so-called identity-related beliefs can indeed shape emotional self-report. For example, their analysis indicates that women are generally thought to feel more negative self-directed emotions such as shame and guilt and more positive other-directed emotions such as sympathy and empathy (Robinson, Johnson, & Shields, 1998; Tangney, 1990). Asking to report emotions as a woman might of course activate these identity-related beliefs even more and might show an effect of social identity salience on emotions that is not due to group-based appraisals, but to existing stereotypes about what group members usually feel. Robinson and Clore (2002) also review evidence that giving people more detailed information about a specific situation in which they would feel emotions, reduces or eliminates the effect of identity-related beliefs, even if the situational information is hypothetical. Applied to research on group-based emotions, this means that researchers should try to specify situations in order to make emotional self-report result from emotional appraisal rather than from beliefs about emotion. One way of achieving this is to assess emotions about one specific event (e.g., see Gordijn, et al., 2001; van Zomeren, Spears, et al., 2008; Yzerbyt, et al., 2003). Another solution is to include questions about group-based appraisals as that is likely to focus participants' attention on appraisals and thus increases the chances that subsequently assessed emotions are indeed a result of those appraisals.

9.2.3. Are group-based emotions adaptive?

The third implication of the importance of group-based appraisals is the functional or adaptive nature of group-based emotions. Group-based emotions are a combination of social identity and emotional appraisal. Note that we have argued that both social identity and emotional appraisal are functional mechanisms. In Chapter 1 we saw that social identity makes group-based behaviour possible, and that this happens in a sensible, almost rational way (i.e., responding to relevant contextual opportunities and threats). In Chapter 2 we presented emotions as an important mechanism that leads to adaptive behaviour and decision-making. It should then come as no surprise to the reader that we believe that group-based emotions have the same adaptive core as their constituting elements. If emotional appraisal can generally be expected to contribute to adaptive behaviour and if social identity is not a cognitive accident but a sensible reaction to the structure of opportunities and threats in a particular situation, then we should expect group-based emotions to be similarly adaptive and to bring individuals closer to reaching their goals.

This functional question is important because it is about the nature of group-based emotions. If we forget about the motivational side and focus only on cognitive aspects, we could see group-based emotions as an “accident”, a chance meeting of appraisals and social identity. The reasoning would be that because events happen to elicit emotions and because the self happens to consist of individual and group aspects, group events coincidentally also sometimes elicit emotions. It would be as if group-based emotions just happen to be the consequence of the fact that people sometimes categorize themselves at the group level. Going back to our discussion about the place of group interests in theories of intergroup relations at the beginning of Chapter 1, this merely cognitive approach would clearly have no place for the more material dimension of group interests. In contrast, seeing social identity and emotional appraisal as largely functional mechanisms leads one to see group-based emotions as largely functional as well. The research on the role of group-based anger in collective action and also the work on group-based guilt are good examples of the functional role of group-based emotions (for a more thorough discussion of this issue, see Spears, 2010). “Functional” will in many cases mean that emotions are reliably related to actual group circumstances.

Even if group-based emotions are adaptive, this does not rule out the possibility that we find certain specific group-based emotions undesirable. Group-based emotions are not inherently good or bad. However, based on a democratic process in society, or on the Universal Declaration of Human Rights, one could decide that some group-based emotions

should be encouraged and others should not. Group-based emotions that lead to discrimination will be regarded by many as problematic. It is in this light that the next section (on changing group-based emotions) should be understood.

9.2.4. Changing group-based emotions and intergroup relations

An emphasis on group-based appraisals also has consequences for efforts to change group-based emotions and intergroup relations. In general, it might be more efficient to work on appraisals rather than directly on emotions. Trying to change emotions without changing appraisals is probably not the best way to achieve change because appraisals cause emotions and it is better to tackle problems at their root.

If people appraise the world considering their group's concerns, a straightforward suggestion would be to change the group's structural situation. Research could look for group-based appraisals that lie at the basis of problematic intergroup relations. Using that knowledge, policies can be designed that aim for a change in the structural circumstances of the groups, thereby also changing the basis of the appraisal process. For example, if ethnocentrism is based in the precarious position of certain groups in society (e.g., the lower educated), efforts could be made to improve their position. Related to this idea of changing the structural situation of groups, are of course Realistic Conflict Theory's recipes for attenuating intergroup conflict, and their emphasis on creating interdependence between groups (for some applications, see D. M. Taylor & Moghaddam, 1994). Although this is an old theory that certainly has its limitations, its implications are still relevant to the extent that conflicts for resources are important in current intergroup relations. As an example we could cite the effect that European integration (i.e., creating relations of dependence between European countries) had on transforming Western Europe from a battlefield into a stable region.

If changing the situation is not an option, one can also try to change the group-based appraisals. For example in the case of homophobia, education and intergroup contact might undermine the appraisal that homosexuality goes against important values by changing those values.

Another idea is one that we already mentioned in chapter 5 and builds upon the fact that the social identity that is salient determines which concerns will be used as the basis of the appraisal process. Changing the identity that is salient can thus also change people's reaction to a situation. Specifically, one could emphasize and develop identities that are less involved in conflicts. Examples of these include groups such as professions and cities. These

groups crosscut groups (e.g. ethnic groups) that are currently associated with the most problematic intergroup relations (see Jones & Fazio, 2010 for evidence that making salient alternative categorizations can decrease the activation of racial stereotypes).

9.3. Limitations and future directions

There are several limitations of the research presented here. First, although our theory concerns all possible emotional reactions, we have only investigated a restricted set of emotions. Anger is a prominent emotion in four out of five empirical chapters. Chapter 5 also included results for fear, chapter 6 had an effect on indignation, and in chapter 7 there was an effect on disgust. Obviously, what is absent here is research on positive group-based emotions. In chapter 6 we found effects on happiness in both studies, but these were not very reliable. The extent to which the results can be generalized to positive emotions remains thus largely an open question.

A second limitation is that we did not attempt to manipulate appraisals directly. Some existing studies have manipulated situations that were not relevant to participants as individuals, but only as group members (Doosje, et al., 1998; Iyer, et al., 2007; Leach, et al., 2003). However, this kind of manipulation of the group-relevant situation can still be distinguished from manipulating appraisals. A (real or imagined) situation can be easily manipulated in research, but appraisal is the personal interpretation of that event or situation. Of course in some or even many circumstances it is reasonable to accept that when we manipulate the situation we know how participants will appraise the situation. An alternative, however, would be to manipulate appraisals directly. One idea could be to use some kind of false feedback in order to make participants believe that they do or do not endorse certain appraisals (e.g., by manipulating rating scales, see Chaiken & Baldwin, 1981). Although this is also applicable to individual appraisals and thus not specific to group-based appraisal, this method could still be used to strengthen the case for the causal role of group-based appraisals in group-based emotions.

A third general limitation is that we have little information about the dynamics of the social process that leads to group-based appraisal. Our use of small group discussions in chapter 6 was intended to shed some light on this issue. Although we found that having a group-relevant discussion affected group-based emotions, we learned less than we had hoped to about the interactive process leading to this result. Participants that discussed the group-relevant issue did not like the discussion more and did not feel closer to the other members of their discussion group than participants that discussed a neutral topic. Furthermore,

participants that discussed the group-relevant issue did not think that other group members had different emotions than participants that discussed a neutral topic (this particular finding was not presented in the paper in chapter 6). This means that there was an effect on own emotions, but not on the emotions they thought other group members felt. As a result, we don't know much about the mechanism responsible for the effect of within-group interaction on social identity salience and group-based emotions. We believe this is a most crucial issue as virtually all real-world attitudes result from a long history of social interaction with others.

Finally, an interesting avenue for future research would be to investigate the relation between intergroup emotions and more stable intergroup attitudes. Is there more intra-individual variability in intergroup emotions than in attitude measures such as modern racism (McConahay, 1986), attitudes toward gay men (Herek, 1988), or ethnocentrism (Welkenhuysen-Gybels, et al., 2003)? One could expect that for those who have strong attitudes, this type of attitude scales elicit pre-existing responses and thus are less variable over time and context (as questions that tap pre-existing responses are less likely to be influenced by emotions, see Forgas, 1995). A different but related question is whether all intergroup attitudes start as an emotion and thus are the result of a long accumulation of emotional reactions toward an out-group. What starts as an emotional reaction might over time crystallize in specific opinions that become chronically accessible and that are part of a discourse of which one is conscious (e.g., one knows that one is not homophobic and strongly supports equal rights for lesbians and gay men).

9.4. Conclusion

In this dissertation we have made a case, both theoretically and empirically, for the importance of group-based appraisals for group-based emotions. Although apparently central to many conceptualizations of group-based emotions, group-based appraisal had not received much attention to date. Our studies have shown that social identity salience increases group-based emotions, an effect that is due to a change in group-based appraisals. Furthermore, we found that group-based appraisal becomes more self-relevant when the group is psychologically more important to the individual. One corollary of the importance of group-based appraisal is that it focuses the attention on group interests and a material dimension of intergroup relations. This is of course a rather old idea, but one that had been pushed into the background by the cognitive focus of recent developments in the social identity tradition.

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