The Past and the Pending: The Antecedents and Consequences of Group-Based Anger in Historically and Currently Disadvantaged Groups

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Two studies investigated the role of domain relevance in the experience of group-based anger among disadvantaged groups using structural equation models. In the first study, Surinamese people to whom the slavery past was more relevant made stronger attributions of outgroup-blame and experienced more anger. This effect was above and beyond the influence of group identification. In the second study relevance of women's status position in society predicted outgroup-blame and group-based anger. In both studies domain relevance and anger were predictive of the tendencies to engage in action demanding reparation, as well as of the desire for the outgroup to engage in reparation. The role of domain relevance for intergroup emotions is considered.

KEYWORDS domain relevance, emotions, past, reparation

On July 1 2002, a large group, mainly Surinamese people of African descent, gathered in the Oosterpark in Amsterdam in the Netherlands. It is a long awaited day, as a statue will be revealed commemorating the slavery past. Because of the high fences securing the official ceremony, the event turns into a small riot. Not being able to be part of the opening gives rise to intense emotions of anger and outrage in the people present. Many people claimed it reminded them of the way the Dutch had mistreated their ancestors during slavery. This example shows that people can experience intense emotions for *past* events in which the ingroup was victimized,

even though this event is appraised in the *present*. The present research investigates how group members appraise important identity-related issues, both historical and current, when the group is victimized, and how these appraisals predict their levels of group-based anger toward the relevant outgroup. We will show that the

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relevance one places in the domain in which the group is victimized has important consequences for the appraisals that are made and the subsequent experience of anger, above and beyond identification with the ingroup. In two different samples we examine the antecedents and consequences of group-based anger directed at the outgroup blamed for the injustice. In the first sample we investigate the anger Surinamese experience toward the Dutch regarding the slavery past, and how this is related to action tendencies. In the second study we focus on a more current societal issue, namely how women perceive sexism, and how this leads to anger and action tendencies directed toward men.

Intergroup emotions

In recent years, research on the emotional consequences of group membership has made important progress, inspired by E. R. Smith's (1993; see also Mackie & Smith, 1998) intergroup emotions theory (IET). Combining insights from both appraisal theory (Scherer, Schorr, & Johnstone, 2001), as well as self-categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), IET explicated why people experience emotions based on social or group-based identity concerns. Indeed, research has shown that emotions based on group membership play an important role in the way people perceive and react to other groups (Branscombe & Doosje, 2004; Doosje, Branscombe, Spears, & Manstead, 1998; Dumont, Yzerbyt, Wigboldus, & Gordijn, 2003; see Mackie & Smith, 2002 for an overview). For example, Mackie, Devos, and Smith (2000) showed that greater collective support of one's opinion led participants to report stronger feelings of group-based anger and a stronger tendency to move against the outgroup. Other research (Doosje et al., 1998) has shown that even events that have happened in the far past can elicit emotions in people, simply because of their membership to the group that acted as a perpetrator in a historical injustice.

In these studies appraisals have been shown to be important predictors of group-based

emotions. In the present research we focus on the role of different appraisals when one's group has been or still can be perceived as the victim of another group's deeds. In particular we investigate the role of domain relevance, a primary appraisal (Lazarus, 1991). In addition we investigate two secondary appraisals, outgroup-blame, and the extent to which a person places the injustice in a historical perspective.

Relevance of the group, and relevance of a domain

In most appraisal theories the relevance of an event for the person is an important prerequisite for emotions to occur (e.g. Frijda, 1986; Lazarus, 1991; Scherer et al., 2001). Lazarus (1991) sees the relevance of an event to a person's goals as the starting point of the appraisal process. Individual differences in the relevance of a domain or issue have been shown to be important in other fields of research as well, such as attitudes (Krosnick, 1988; Petty & Cacioppo, 1986; for an overview see Johnson & Eagly, 1989) and personal goals (e.g. Cantor et al., 1991; Lavalley & Campbell, 1995). What these literatures indicate is that people who are more involved in a certain issue will process information regarding these issues more extensively, have stronger opinions about these issues and are more affected by events related to these issues. This is for example evident from the Elaboration Likelihood Model (Petty & Cacioppo, 1986), in which issue involvement (i.e. personal relevance) is given a central place. In turn these issues may be more accessible because people have given them more thought (Fazio, 1995). Another good illustration of individual differences in the relevance of certain domains is offered by the work on the contingencies of self-worth (Crocker, Luhtanen, Cooper, & Bouvrette, 2003). This work shows that people differ in the domains on which they base their self-esteem. People are consequently more affected by successes and failures in self-relevant domains. The fact that relevance has such a central place in these literatures suggests that it is important to consider this factor in studying group emotions as well.

To most researchers of group emotions, identification with a group has so far been a sufficient measure of relevance. The reasoning that when the group is important to a person, matters concerning the group will be important to this person too is implicit in this research. Indeed, a number of studies report on the different emotional experience between high and low identifiers with the group (e.g. Doosje et al., 1998; Mackie et al., 2000).

However, identification usually refers to the general importance of the group to a person, yet belonging to a group encompasses a large range of domains a group is involved in (McGarty & Bluic, 2004). We argue here that a more *specific* measure of the relevance of a domain to a person's (social) identity might function better in explaining the intensity of emotions and associated action tendencies. Some high Dutch identifiers might derive pride from the national soccer team, whereas others might derive their pride from the paintings by the Dutch masters. Some groups have evolved around a certain theme that is relevant to its members, such as fan clubs and sport clubs. The domain that these groups revolve around will be highly relevant to most members of this group. In such groups, group identification and domain relevance will be closely linked.

However, in other more broad social categories, such as gender or nationality, group members are more likely to vary in the extent to which they perceive certain domains as relevant to their group identity. Consequently, the link between the domain relevance and group identification will be less strong. Research by Sellers and his colleagues on racial identity (Sellers, Rowley, Chavous, Shelton, & Smith, 1997) has given attention to the individual differences in the meanings identities have to group members. In their inventory of Black identity, they not only include the centrality of a certain identity (i.e. identification), but also the ideologies people endorse in relation to their identity. These ideologies in turn influence their perception of group membership (Sellers & Shelton, 2003). Besides ideologies, individuals may also differ in the importance they place on more specific

domains. Indeed, it has been found that interest in the domain of soccer, and not national identification, is predictive of the intensity of the *schadenfreude* that is experienced toward a rival team after a soccer championship (Leach, Spears, Branscombe, & Doosje, 2003). Thus, it is not the identification with the national group per se that renders the performance of one's own and other teams relevant, but one's concern or interest in a specific game as well. In the present research we extend the model derived from IET by adding relevance as a predictor of the appraisals, as well as of the group-based emotions that are experienced; we expect relevance to be more predictive of the emotions than identification.

Secondary appraisals

When something is relevant to a person's group identity, one will engage in further appraisals. The assignment of blame might be an important appraisal in eliciting anger, when an event has negative consequences for the group. Weiner (1985) showed that attributing blame for a negative event to another person gives rise to anger. In a similar fashion appraising another person as being accountable for a negative event has also been shown to be important in eliciting anger (e.g. Kuppens, Van Mechelen, Smits, & De Boeck, 2003; C. A. Smith & Lazarus, 1993). A study by Doosje and Branscombe (2003) showed that blame is also relevant at the intergroup level. They demonstrated that current members of a historical perpetrator group were less likely to blame their group for a negative historical event than current members of the victim group, in particular when they were highly identified. Because victims of a historical injustice are likely to blame the perpetrator group, they are likely to experience anger regarding this past. Considering outgroup-blame may thus be important in both historical and current injustices.

Although outgroup-blame seems to be a likely appraisal when considering a historical injustice, not all group members may find these issues important today, and thus may not appraise

the event in terms of anyone's blame. Indeed, people differ in the extent to which they place past events in a historical perspective. Members of a perpetrator group are generally more likely to place negative historical events in a historical perspective than members of a victim group, especially if they are highly identified (Doosje & Branscombe, 2003). A study by Zebel, Doosje, Spears, and Vliek (2005) also showed that high identifiers placed negative past ingroup behavior more in a historical perspective than low identifiers, which lowered feelings of guilt. We believe that the relevance a certain domain has to a person will influence the extent to which people are likely to place an injustice in a historical perspective, that is, the extent to which they attribute it to situational characteristics (e.g. moral values) that existed in the past. This makes it an external attribution, in which the injustice is attributed to the situation back then, which will lead participants to experience less anger. Relevance will be a negative predictor of historical perspective, because people to whom the slavery past is relevant still consider the injustice to be important in present times. In the present research we expect that Surinamese participants who identify more strongly with their Dutch identity are more willing to appraise their slavery past in a historical perspective. A cause for this might be the fact that they belong to both the perpetrator and the victim group. As a consequence, they are likely to experience less anger toward the Dutch.

The present study investigates the appraisals of two groups regarding the past of their group or their current group status. We predict that the relevance of the slavery past among Surinamese people (Study 1) or of women's current position in society among women (Study 2) directly predicts group-based anger and is associated with stronger outgroup-blame¹ and, in Study 1, a less historical perspective. We also predict that appraising outgroup-blame will lead to more intense feelings of anger, whereas placing the events in a historical perspective will decrease these feelings. Finally we hypothesize that feelings of anger will lead the participants

to experience stronger tendencies to engage in own actions to demand reparation from the outgroup and stronger support for the outgroup to engage in reparatory action.

Study 1

The first group in which we test our predictions regarding the antecedents and consequences of group-based anger are Surinamese people living in the Netherlands. Surinam is a former colony of the Netherlands, which became independent in 1975. The Dutch practiced slavery in Surinam until 1873. Before and right after Surinam became independent large groups of Surinamese immigrated to the Netherlands. Today people of Surinamese descent are one of the largest non-native groups living in the Netherlands. Although, as described in the introduction, a monument commemorating the slavery past has been unveiled, no formal excuses regarding the Dutch role in slavery have been made.

Method

Participants The participants in this study were 138 people of Surinamese descent, currently living in The Netherlands. These people were recruited at different locations, including a gym, a school for adult education and a church in a big city in the Netherlands. There were 72 women and 49 men; 17 participants did not indicate their sex (mean age = 37.36, *SD* = 13.66). The majority of these participants were born in Surinam (74%). An item measuring the extent to which they had frequent contact with native Dutch people showed that only 5% did not have frequent contact with native Dutch people.

Procedure and materials Participants were asked if they wanted to participate in a study about the Dutch slavery past in Surinam. If they agreed to participate, they received a questionnaire, which could be filled in directly or could be taken home and be returned later to the researchers. All questions were answered on 5-point Likert scales (1 = totally disagree to 5 = totally agree) unless mentioned otherwise.

Measure of identification The first part of the questionnaire was about the extent to which participants identified with their Surinamese and Dutch identities. These questions were taken from Leach et al. (2005). Participants indicated their agreement with nine statements for each of the identities. These statements differed only in subject (Surinamese/Dutch, $\alpha = .87$ and $\alpha = .91$, respectively). An example of a statement is 'Being [Surinamese] forms an important part of the way I see myself'.

Relevance of the slavery past The first set of appraisal items was the personal relevance of the slavery past ($\alpha = .78$). This scale consisted of two dimensions, which were combined because of their high correlation. Four questions asked whether they thought the slavery past was still personally important and three statements concerned the extent to which people still discussed the slavery past with others (e.g. 'I regularly think about the slavery past').

Secondary appraisals After participants filled in the first part of the questionnaire they were told that in the remainder of the questionnaire, 'Surinamese people' would mean people who descended from Surinam and who are currently living in the Netherlands, and by Dutch people we would refer to people whose ancestors are from the Netherlands. This was important because otherwise the two groups could be confused because they are both part of the Dutch society.

Outgroup-blame was measured with three items ($\alpha = .83$; e.g. 'Present-day Dutch people can still be held responsible for the slavery past'). Subsequently historical perspective was assessed with four items ($\alpha = .65$; e.g. 'Slavery can be seen in a historical perspective').

Group-based anger Next participants were asked to which extent they felt angry about the slavery past and the Dutch role during slavery ($\alpha = .87$), using the following question: 'When you are confronted with the slavery past and the Dutch role during slavery, to what extent do you experience the following emotions...'. After which they rated the emotions: 'anger',

'irritation', 'frustration', and 'moral outrage'. Here and in the remaining variables answers were given on a scale ranging from 1 (*not at all*) to 5 (*very much*).

Action tendencies The last set of questions involved the action tendencies people felt in relation to the slavery past. Four statements asked whether they themselves would initiate behavior to demand reparation for the slavery past (reparation demands, $\alpha = .82$; e.g. 'I would sign a petition which asks for more attention to the slavery past'). Finally, participants indicated how strongly they would support four possible initiatives (e.g. an official excuse) that could be undertaken by the Dutch government as a form of reparation for slavery (support for outgroup reparation, $\alpha = .75$).

Results

Factor analyses First we conducted factor analyses to test whether the variables represent discrete constructs. The factor analyses were done in three parts, for reasons of clarity.² All factor analyses were done using maximum likelihood extraction and oblimin rotation. The factors were selected using the Kaiser criterion unless mentioned otherwise.³ The first analysis included both identification scales and the relevance items. This analysis was important because it could show that Surinamese identification, and the relevance of the slavery past are discrete constructs. The analysis yielded a six factor solution. Inspection of the scree-plot though, showed that the point of inflexion was after three factors. Therefore we conducted another factor analysis asking for a three factor solution. This resulted in separate factors for both identification scales and the relevance scale. The factor analyses thus confirmed our assumption that relevance and (Surinamese) identification are distinct constructs.

A second factor analysis was done to see whether historical perspective and outgroup-blame were distinct constructs. As expected this analysis yielded a two factor solution. Although these factors were significantly correlated in the oblimin rotated solution, the correlation was only moderate ($r = -.30, p = .001$). This indicated

that historical perspective and outgroup-blame are distinct constructs. The last factor analysis was done with the anger items and the items measuring the two forms of action tendencies. Unexpectedly the analysis yielded a two factor solution. One factor consisted of the anger items. The second factor contained all items measuring action tendencies, both reparation demands and support for outgroup reparation. This might be explained by the fact that the items of these variables all center around the reparation of a historical injustice. When we asked for a three factor solution however, the predicted three factors resulted. The high correlation between these variables might have made it difficult to separate the two factors. Because these factors clearly differ in the target that should perform behavior to result in reparation, we chose to treat these two forms of action as separate variables in our analysis.

Structural equation model The means of the variables used in this study are given in Table 1. The correlations between the variables can be found in Table 2. We used EQS 6.1 software (Bentler, 1995) to test our model for group-based anger regarding the Dutch role in the slavery past among the Surinamese. The first model included our hypotheses regarding the influence of Surinamese identification on the appraisal of relevance. In addition, it included the effects of relevance on the secondary appraisals outgroup-blame and historical perspective, as well as its

direct influence on anger. It also incorporated the effects of the secondary appraisals on anger, and the role of anger in predicting the action tendencies. The two action tendencies were allowed to correlate. Our exploratory predictions regarding the influence of Dutch identification on historical perspective taking were also included in the model.

The hypothesized model resulted in poor fit. The chi-square was significant ($\chi^2 (18) = 89.86$, $p < .001$). Other fit indices also indicated poor fit, the comparative fit index (CFI) = .73, the goodness of fit index (GFI) = .88 and the root mean-square error of approximation (RMSEA) = .17 (see Hu & Bentler, 1999). Lagrange Multiplier test suggested adding paths from relevance to both action tendencies. Adding these paths strongly increased the model fit. That is, the chi-square was weakened, indicating a better fit ($\chi^2 (19) = 26.51$, $p = .034$), as was the ratio $\chi^2 / df = 1.40$, which is lower than 3 (as suggested by Kline, 2005). Other indicators also show good fit (CFI = .96, GFI = .95, RMSEA = .07). This model is shown in Figure 1.

As expected, Surinamese identification is a significant predictor of the relevance of slavery. Relevance in turn is the most important predictor in the model, predicting both outgroup-blame and historical perspective, anger and the action tendencies. In line with our expectations, the relationship between relevance and outgroup-blame is strongly positive, whereas the relationship between relevance and historical

Table 1. Means and standard deviations of variables in Studies 1 and 2

	Study 1	Study 2
	<i>M (SD)</i>	<i>M (SD)</i>
Surinamese identification	4.24 (0.70)	—
Dutch identification	3.14 (0.84)	—
Gender identification	—	5.55 (0.85)
Domain relevance	3.09 (0.85)	5.05 (1.01)
Outgroup-blame	2.81 (1.27)	4.09 (1.05)
Historical perspective	3.17 (0.98)	3.88 (1.09)
Anger	3.45 (1.14)	3.29 (1.46)
Reparation demands	3.39 (1.13)	4.27 (1.39)
Support for outgroup reparation	3.99 (0.92)	4.89 (1.10)

Note: Variables in Study 1 are measured on a 5-point scale; variables in Study 2 are measured on a 7-point scale.

Table 2. Correlations between variables in Study 1 ($N = 138$)

Variables	1	2	3	4	5	6	7	8
1. Surinamese identification	–	.02	.36**	.31**	–.09	.22*	.38**	.26**
2. Dutch identification		–	–.01	.23**	–.18*	.32**	–.02	.05
3. Relevance (slavery past)			–	.43**	–.19*	.32**	.66**	.42**
4. Outgroup-blame				–	–.20*	.39**	.52**	.42**
5. Historical perspective					–	–.32**	–.20*	–.16†
6. Anger						–	.46**	.42**
7. Reparation demands							–	.65**
8. Support for outgroup reparation								–

** $p < .001$; * $p < .05$; † $p < .10$.

Figure 1. Structural Equation Model: Study 1. Antecedents and consequences of group-based anger in Surinamese. Standardized parameter estimates are shown, all pathways are significant, $p < .05$.

perspective is negative. This shows that the Surinamese, for whom the slavery past is more important, blame the Dutch more for their role in this past and are less likely to see the slavery in a historical perspective. Interestingly, Dutch identification predicts historical perspective. All appraisals have direct effects on the intensity of the anger regarding the Dutch role in the slavery past. As expected, outgroup-blame is a good positive predictor of the anger, whereas historical perspective functions as a negative predictor of anger. The effect of relevance seems to be partially mediated by the two secondary appraisals, especially outgroup-blame, but remains a significant predictor of anger.

The extent to which one wants to engage in reparation demands or supports the outgroup

to undertake reparation is predicted by both relevance and anger. As expected on the basis of IET, anger is a positive predictor of the tendency to engage in action to demand reparation. Relevance though, is a stronger predictor of reparation demands. Support for outgroup reparation shows a similar pattern, though here the relationship is less strong. Both relevance and anger lead to support for the outgroup to repair the injustice done. Both forms of action are correlated.

Alternative models We tested two alternative models. In the first one we excluded relevance, and considered whether Surinamese identification could predict the secondary appraisals. No direct paths from identification to either

anger or the action tendencies were included in this model. The remainder of the model was similar to the one described above. This model resulted in poor fit, with a highly significant chi-square ($\chi^2(13) = 47.46, p < .001$). Other indicators also showed poor fit (CFI = .82, GFI = .92, RMSEA = .14). We tried to improve this model by including direct paths from Surinamese identification to anger as well as the action tendencies, making it similar to the role relevance played in the model described above. Including these paths increased the fit. However, the chi-square was still highly significant ($\chi^2(10) = 30.71, p < .001$). The other indicators also showed poorer fit (CFI = .89, GFI = .94, RMSEA = .12).

Because these alternative models are not nested in the model we propose, their fit indices cannot be compared directly. It is possible, however, to compare these models derived from the same sample on the base of a predictive fit index, such as the Akaike information criterion (AIC; see Kline, 2005). The model with the lowest value on this index is preferred above the others. We therefore compared the models on this index. The model we propose including relevance (AIC = -4.29) indeed had a lower score on this index than both the alternative models we tested (respectively AIC = 21.46 and AIC = 10.71). This indicates that the model as presented in Figure 1 is preferred above the alternative models.

Discussion

In general, the model confirmed our hypotheses regarding the antecedents and consequences of group-based anger regarding the slavery past. Adding paths from relevance to the two action tendencies resulted in a model with a good fit. As expected, relevance of the slavery past more so than Surinamese identification was predictive of the secondary appraisals that were made, and in part of the anger that was experienced. The secondary appraisals were also predictive of group-based anger. Anger in turn, together with relevance, could predict the strength of the action tendencies that were experienced. This also corroborates earlier research on group-based anger (e.g. Mackie et al., 2000).

Perhaps most striking in our results is the central role played by relevance, although most of the relations between this variable and others seem to be quite clear. The fact that it is, together with the secondary appraisals outgroup-blame and historical perspective, predictive of anger follows from work on the antecedents of personal anger. In fact, Lazarus (1991) considers relevance and blame (or accountability) as being part of the core relational theme of anger. More interesting perhaps are the relations between relevance and the action tendencies. Although anger is also important in explaining the action tendencies, relevance seems to play a considerable role here. In other words, anger is only partially mediating the effects of relevance on action tendencies. Especially, the relation between relevance and reparation demands is strong.

A methodological reason for this relation might be that both domain relevance and reparation demands contain items measuring behavior in relation to the issue of slavery. Another point might be that relevance not only measures 'motivational' relevance, but also a more cognitive aspect of this relevance, comparable to attitude strength. From the attitude literature it is known that personal relevance can in some cases predict the behavior of people (Krosnick, 1988).

Interestingly, participants who identified more strongly with their Dutch identity were more likely to place the slavery past in a historical perspective. This reflects findings in the field of group-based guilt, in which it is found that high identifiers become more defensive when confronted with a negative history of their group (Doosje & Branscombe, 2003). The fact that our participants belong to both the historical perpetrator and victim group makes this finding even more intriguing. Perhaps living in the country of the former perpetrator and identifying with this group leads one to temper the relevance of the slavery past and makes one less affected by it. In fact, in conducting this research, different people indicated that they didn't want to place emphasis on the slavery past because the future was more important to them. The fact that respondents participated voluntarily does not seem to have led to a biased sample. The mean levels of relevance and Dutch

identification were around the scale mid-point and the scores on these variables covered the full range of the scale. For Surinamese identification the mean is higher, but here too scores covered the full range of the scale.

In the second study we wanted to investigate non-overlapping victim and perpetrator groups, for which it is clear that members of the victim group are less likely to identify with the perpetrator group. Women and men, for example, can be considered mutually exclusive groups, in which case it is less likely for members of the victim group (i.e. women, as they can be seen as victims of gender discrimination) to identify with the perpetrator group (i.e. men). In this case, we do not expect the historical appraisal to be important. Apart from being a replication of Study 1, we aim to test this notion in Study 2, in which we investigate the appraisals and emotions of the victim group women toward men.

Study 2

In the second study we test our predictions regarding the antecedents and consequences of group-based anger on Dutch women. Women as a group clearly differ from Surinamese in the sense that they don't overlap the outgroup considered here, men. The domain used here to elicit anger also clearly differs. Whereas slavery is something that has happened in the distant past, women still hold a lower status position in society compared to men.

One might argue that relevance is less likely to play a role in the perception of women's position in society, than in the case of slavery. Slavery ended over a century ago. It may be required to find this past relevant to still experience emotions about this issue. In the case of women, the injustice is enduring, and it is thus more likely that women have had negative experiences themselves, eliciting anger (Swim, Hyers, Cohen, & Ferguson, 2001). We will test this empirical question in the following study.

Method

Participants The participants were female students from the University of Amsterdam who participated in a mass testing session in

return for course credits. In total, 140 students participated. Their mean age was 21.21 years ($SD = 4.35$). Ethnicity was not recorded for 12 participants, of the remaining participants, 83% had at least one native Dutch parent (for 75% both parents were Dutch natives), and only 3% indicated that they had lived in the Netherlands for less than 4 years.

Procedure and materials Participants were seated behind computers in a large computer room. In the session they participated in several other experiments as well. The participants were told we were interested in their views on sexism in the current society.⁴ The participants filled out the questionnaire; after they had finished all the experiments, they received a booklet containing a debriefing.

Identification The first scale was a measure of gender identification, which consisted of the same nine items as in Study 1 ($\alpha = .90$). Participants indicated their agreement with nine statements (1 = strongly disagree, 7 = strongly agree; these scales are used throughout the experiment except when mentioned otherwise).

Relevance of status position The second scale was intended to measure the relevance for the participants of societal issues concerning women ($\alpha = .85$), this scale consisted of the same seven items as in Study 1.

Secondary appraisals Next followed the appraisals women made for sexism. The first three items asked whether they thought men were to blame for the existence of sexism ($\alpha = .62$; e.g. 'Men are responsible for the unequal treatment of men and women'). Next were three items asking whether the participant thought that sexism could be seen in a historical perspective ($\alpha = .66$; e.g. 'Sexism slowly ceases to exist').

Emotions After the appraisals we asked the participants which emotions they felt when they thought about the low status position of women in society. We asked the same four anger-related emotions as in Study 1: anger, irritation, frustration and moral outrage ($\alpha = .91$).

Action tendencies The last part of the questionnaire measured the action tendencies felt by the participants in relation to sexism in current society. The first three items asked whether the participants felt a need to do something about the position of women in society themselves (reparation demands, $\alpha = .68$; e.g. 'I would make a donation to organizations that try to improve the position of women in society'). Subsequently we asked the participants whether they thought men should contribute more effort to the equal rights and treatment of women (support for outgroup reparation, $\alpha = .81$; e.g. 'Men can contribute more to the improvement of the position of women in society').

Results

Factor analyses Again we conducted factor analyses to check whether our variables indeed represent distinct constructs. The first factor analysis was done on the gender identification items and the relevance items. This yielded a four factor solution, although inspection of the scree-plot showed a point of inflexion after two factors. A second factor analysis in which we asked for a two factor solution resulted in separate factors for the identification and the relevance scales. So again we show that identification and relevance (of women's position in society) are distinct variables. A second factor analysis was done on the secondary appraisal items. Again this yielded a two factor solution with historical perspective and outgroup-blame as distinct factors (the correlation between these factors in the oblimin rotated solution was again moderate $r = .27$, $p = .002$). The last

factor analysis was done on the items measuring anger and the action tendency items. This time the expected three factor solutions resulted. The anger items made up one factor, the support for outgroup reparation items made up the second factor, and the last factor consisted of the reparation demands items. After factor analyses it can thus be concluded all variables in our analyses represent distinct constructs.

Structural equation model The means of the variables used in this study are represented in Table 1. The correlations between the variables can be found in Table 3. We tested a path model consistent with our hypothesis, extended with the paths between relevance and anger and the action tendencies, found in Study 1. Gender identification was predictive of domain relevance. Relevance predicted the secondary appraisals outgroup-blame and historical perspective as well as the anger and action tendencies that were experienced. The secondary appraisals both were predictive of anger. Anger predicted both action tendencies, which were again allowed to correlate.

This resulted in a model of moderate fit ($\chi^2(10) = 25.66$, $p < .001$). Other indicators also showed moderate fit (CFI = .92, GFI = .94, RMSEA = .11). The main reason for this modest fit was the path running from historical perspective to anger. Results showed that this path could not be significantly distinguished from zero. The Wald test for model modification confirmed that this variable could be dropped from the model without worsening the fit. We tested a second model without historical perspective all

Table 3. Correlations between variables in Study 2 ($N = 140$)

Variables	1	2	3	4	5	6	7
1. Gender identification	–	.56*	.16†	–.05	.32**	.22*	.34**
2. Relevance (sexism)		–	.23**	–.19*	.39**	.40**	.36**
3. Outgroup-blame			–	–.21*	.38**	.29**	.32**
4. Historical perspective				–	–.11	–.16†	–.32**
5. Anger					–	.44**	.35**
6. Reparation demands						–	.47**
7. Support for outgroup reparation							–

** $p < .001$; * $p < .05$; † $p < .10$.

together, which resulted in good fit. The chi-square was no longer significant ($\chi^2(6) = 11.67$, $p = .069$). Other indicators also showed good fit (CFI = .97, GFI = .97, RMSEA = .08). This model is shown in Figure 2.

Gender identification was a strong predictor of the extent to which the participant found it relevant to think about the position of women in society. This relevance in turn predicted both outgroup-blame and anger. Outgroup-blame again also had a direct path to anger. So again, domain relevance influences the extent to which one is likely to blame the outgroup and experience anger directed at this group. Both anger and relevance are predictive of the extent to which one is likely to engage in action to improve the position of women in society. The path between relevance and reparation demands is less strong than in the first study. Anger and relevance also predict the extent to which outgroup action to equalize the status positions is supported. Again the two reparation variables were correlated.

Alternative models We tested the same two alternative models that might account for our data as in Study 1. In the first we excluded relevance so that identification would predict the appraisals, again no direct path to anger and the action tendencies was included. The remainder of

the model was similar to the one described above. This resulted in a poor fitting model, the chi-square was highly significant ($\chi^2(5) = 26.70$, $p < .001$). Other indicators also showed poor fit (CFI = .80, GFI = .93, RMSEA = .18). In the second model we included paths running from identification directly to anger and the action tendencies. This improved the model and increased its fit, however the chi-square was still significant ($\chi^2(2) = 7.21$, $p = .027$). Other indicators also showed increased fit (CFI = .95, GFI = .98, although the RMSEA = .14 was still quite large). Again when we compared the models on the basis of their predictive fit, the model we proposed had a lower score on this index (AIC = .32) than both of the alternative models (respectively AIC = 16.70 and AIC = 3.21). This indicates that the model we presented in Figure 2 is preferred above the alternative models.

Discussion

We were able to replicate most of the findings of the first study. Again results confirmed our hypotheses regarding the important role of domain relevance in eliciting group-based anger above and beyond identification. Relevance was a good predictor of anger, both directly and through outgroup-blame. Anger in turn,

Figure 2. Structural Equation Model: Study 2. Antecedents and consequences of group-based anger in women. Standardized parameter estimates are shown, all pathways are significant, $p < .05$.

together with relevance, was a good predictor of the action tendencies that were experienced and the extent to which people supported action by the outgroup. As in Study 1, relevance could better predict the subsequent emotional experience than identification. The relation between these two variables was somewhat stronger than in Study 1, but testing of alternative models showed that removing relevance from the model resulted in poorer fit. Outgroup-blame, together with relevance, predicts anger. Being able to replicate important parts of our model in two different groups on two different issues greatly adds to the external validity of our findings. It shows that group-based emotions are an important part of the group experience in both past and present.

However, there were some important differences between the path model regarding the slavery past shown in Study 1, and the model explaining women's reaction to their low status position shown here. The main difference with the first study was that historical perspective failed to be a predictor of anger. A reason why historical perspective failed to be a good predictor could be that the low status of women in society is still very contemporary. Indeed, recent research has shown that women still experience sexism on a regular basis (Swim et al., 2001). Not surprisingly, anger was the emotion most reported by the women in reaction to being subjected to sexism. Putting sexism in a historical perspective is thus more unlikely than in the case of slavery, also because these identities were non-overlapping. Women might be more likely to attribute sexism externally to other characteristics of the situation, such as to test difficulty or even internally (Stangor, Swim, Van Allen, & Sechrist, 2002). An alternative explanation for the fact that historical perspective failed to predict anger is that the anger in Study 2 was measured in relation to sexism in current society. The historical perspective women have on sexism could therefore have played less of a role, whereas this appraisal would have been more important if we would have investigated the emotions that are felt about sexism in relation to the past. In a broader sense one could argue

that when the emotions regarding an issue in the past or present are studied, it is important to take into account appraisals that relate to the same time period.

General discussion

We examined the antecedents and consequences of group-based anger in historically and structurally disadvantaged groups. The results of these two studies show strong support for our hypotheses. In two studies we were able to show that for both historical as well as currently enduring injustices, domain relevance predicted group-based anger above and beyond group identification. In the first study we showed that relevance together with outgroup-blame and historical perspective predicted the anger that was experienced toward the Dutch in relation to the slavery past. Anger, together with relevance, could predict the extent to which Surinamese people were willing to engage in action asking for reparation of the slavery past. Anger also predicted the extent to which they supported behavior aimed at reparation from the outgroup. In the second study we replicated the findings from Study 1 to a large extent. Here also relevance was a strong predictor of outgroup-blame and anger. Anger in turn had the hypothesized effect on the action tendencies and the support for reparation.

Experiencing anger toward the perpetrator outgroup might serve a functional role. Indeed, as the work on group-based guilt has shown, and as we show here for anger, these emotions are related to the willingness to repair or demand reparation for the harm that is done (Branscombe & Doosje, 2004). At the interpersonal level, guilt has been shown to function as a relationship enhancing emotion (Baumeister, Stillwell, & Heatherthorn, 1994). Expressing guilt signals that one cares about the other and harm that is done. Anger in this case might serve a similar function for the person or group who has been harmed. Anger might signal that one cares about the relationship (i.e. relevance) and that one is motivated to seek reparation for the injustice restoring

the relations between the groups. In research on the emotions expressed in negotiations (Van Kleef, De Dreu, & Manstead, 2004) anger is given a more strategic role. Anger signals that one has high limits causing negotiation partners to make larger concessions. We have shown that anger not only predicts the action tendencies of group members themselves, but it is also predictive of support for the outgroup to repair the injustice.

In this research we have extended the IET model by adding domain relevance as a predictor of secondary appraisals and group-based emotions. The role of relevance in eliciting group-based emotions has so far been largely overlooked (but see McGarty & Bliuc, 2004; Nieweg, Van Dijk, Ouwerkerk, Spears, & Kerkhof, 2006). The importance of considering individual differences in domain relevance has been shown in other fields of research, such as attitudes (Johnson & Eagly, 1989). However, research in the area of group-based emotions has up to now mainly used group identification as a proxy of the relevance of the domain (but see Sellers et al., 1997). We argue that especially when one is investigating broad social categories, identification might be too distal to be of influence for the specific domain in which emotions are expected to occur. As already stated in the introduction, identification might mean different things to different people, for instance because different norms are associated with the identity (McGarty & Bliuc, 2004). Taking domain relevance and other secondary appraisals into account, one might be able to overcome these different views on the group.

Being able to replicate the same process regarding the factors eliciting group-based anger, and the subsequent effects of this emotion on the action tendencies over two groups adds to the external validity of our findings. However, there are also some limitations to the studies presented here. Both investigate broad social categories in which relevance might be more likely to play a role in eliciting emotions than in smaller groups. In smaller groups, which may even have evolved around a domain important to all members, identification and relevance

might serve similar functions and might be harder to distinguish. Future research might further examine the link between identification and relevance in other groups.

Another limitation of our research lies in its correlational nature. Doing correlational research limits the extent to which one can make causal claims about relations between variables. By presenting a model and suggesting possible causal relations between variables, we do not mean to imply that the order suggested here is fixed. As explained in the introduction we derived this order from earlier work on emotions in general and group emotions in particular. Although the emotions here are represented as a stepwise process starting with identification and ending with a tendency to engage in action, this process may be less clear in every day life.

The present research investigated the role of domain relevance in predicting the appraisals and anger that were felt for past as well as pending injustices. We have demonstrated that the relevance of a domain to a person's social identity could predict the secondary appraisals and subsequent emotions people experience above and beyond their identification with the group. These findings contribute to the field of intergroup emotions and shows the importance of domain relevance for group-based emotions, as well as the combined influence of emotions and relevance for action tendencies.

Notes

1. Although Surinamese people in the Netherlands are also Dutch, we will treat the Dutch as an outgroup here because we look at these identities from a historical perspective, in which Surinamese can be seen as members of the historical victim group, whereas the Dutch are the historical perpetrator group.
2. We also conducted a factor analysis on all items included in Studies 1 and 2. This yielded similar results as the ones described here. For reasons of interpretability we chose not to include this analysis here.
3. Only on the factor analyses on the items measuring identification and domain relevance in both studies did the results from the Kaiser

criterion and the scree-plot differ. This was mainly due to the fact that our measure of identification contained different subscales (see Leach et al., 2005). Because we do not make use of these subscales, we chose not to include these results here.

4. The study also contained a manipulation. This manipulation only affected one of the seven variables used here and thus is not mentioned in the rest of this paper.

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References

- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: An interpersonal approach. *Psychological Bulletin*, 115, 243–267.
- Bentler, P. M. (1995). *EQS structural equations program manual*. Encino, CA: Multivariate Software, Inc.
- Branscombe, N. R., & Doosje, B. (2004). *Collective guilt: International perspectives*. Cambridge, UK: Cambridge University Press.
- Cantor, N., Norem, J., Langston, S., Fleson, W., & Cook-Flannagan, C. (1991). Life tasks and daily experience. *Journal of Personality*, 59, 425–451.
- Crocker, J., Luhtanen, R. K., Cooper, M. L., & Bouvrette, A. (2003). Contingencies of self-worth in college students: Theory and measurement. *Journal of Personality and Social Psychology*, 85, 894–908.
- Doosje, B., & Branscombe, N. R. (2003). Attributions for the negative historical actions of a group. *European Journal of Social Psychology*, 33, 235–248.
- Doosje, B., Branscombe, N. R., Spears, R., & Manstead, A. S. R. (1998). Guilt by association: When one's group has a negative history. *Journal of Personality and Social Psychology*, 75, 872–886.
- Dumont, M., Yzerbyt, V., Wigboldus, D., & Gordijn, E. H. (2003). Social categorization and fear reactions to the September 11th terrorist attacks. *Personality and Social Psychology Bulletin*, 29, 1509–1520.
- Fazio, R. H. (1995). Attitudes as object-evaluation associations: Determinants, consequences, and correlates of attitude accessibility. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 247–282). Hillsdale, NJ: Erlbaum.
- Frijda, N. H. (1986). *The emotions*. Cambridge, UK: Cambridge University Press.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1–55.
- Johnson, B. T., & Eagly, A. H. (1989). The effects of involvement on persuasion: A meta-analysis. *Psychological Bulletin*, 106, 290–314.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York: Guilford.
- Krosnick, J. A. (1988). The role of attitude importance in social evaluation: A study of policy preferences, presidential candidate evaluations, and voting behavior. *Journal of Personality and Social Psychology*, 55, 196–210.
- Kuppens, P., Van Mechelen, I., Smits, D. J. M., & De Boeck, P. (2003). The appraisal basis of anger: Specificity, necessity and sufficiency of components. *Emotions*, 3, 254–269.
- Lavallee, L. F., & Campbell, J. D. (1995) Impact of personal goals on self-regulation processes elicited by daily negative events. *Journal of Personality and Social Psychology*, 69, 341–352.
- Lazarus, R. S. (1991). *Emotion & adaptation*. New York: Oxford University Press.
- Leach, C. W., Spears, R., Branscombe, N. R., & Doosje, B. (2003). Malicious pleasure: Schadenfreude at the suffering of another group. *Journal of Personality and Social Psychology*, 84, 932–943.
- Leach, C. W., Van Zomeren, M., Zebel, S., Vliek, M., Pennekamp, S. F., Doosje, B., et al. (2005). *Collective self-definition and self-investment: A two-dimensional framework of group identification*. Manuscript submitted for publication.
- Mackie, D. M., Devos, T., & Smith, E. R. (2000). Intergroup emotions: Explaining offensive action tendencies in an intergroup context. *Journal of Personality and Social Psychology*, 79, 602–616.
- Mackie, D. M., & Smith, E. R. (1998). Intergroup relations: Insights from a theoretically

- integrative approach. *Psychological Review*, 105, 499–529.
- Mackie, D. M., & Smith, E. R. (Eds.). (2002). *From prejudice to intergroup emotions: Differentiated reactions to social groups*. New York: Psychology Press.
- McGarty, C., & Blüch, A. M. (2004). Refining the meaning of 'collective' in collective guilt: Harm, guilt, and apology in Australia. In N. R. Branscombe & B. Doosje (Eds.), *Collective guilt: International perspectives* (pp. 112–129). Cambridge, UK: Cambridge University Press.
- Nieweg, M., Van Dijk, W. W., Ouwerkerk, J. W., Spears, R., & Kerkhof, P. (2006). *When the downfall of a rival group elicits pleasure: Social identification and domain interest as determinant of intergroup schadenfreude*. Manuscript submitted for publication.
- Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. New York: Springer-Verlag.
- Scherer, K. R., Schorr, A., & Johnstone, T. (Eds.). (2001). *Appraisal processes in emotion: Theory, methods, research*. New York: Oxford University Press.
- Sellers, R. M., Rowley, S. A. J., Chavous, T. M., Shelton, J. N., & Smith, M. A. (1997). Multidimensional inventory of black identity: A preliminary investigation of reliability and construct validity. *Journal of Personality and Social Psychology*, 73, 805–815.
- Sellers, R. M., & Shelton, J. N. (2003). The role of racial identity in perceived racial discrimination. *Journal of Personality and Social Psychology*, 84, 1079–1092.
- Smith, C. A., & Lazarus, R. S. (1993). Appraisal components, core relational themes, and the emotions. *Cognition & Emotion*, 7, 233–269.
- Smith, E. R. (1993). Social identity and social emotions: Toward a new conceptualization of prejudice. In D. M. Mackie & D. L. Hamilton (Eds.), *Affect, cognition, and stereotyping: Interactive processes in group perception* (pp. 297–315). San Diego, CA: Academic Press.
- Stangor, C., Swim, J. K., Van Allen, K. L., & Sechrist, G. B. (2002). Reporting discrimination in public and private contexts. *Journal of Personality and Social Psychology*, 82, 69–74.
- Swim, J. K., Hyers, L. L., Cohen, L. L., & Ferguson, M. J. (2001). Everyday sexism: Evidence for its incidence, nature, and psychological impact from three daily diary studies. *Journal of Social Issues*, 57, 31–53.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (Eds.). (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, UK: Blackwell.
- Van Kleef, G. A., De Dreu, C. K. W., & Manstead, A. S. R. (2004). The interpersonal effects of emotions in negotiation: A motivated information processing approach. *Journal of Personality and Social Psychology*, 87, 510–528.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92, 548–573.
- Zebel, S., Doosje, B., Spears, R., & Vliek, M. L. W. (2005). *Guilty by association, and with dissociation: The interplay between involvement and identification*. Manuscript submitted for publication.

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