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Of Bikers, Teachers and Germans:

Groups' Diverging Views About Their Prototypicality

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#### Abstract

The ingroup projection model hypothesizes that members of social groups generalize attributes of their ingroup to a superordinate category that provides dimensions for comparisons between ingroup and outgroup (ingroup projection). As a result, both groups in an intergroup situation should disagree about their relative prototypicality for the superordinate category. Three studies confirmed this prediction. In Study 1 (N = 54), it was found that different groups of motor bikers (chopper-bikers vs. sportbikers) perceived their own subgroup to be the more typical biker group compared to the respective outgroup. Study 2 (N = 60) showed the same divergence of perspectives in the context of more formal subgroups of teachers (primary school teachers vs. high-school teachers). In a third study (N = 157), the relative character of ingroup projection was demonstrated in an intergroup context with strong reality constraints due to differences in group size, status and power. Although there was consensus between both groups that the majority (West Germans) was more prototypical for the superordinate group (Germans) than the minority (East Germans), majority members perceived the groups' difference in prototypicality to be greater than minority members did.

Of Bikers, Teachers and Germans: Groups' Diverging Views About Their

Prototypicality

Psychological research has made great advances in our understanding of the role of social categorisations and stereotyping for the relations between social groups (Brewer & Brown, 1998). Of great importance has been the insight that social categorizations and stereotypes are not fixed or stable schemata but rather flexible perceptions and context-dependent processes (Ellemers, Spears, & Doosje, 1999; Oakes, Haslam, & Turner, 1994). Social context and frame of reference determine the salience of groups as well as the stereotypes and meaning we attach to them. However, less well reflected is the fact that social context and frame of reference are themselves social constructions, affected by the perceiver's perspective, being disputable and disputed – namely for the very fact that they give rise and meaning to groups and identities. Mummendey and Wenzel (1999) argue that ingroup members refer to a salient superordinate identity, including ingroup and outgroup, in order to evaluate an outgroup's difference; and group members tend to represent the superordinate category in a way that makes their ingroup relatively prototypical and thus positively distinct. The present article investigates the contestation and perspective divergence implied in this process of "ingroup projection".

In their ingroup projection model, Mummendey and Wenzel (1999) assume that the representation of a salient superordinate category in relation to the included subgroups is shaped by subgroup membership. The model is based on self-categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), which assumes that an ingroup and an outgroup are only comparable with reference to a common superordinate category that includes both ingroup and outgroup and provides

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the dimensions for the intergroup comparison. The prototype of the superordinate self-category (which is usually positively valued) is the positive standard against which the lower-level groups are compared. Being relatively prototypical, a subgroup is more normative and positively distinct, while the less prototypical group is more deviant and deserving of lower status. The argument parallels the finding at an intragroup level that group members are considered more attractive, the more prototypical they are for a salient ingroup (Hogg & Hardie, 1991). Likewise, it has been shown that members or subgroups that are considered more prototypical for a relevant inclusive category are considered more deserving and have higher entitlements (Wenzel, 2001). Mummendey and Wenzel (1999) have pursued this idea at an intergroup level, with implications for social discrimination and tolerance. They assume that an ingroup's relative prototypicality implies a perception of the outgroup as deviating from the positively evaluated standard of the superordinate category. As a consequence, the outgroup may be evaluated negatively and discriminated against (Waldzus, Mummendey, Wenzel, & Weber, 2003; Wenzel, Mummendey, Weber, & Waldzus, in press). The outgroup may be considered less deserving of rights or resources, and it may be considered legitimate for it to hold a position of lower status (Weber, Mummendey, & Waldzus, 2002).

With prototypicality having such a significance for positive distinctiveness, perceptions of deservingness and the legitimizing of relative group status,

Mummendey and Wenzel (1999) hypothesize that group members tend to claim prototypicality of their ingroup by generalizing distinctive attributes of their ingroup – relative to the attributes of the outgroup – to the superordinate category (ingroup projection). This phenomenon is similar to what is discussed as social projection in the social psychological literature (Allport, 1924) and to the well known false

consensus effect (FCE: Ross, Greene, & House, 1977; for reviews see Krueger, 1998; Marks & Miller, 1987; Mullen & Hu, 1988). FCE has been shown to be based on the projection from self to the ingroup (Krueger & Clement, 1996; Mullen, Dovidio, Johnson, & Copper, 1992). Thus, whereas FCE has implications for the representation of the ingroup's prototype, ingroup projection applies to the representation of a relevant <u>superordinate category</u> and is relevant to the <u>relations between groups</u> included.

The current paper examines the hypothesis that, as an intergroup phenomenon, ingroup projection implies diverging perspectives held by two groups in an intergroup context in terms of their relative prototypicality. If the members of both groups project their respective ingroup attributes onto the superordinate category, they are expected to disagree when judging their relative prototypicality in terms of the superordinate category. Disagreement about relative prototypicality can impact significantly on intergroup relations, given the implications of perceived relative ingroup prototypicality discussed above. Dissent about prototypicality may imply disagreement about the appropriate relative evaluation of two groups in an intergroup context and their relative entitlements to resources and status. Such a disagreement can be the basis of the experience of intergroup discrimination and can foster intergroup conflict.

Recent findings by Sani and Reicher (1998; 2000) on intergroup discourses in the context of schisms, that is, when a group splits up into new groups, are consistent with this hypothesis. These authors found that the newly emerging groups strongly disagreed about the essence of the earlier shared (superordinate) group. Each subgroup claimed to represent better the former common identity whereas the respective outgroup was claimed to deviate from its nature. By these moves, Sani and

Reicher argue, the groups sought to demonstrate their superiority and their claim of being the better and true descendent from their mother group.

By definition, the case of schisms must be regarded as a particular intergroup situation, in which the future existence of the superordinate group as a unit is actually questioned by the sub-groups. However, the ingroup projection model assumes that disagreement between sub-groups about the prototype of a superordinate category is a general intergroup phenomenon, which is not restricted to the particular case of schisms. In fact, a recent study by Wenzel et al. (in press, Study 1) yielded further and more direct evidence. In this study, psychology students and business students disagreed about their relative prototypicality in terms of students in general. Members of both groups perceived their ingroup - in comparison with the outgroup - to be more typical students than outgroup members perceived it to be.

The present research seeks to replicate this finding in other intergroup contexts; however, it also investigates the limits of ingroup projection. The assertion of relative ingroup prototypicality can only claim to be a valid perception, and it can only be a persuasive argument, if it does not ignore social facts and socially shared truths (see, e.g., Ellemers, Van Rijswijk, Roefs, & Simons, 1997). We contend that ingroup projection is not a sleight of hand that can ignore or reverse socially accepted facts, but it has to accommodate them. Ingroup projection can bend, but it cannot break with, social truths.

The present studies tested this notion by investigating ingroup projection, and the corresponding disagreement between subgroups on their relative prototypicality, in three intergroup contexts with differing levels of reality constraints. First, in Study 1, we chose an intergroup context of relatively low formality (bikers), where no explicit role prescriptions and, outside the groups, no accepted criteria for superiority

or inferiority exist. This situation resembled the intergroup context in Wenzel et al.'s (in press) study, and we thus expected to find that both groups would claim greater prototypicality for the inclusive category, leading to complete disagreement. In Study 2, we explored whether ingroup projection would be suppressed in a professional group (teachers), where tradition and regulations formally define roles and describe tasks that could be assumed to constrain the scope for negotiating category representation. However, note that these role definitions do not necessarily imply which subgroup role should be more prototypical for the superordinate category; thus, as in Study1, ingroup projection and a divergence in subgroup views about their relative prototypicality was yet predicted to occur.

In Study 3, then, we studied how ingroup projection is affected by reality constraints that suggest a certain consensus about which group has to be regarded more prototypical because of the historical course of events as well as differences in number, status and power (West and East Germans). Because the German unification was a consequence of the collapse of the East German political regime; because West Germany largely provided the monetary resources for the unification and dictated its terms; because the political program was to assimilate East German politically and economically to West Germany, West Germany was mostly considered the standard of all things being German. Under these circumstances, we predicted that there was little scope for East Germans to claim greater prototypicality and, thus, agreement between West and East Germans about their relative prototypicality was more likely. And yet, there was the possibility of disagreement about the degree to which West Germans were more prototypical; with West Germans bending the social truth to portray themselves as even more status-superior and East Germans bending it to alleviate their inferiority.

### Study 1

The first study is about bikers, the most informal of our groups. People become bikers because they voluntarily choose to do so and often make it a central part of their identity. Bikers organize themselves in clubs or gangs, express their group membership in their outfit, drive to biker meetings and greet one another on the road. Bikers share the common fate of being observed rather ambivalently by the rest of the society. There is a clear criterion and content of membership in the biker category; namely, driving a motorbike, which is usually considered dangerous, foolhardy and subversive. Aside from this, however, being a biker is a way of life that invites for flexible self-definition because there are little constraints of how a biker has to be. Accordingly, bikers are not all alike. There are the disciples of "easy-riding" Peter Fonda and Dennis Hopper, cruising down country roads through free and adventurous landscapes. Then, there are those revelling in a rush of speed while racing down the fast lane of the expressway. The subgroup of bikers that fits the easyrider image is here called "chopper bikers" and the subgroup of speedy bikers "sport bikers". Although there are a lot of other biker subgroups, the current study is restricted to these two. Chopper bikers drive choppers, motorbikes that are usually dark-coloured or black and classic in style (e.g. Harley Davidson). They sit upright or even lean backwards on their bikes, drive rather slowly and develop high creativity in their outfit. They usually wear black leather or dark coats and look cool and tough. In contrast, sport bikers drive sport bikes, which are usually optimized to reach high speed. They sit leaning forward or almost lie on their bikes, in order to avoid air resistance. They usually dress in brightly coloured leather that is reminiscent of motor race contests rather than street gangs. There is consensus among German bikers that these two subgroups exist. Their members have no difficulties to give a clear

statement of their membership in one or the other group and the two groups are aware of each other.

In the current study, we asked members of both groups about their groups' relative prototypicality for bikers in general. The hypothesis was that members of both groups would perceive their ingroup to be more prototypical – compared to the respective outgroup – than members of the outgroup would see it. In other words, both groups should disagree about the prototypicality of chopper bikers and sport bikers for bikers in general.

### Method

# Participants and Design

Twenty-seven sport bikers (one female, 26 male) and 27 chopper bikers (6 female, 21 male) in Germany filled in a short questionnaire about how they saw bikers in general, and chopper bikers as well as sport bikers in particular. The chopper-group was significantly older ( $\underline{M} = 39.4$ ,  $\underline{SD} = 9.5$ ) than the sport biker group ( $\underline{M} = 32.0$ ,  $\underline{SD} = 7.7$ ),  $\underline{t}(52) = 3.14$ ,  $\underline{p} = .003$ . We conducted a quasi-experimental 2 (biker group: chopper bikers vs. sport bikers) x 2 (target group: chopper bikers vs. sport bikers) design with 'biker group' as between-subjects factor and 'target group' as within-subject factor.

### Measure of Prototypicality

The prototypicality of both groups was measured on attributes that were generated by the participants themselves as being distinctive for each group compared to the other group (Waldzus et al., 2003). First, participants were asked to type in up to four attributes that were characteristic for chopper bikers [sport bikers] in comparison to sport bikers [chopper bikers]. Then participants had to type in up to four attributes that were characteristic for the other group (the order of the two target

groups was randomized). Examples of these attributes mentioned by our participants were, for instance, "pally" or "easygoing" for chopper bikers, and "fast driving" and "venturesome" for sport bikers. Then, participants were asked to rate the self-generated attributes of chopper bikers and sport bikers in terms of their applicability to bikers in general on five-point Likert-scales from 1 (does not apply at all) to 5 (does apply very much). The mean applicability score of each group's attributes was the indicator of the typicality of the respective subgroup for bikers in general.

# Procedure

Participants were contacted at biker meetings and via biker clubs in Germany and took part voluntarily in the study. They filled in the questionnaire containing the measure of prototypicality and additional items that assessed further information for exploratory purposes, but are not relevant for the focus of the current paper. After finishing the study participants were thanked and debriefed.

### Results and Discussion

As predicted, members of both groups perceived their ingroup to be the more prototypical biker group (Figure 1). In a 2 (biker group: chopper vs. sport) x 2 (target group: chopper vs. sport) ANOVA with target group as within-subjects factor and ratings of prototypicality as dependent variable we found no significant main effects, but a significant interaction,  $\underline{F}(1,52) = 8.62$ ,  $\underline{p} = .005$ , partial  $\eta^2 = .142$ . Chopper bikers perceived chopper bikers to be marginally significantly more prototypical ( $\underline{M} = 3.58$ ,  $\underline{SD} = 0.79$ ) than sport bikers ( $\underline{M} = 3.24$ ,  $\underline{SD} = 0.78$ ),  $\underline{F}(1,52) = 2.38$ ,  $\underline{p} = .099$ , partial  $\eta^2 = .052$ , whereas sport bikers perceived sport bikers to be more prototypical ( $\underline{M} = 3.47$ ,  $\underline{SD} = 0.77$ ) than chopper bikers ( $\underline{M} = 2.97$ ,  $\underline{SD} = 0.74$ ),  $\underline{F}(1,52) = 6.10$ ,  $\underline{p} = .017$ , partial  $\eta^2 = .105$ . Correspondingly, the prototypicality of chopper bikers was higher from the perspective of chopper bikers than sport bikers,

 $\underline{F}(1,52) = 8.48$ ,  $\underline{p} = .005$ , partial  $\eta^2 = .140$ , whereas the prototypicality of sport bikers was (non significantly) higher from the perspective of sport bikers than chopper bikers,  $\underline{F}(1,52) = 1.13$ ,  $\underline{p} = .292$ , partial  $\eta^2 = .021$ . The perspective divergence indicates a process of ingroup projection and replicates the finding by Wenzel et al. (in press, Study 1).

# Study 2

The aim of the second study was to test whether a divergence in perspectives on subgroup prototypicality could be found in a professional intergroup context, where clear role descriptions constrain the flexibility of category definition.

Professional groups are less informal than groups such as bikers. Membership is not entirely voluntary, because a professional role is associated with the category; one cannot swap one's profession as easily as one can sell one's motor bike. Moreover, the meaning of being a member of a particular professional group is partly determined by formal and external criteria.

We asked two different subgroups of German teachers (primary school teachers vs. high-school teachers) about their perceptions of both subgroups' prototypicality for teachers in general. In Germany, primary school teachers teach children in their first four years at school whereas high-school teachers teach students up to year 13. These two sub-categories are official categories in the German teaching system and are based on the distinction between different kinds of schools (primary school, in German: "Grundschule", high-school, in German "Gymnasium").

Moreover, the sub-categories are also used as self-descriptions by the respective teachers; for instance, if they meet other teachers in training courses. The stereotype of primary school teachers is that they are more oriented towards child caring rather than knowledge building. They are assumed to fulfil the children's needs rather than

hold high demands on children's performances. The stereotype of high-school teachers is that they are more scientifically oriented, competent in their specific subjects rather than child development, and that they demand high achievements. The hypothesis for both subgroups of teachers was the same as in Study 1. Although the two groups are more formal and externally defined, this social reality does not prescribe which group is to be regarded as more prototypical. Thus, we predicted both groups to claim greater prototypicality for the superordinate group and to show the symptomatic disagreement.

### Method

# Participants and Design

Thirty-three primary school teachers (2 male, 31 female) and 27 (11 male, 16 female) high-school teachers filled in a short questionnaire and received 10 German Marks (about \$4 or  $\[ \in \] 5 \]$ ) as an incentive for their participation. Participants were between 24 and 57 years old ( $\underline{M} = 43.4$ ,  $\underline{SD} = 8.62$ ); subgroups did not differ significantly in age,  $\underline{t}(55) = 1.36$ ,  $\underline{p} = .18$ . We conducted a 2 (teacher group: primary school vs. high-school) x 2 (target group: primary school vs. high-school) design with target group as within-subject factor.

# **Procedure**

The teachers filled in a short questionnaire in their schools after work or during a longer break between two lessons. The questionnaire was introduced as a survey about their professional identity and consisted of an attribute list, which was, according to judgments in pre-tests, balanced with respect to the number of attributes typical and distinct for primary school teachers, attributes typical and distinct for high-school teachers, and attributes equally typical for both groups. The attributes were as follows (translated from German): child-loving, patient, subjective,

patronizing, schoolmasterly, helpless (stereotypical for primary school teachers); scientific, achievement-oriented, specialized, demanding, arrogant, ambitious (stereotypical for high-school teachers); conscientious, loud, educated, under a lot of pressure, educational, self-opinionated (stereotypical for both groups). The order of attributes was randomized but equal in all questionnaires. The list of attributes was presented three times, whereby the participants were asked to indicate the extent to which the attributes applied to primary school teachers, high-school teachers and teachers in general, respectively (1 = not at all; 5 = very much). The sequence of the evaluations of ingroup and outgroup was randomized, while teachers in general were always evaluated last. After rating the groups and answering some additional explorative questions, which are not relevant to the focus of this paper, participants were thanked, paid and debriefed.

# Measure of Prototypicality

The measure of relative prototypicality followed the study by Wenzel et al. (in press). The typicality of each subgroup in terms of the superordinate category was operationalized as profile similarity between the attribute ratings of each subgroup and the superordinate category. The mean Euclidean distance served as an indicator of profile similarity (see Cronbach & Gleser, 1953). Adapted to our purposes, the formula is as follows:  $d_{sup-sub} = [[\Sigma(x_{sup'i} - x_{sub'i})^2]/n]^{1/2}$ ; with d = profile dissimilarity, sup = superordinate category, sub = sub-group,  $x_i$  = value for attribute i, n = number of attributes. That is, the differences between the ratings of subgroup and superordinate group were squared, summed up and divided by the number of ratings (to obtain an average squared distance), and then transformed back to the original metric by taking the square root. Less dissimilarity between subgroup and

superordinate category indicated greater prototypicality of the subgroup in terms of the superordinate category.

## Results and Discussion

As predicted, members of both groups perceived their ingroup to be the more prototypical teacher group (Figure 2). In a 2 (teacher group: primary school vs. highschool) x 2 (target group: primary school vs. high-school) ANOVA on the profile dissimilarity scores, with target group as within-subject factor, we found no significant main effects but a significant interaction, F(1,58) = 16.00, p < .001, partial  $\eta^2$  = .216. Primary school teachers perceived less dissimilarity between primary school teachers and teachers in general (M = 0.93, SD = 0.28) than between highschool teachers and teachers in general (M = 1.13, SD = 0.33), F(1.58) = 6.70, p = .012, partial  $\eta^2 = .103$ , whereas high-school teachers perceived high-school teachers to be less dissimilar to teachers in general (M = 0.83, SD = 0.33) than they perceived primary school teachers to be  $(\underline{M} = 1.08, \underline{SD} = 0.41), \underline{F}(1,58) = 9.32,$  $\underline{p} = .003$ , partial  $\eta^2 = .139$ . Correspondingly, high-school teachers perceived highschool teachers to be more similar to teachers in general than primary school teachers did, F (1, 58) = 11.99, p = .001, partial  $\eta^2$  = .171, and primary school teachers perceived primary school teachers to be (non-significantly) more similar to teachers in general than high-school teachers did,  $\underline{F}(1, 58) = 2.76$ ,  $\underline{p} = .101$ , partial  $\eta^2 = .043$ .

In Study 2, the disagreement between groups about their relative prototypicality for a relevant superordinate category was replicated again. As in Study 1, this reflected a process of ingroup projection despite the groups' greater degree of formality, which however, we argued, should not bear upon any social consensus regarding their status relation and thus should not constrain the projection

process. The prediction was confirmed and ingroup projection proved to be a relatively robust phenomenon.

### Study 3

In Study 3, we asked West Germans and East Germans for their perceptions of both groups' prototypicality for Germans in general (superordinate category). Membership in these groups and the meaning of being West German, East German or German is deeply rooted in historically developed stereotypes. Although the unification between East- and West Germany aims to overcome the intergroup differences, the two subgroups are still important reference groups for their members, at least they were so when the study was conducted. In number, the group of West Germans is about three times as large as the East German group; and because of historical reasons, they are on average richer and more powerful, and hold higher status positions than East Germans. Moreover, the political program after the unification has been predominantly one of assimilation of East Germans to the West German standard. Thus, there is a certain degree of consensus between the groups, as well as within the wider international community, that West Germans are the more prototypical subgroup. This social fact is likely to constrain the possibility for projection. Specifically, it would appear odd for East Germans to claim to be more prototypical for Germans than West Germans are. Thus, the occurrence of ingroup projection under these conditions can be expected to be less likely than in Studies 1 or 2. Instead, we expected East and West Germans to agree on the greater prototypicality of West Germans. However, there might still be room for disagreement. For instance, even if there was consensus about which group was the more prototypical one, the degree to which this was the case could still be disputed. Thus, we can expect West Germans to perceive a higher superiority in prototypicality than East Germans might

concede to be the case. A finding like this would indicate that ingroup projection is not only a robust phenomenon, but also adaptive to the intergroup situation and takes into account reality constraints of intergroup consensus. In general, we expected to find (a) a within-subject main effect of target group on prototypicality, reflecting a relative agreement between both groups (reality constraints), and (b) an interaction between participant group and target group, as found in the two previous studies, indicating divergent perspectives (i.e., ingroup projection). Thus, we expected that both groups would agree that West Germans were more prototypical for Germans than East Germans were (intergroup consensus), but the difference in prototypicality perceived by West Germans would exceed the difference as perceived by East Germans. That means, ingroup projection would be relative, accommodating the social fact of wider consensus but accentuating or downplaying it to the ingroup's advantage.

#### Method

# Participants and Design

One hundred and sixty-eight students of the natural sciences participated in the study. The study was conducted in both East and West Germany: 75 students at an East German university participated, of whom 66 regarded themselves as East Germans and 9 regarded themselves as West Germans. The data of the latter were not considered due to their special experiences and ambiguous identity. Ninety-three students at a West German university participated, of whom 91 regarded themselves as West Germans and 2 regarded themselves as East Germans. The data of the latter were again not considered. Four participants had missing values on the dependent variable because they did not correctly fill in the questionnaire. The remaining 153 participants were between 19 and 32 years old; 127 were male, 24

were female (two participants did not report on their gender and age). The West German participants were significantly older ( $\underline{M} = 21.76$ ,  $\underline{SD} = 1.80$ ) than the East German participants ( $\underline{M} = 20.17$ ,  $\underline{SD} = 1.20$ ),  $\underline{t}(149) = 6.11$ ,  $\underline{p} < .001$ . Students participated voluntarily in the study and, as an incentive, received for their participation a ticket for a lottery that could win them 3 times 20 German Marks. We conducted a 2 (participant group: West Germans vs. East Germans) x 2 (target group: West Germans vs. East Germans) design with target group as within-subject factor. Procedure

Participants were given a list of 20 attributes, which was, according to pretests, balanced with respect to the number of attributes typical and distinct for East Germans, attributes typical and distinct for West Germans, and attributes equally typical for both groups. The attributes were as follows (translated from German): child-loving, considerate, humorous, imaginative, romantic, sincere, social (stereotypically East German); efficient, environmentalist, independent, open-minded, progressive, resolute, self-confident (stereotypically West German); accurate, clever, committed, hardworking, reliable, self-critical (stereotypical for neither or both groups). The list of attributes was presented three times, whereby the participants were asked to indicate the extent to which the attributes applied respectively to East Germans, West Germans and Germans in general (1 = not at all; 5 = very much). The sequence of the evaluations of East and West Germans was randomized, while Germans in general were always evaluated last. Afterwards, participants answered several exploratory questions that are not relevant for the focus of this paper.

# Measure of Prototypicality

The measure of prototypicality was the same profile-dissimilarity index as in Study 2, calculated as the mean of the Euclidean distance between corresponding attribute ratings.

## Results and Discussion

As predicted, both groups agreed that West Germans were more prototypical than East Germans (Figure 3). In a 2 (participant group: West Germans vs. East Germans) x 2 (target-group) ANOVA for scores of dissimilarity from Germans in general, we found a significant main effect of target group,  $\underline{F}(1,151) = 74.85$ ;  $\underline{p} < .001$ , partial  $\eta^2 = .331$ . West Germans were regarded as less different from, and thus more prototypical for, Germans ( $\underline{M} = 3.52$ ;  $\underline{SD} = 1.59$ ) than East Germans were ( $\underline{M} = 4.72$ ;  $\underline{SD} = 2.01$ ). As predicted, however, this effect was moderated by a significant interaction effect,  $\underline{F}(1,151) = 6.99$ ;  $\underline{p} = .009$ , partial  $\eta^2 = .044$ , reflecting that both subgroups differed in their views of how relatively prototypical they were for the superordinate category.

More precisely, West Germans perceived West Germans to be less dissimilar from (i.e., more prototypical for) Germans in general ( $\underline{M} = 3.22$ ;  $\underline{SD} = 1.77$ ) than East Germans did ( $\underline{M} = 3.92$ ;  $\underline{SD} = 1.19$ ),  $\underline{F}(1,151) = 7.61$ ;  $\underline{p} = .007$ , partial  $\eta^2 = .048$ . East Germans and West Germans did not differ from each other in their views of how dissimilar East Germans were from Germans in general (both  $\underline{M}$ s = 4.72,  $\underline{SD}_{east} = 1.38$ ,  $\underline{SD}_{west} = 2.38$ ),  $\underline{F}(1,151) = .02$ ;  $\underline{ns}$ ). Redundant to the ANOVA, but more illustrative, we calculated the difference between West and East Germans' profile dissimilarities to Germans in general. For this variable, which indicated the prototypicality of East Germans relative to West Germans' prototypicality, a t-test

revealed a significant difference between East Germans and West Germans ( $\underline{\mathbf{M}} = -80$ ;  $\underline{\mathbf{SD}} = 1.47$  vs.  $\underline{\mathbf{M}} = -1.50$ ;  $\underline{\mathbf{SD}} = 1.73$ ;  $\underline{\mathbf{t}}(151) = 2.64$ ;  $\underline{\mathbf{p}} = .009$ ).

Thus, while there was consensus between both groups that the majority was more prototypical than the minority, there was disagreement on the extent to which this was true. The interaction effect was, in fact, of smaller size than in the previous studies, yet still significant. Ingroup projection emerged in an intergroup context with strong reality constraints. However, it did not simply ran counter a wider social consensus about which group was more prototypical, but rather accommodated this social reality. Ingroup projection may create conflict even between groups that agree in principle on the higher prototypicality of one of the groups.

## General Discussion

In three different intergroup contexts, using two different operationalizations of group prototypicality, we found that two subgroups disagreed on their relative prototypicality for the superordinate category including both. This divergence in perspectives is an indicator of ingroup projection, that is the generalization of distinctive ingroup attributes to the superordinate category. The results support Mummendey and Wenzel's (1999) theoretical analysis and replicate a finding by Wenzel et al. (in press). Given that effect sizes in two of the three studies were strong and the intergroup contexts considerably different from one another in terms of content, determination by formality or history, and status relations, we conclude that ingroup projection seems to be a robust phenomenon.

Moreover, ingroup projection is not incompatible with an adaptive perception of social reality. In Study 3, the lower status minority (East Germans) did not insist on being more or even equally prototypical than the higher status majority (West Germans), which would have violated various social facts about the numerical,

material and ideological dominance of West Germans. However, there was still disagreement about relative prototypicality, with East Germans regarding West Germans' greater prototypicality as less pronounced than West Germans saw it. Thus, ingroup projection might lead to intergroup conflict even when there is a general consensus between both groups about the dominance of one of the two groups. In this particular case, we can only speculate whether the intergroup consensus was primarily based on shared perceptions of prototypicality cues such as West Germans being the numerical majority, or whether it was based on the fact that West Germans were the more powerful group and, thus, able to dictate the intergroup discourse in a direction that favoured their ingroup, defining their own attributes as standards of the superordinate category. Our data do not allow a conclusive answer to this question.

In any case, the result of Study 3 is important because it makes clear, that ingroup projection can only be understood completely if the perspectives of both groups are taken into account. The fact that one group claims to be more prototypical than an outgroup does not necessarily indicate ingroup projection, because the outgroup could agree with this view. Even though ingroup projection can coexist with a certain degree of agreement, the amount of disagreement determines how much the relationship between the two groups is characterized by ingroup projection, conflict and discrimination. Correspondingly, Mummendey and Wenzel (1999) understand intergroup discrimination as a disagreement about the appropriate treatment of both groups rather than unequal treatment in an absolute sense: "Social discrimination is an ingroup's subjectively justified unequal, usually disadvantageous, evaluation or treatment of an outgroup, that the latter (or an outside observer) would deem unjustified" (p. 159). This way, they can explain why unequal treatment and status differences are sometimes regarded as discrimination, but sometimes not. Unequal

treatment would be considered justified when there is consensus between the groups about corresponding differences in prototypicality. There can be harmony and legitimacy even if there is inequality and differences of power between two groups. However, the distribution of recourses, power or status becomes a matter of social discrimination, when one group contests this presumed consensus and disagrees with the outgroup on their relative prototypicality (see also Mummendey & Otten, 2001). Thus, ingroup projection can be a basis of intergroup discrimination – as well as social change!

However, the account of ingroup projection as disagreement between the two subgroups of a superordinate category has also implications for attempts to improve intergroup relations toward true intergroup tolerance. It should be possible to reduce intergroup conflicts by inducing the two groups to acknowledge the prototypicality of the outgroup, thus promoting consensus about the groups' prototypicality. Such a consensus may be facilitated, for instance, by perspective-taking (Galinsky & Moskowitz, 2000), representations of the superordinate category that accommodate subgroup diversity (Waldzus et al., 2003) or an overarching philosophy of "organic pluralism" (Haslam, 2001). In contrast to approaches that aim to improve intergroup relations by reducing subgroup identification, for instance, through decategorization (Brewer & Miller, 1984), cross-categorization (Deschamps & Doise, 1978; Migdal, Hewstone, & Mullen, 1998) or recategorization on a higher level of inclusiveness (Gaertner, Dovidio, Anastasio, Bachman, & Rust, 1993), the ingroup projection approach may enable tolerance between groups that remain salient as self categories but acknowledge each other's prototypicality. This way, it may be possible to achieve a state of mutual positive intergroup differentiation (Hewstone & Brown, 1986; Hornsey & Hogg, 2000).

Ingroup projection is, on the one hand, a social-cognitive process indicated by disagreement between groups on their relative prototypicality; on the other hand, the process itself may be considered to be one of disagreement, discourse, dispute and social influence. Reicher, Hopkins and Condor (1997), for instance, have made this point eloquently by arguing that groups (i.e., various political parties in Scotland) attempt to define the social context (i.e., Scottishness) to promote certain social action. The overarching identity that defines the frame of reference is, in their view, open for argument and, indeed, itself an argument for the relations between groups and their social actions (see also Reicher & Hopkins, 1996a; 1996b). In a similar sense, discourse analyses have shown that people use claims to be representative members of superordinate categories such as normal citizens when justifying demands and entitlements for their subgroups in their spontaneous conversations (e.g., McKinlay & Dunnett, 1998; Widdicombe, 1998). The phenomenon of ingroup projection is thus open to various research strategies and analytical approaches, including social cognition and discourse analyses. In future, either approach may help us understand how disagreement about relative prototypicality comes about and how agreement can be achieved. On the one hand, it might be the case that ingroup projection is partly based on high accessibility of self-referent or ingroup-referent knowledge and thus requires an analysis of individual information processing involved in perceptions of group prototypicality. For instance, recent research has found an overlap between the cognitive representations of self and ingroup (Coats, Smith, Claypool, & Banner, 2000; Smith, Coats, & Walling, 1999), and social projection has been explained by a neglect of others (compared to self) as a basis for inductive reasoning (Clement & Krueger, 2000; Krueger & Stanke, 2001). For instance, it might be the case that, as a majority, West Germans simply neglected the

outgroup in their representation of Germans and thus confused their own subgroup with the superordinate category, which should be less likely the case for East Germans. On the other hand, we assume that strategic concerns about the positive identity, status and power of one's group should render claims for prototypicality an argument in a discourse, be it with ingroup members, outgroup members or external observers (Reicher et al., 1997). For instance, as a minority, East Germans might have downplayed the prototypicality of West Germans in order to justify claims of equal treatment (Wenzel, 2000). Instead of limiting the focus on one of the two possibilities, we would rather invite researchers from both intellectual camps to study the causes and consequences of ingroup projection.

The more important lesson from the present research is that social context and frame of reference, here in the form of a superordinate category, is not only a determinant of intergroup processes; one that group members perceive and adhere to passively. Rather, the definition of social context, its meaning and how it relates to the meaning of salient subgroups, is itself determined by intergroup processes, group norms and group goals; it is actively construed, disputed and negotiated. It is through its implications for the perceived relative prototypicality of ingroup and outgroup for the superordinate category that this construal of context feeds back into the quality of intergroup relations.

### References

Allport, F. H. (1924). Social psychology. Cambridge, MA: Riverside Press.

Brewer, M. B. & Brown, R. J. (1998). Intergroup relations. In D. T. Gilbert & S. T. Fiske (Eds.), <u>The handbook of social psychology</u> (Vol. 2, pp. 554-594). Boston, MA: Mcgraw.

Brewer, M. B. & Miller, N. (1984). Beyond the contact hypothesis:

Theoretical perspectives on desegregation. In N. Miller & M. B. Brewer (Eds.),

<u>Groups in contact: The psychology of desegregation</u> (pp. 281-302). New York:

Academic Press.

Clement, R. W. & Krueger, J. (2000). The primacy of self-referent information in perceptions of social consensus. <u>British Journal of Social Psychology</u>, 39, 279-299.

Coats, S., Smith, E. R., Claypool, H. M., & Banner, M. J. (2000). Overlapping mental representations of self and in-group: Reaction time evidence and its relationship with explicit measures of group identification. <u>Journal of Experimental Social Psychology</u>, 36, 304-315.

Cronbach, L. J. & Gleser, G. C. (1953). Assessing similarity between profiles. Psychological Bulletin, 50, 456-473.

Deschamps, J. C. & Doise, W. (1978). Crossed category memberships in intergroup relations. In H. Tajfel (Ed.), <u>Differentiation between social groups</u> (pp. 141-158). London: Academic Press.

Ellemers, N., Van Rijswijk, W., Roefs, M., & Simons, C. (1997). Bias in intergroup perceptions: Balancing group identity with social reality. <u>Personality and Social Psychology Bulletin</u>, 23, 186-198.

Ellemers, N., Spears, R., & Doosje, B. (1999). <u>Social identity: Context</u>, commitment, content. Oxford, England: Blackwell Science Ltd.

Gaertner, S. L., Dovidio, J. F., Anastasio, P. A., Bachman, B. A., & Rust, M. C. (1993). The common ingroup identity model: Recategorization and the reduction of intergroup bias. In W. Stroebe & M. Hewstone (Eds.), <u>European review of social psychology</u> (Vol. 4, pp. 1-26). Chichester, England UK: John Wiley & Sons.

Galinsky, A. D. & Moskowitz, G. B. (2000). Perspective-taking: Decreasing stereotype expression, stereotype accessibility, and in-group favoritism. <u>Journal of Personality and Social Psychology</u>, <u>78</u>, 708-724.

Haslam, S. A. (2001). <u>The psychology of organizations: A social identity perspective.</u> London: Sage.

Hewstone, M. & Brown, R. (1986). Contact is not enough: An intergroup perspective on the 'contact hypothesis.'. In M. Hewstone & R. Brown (Eds.), <u>Contact and conflict in intergroup encounters</u> (pp. 1-44). Oxford, England UK: Basil Blackwell.

Hogg, M. A. & Hardie, E. A. (1991). Social attraction, personal attraction, and self-categorization: A field study. <u>Personality and Social Psychology Bulletin</u>, <u>17</u>, 175-180.

Hornsey, M. J. & Hogg, M. A. (2000). Subgroup relations: A comparison of mutual intergroup differentiation and common ingroup identity models of prejudice reduction. Personality and Social Psychology Bulletin, 26, 242-256.

Krueger, J. (1998). On the perception of social consensus. In M. P. Zanna (Ed.), <u>Advances in experimental social psychology</u> (Vol. 30, pp. 163-240). San Diego, CA: Academic Press.

Krueger, J. & Clement, R. W. (1996). Inferring category characteristics from sample characteristics: Inductive reasoning and social projection. <u>Journal of Experimental Psychology: General</u>, <u>125</u>, 52-68.

Krueger, J. & Stanke, D. (2001). The role of self-referent and other-referent knowledge in perceptions of group characteristics. <u>Personality and Social Psychology</u> Bulletin, 27, 878-888.

Marks, G. & Miller, N. (1987). Ten years of research on the false-consensus effect: An empirical and theoretical review. Psychological Bulletin, 102, 72-90.

McKinlay, A. & Dunnett, A. (1998). How gun-owners accomplish being deadly average. In C. Antaki & S. Widdicombe (Eds.), <u>Identities in talk</u> (pp. 34-51). London: Sage Publications, Inc.

Migdal, M. J., Hewstone, M., & Mullen, B. (1998). The effects of crossed categorization on intergroup evaluations: A meta-analysis. <u>British Journal of Social Psychology</u>, 37, 303-324.

Mullen, B., Dovidio, J. F., Johnson, C., & Copper, C. (1992). In-group^out-group differences in social projection. <u>Journal of Experimental Social Psychology</u>, <u>28</u>, 422-440.

Mullen, B. & Hu, L. (1988). Social projection as a function of cognitive mechanisms: Two meta-analytic integrations. <u>British Journal of Social Psychology</u>, <u>27</u>, 333-356.

Mummendey, A. & Otten, S. (2001). Aversive Discrimination. In R. Brown & S. L. Gaertner (Eds.), <u>Blackwell Handbook of Social Psychology: Intergroup</u>

<u>Processes</u> (pp. 112-132). Oxford: Blackwell Publishers.

Mummendey, A. & Wenzel, M. (1999). Social discrimination and tolerance in intergroup relations: Reactions to intergroup difference. <u>Personality and Social Psychology Review</u>, <u>3</u>, 158-174.

Oakes, P. J., Haslam, S. A., & Turner, J. C. (1994). <u>Stereotyping and social</u> reality. Oxford, England UK: Blackwell Publishers.

Reicher, S. & Hopkins, N. (1996a). Self-category constructions in political rhetoric: An analysis of Thatcher's and Kinnock's speeches concerning the British miners' strike (1984-5). European Journal of Social Psychology, 26, 353-371.

Reicher, S. & Hopkins, N. (1996b). Seeking influence through characterizing self-categories: An analysis of anti-abortionist rhetoric. <u>British Journal of Social Psychology</u>, 35, 297-311.

Reicher, S., Hopkins, N., & Condor, S. (1997). Stereotype construction as a strategy of influence. In R. Spears & P. J. Oakes (Eds.), <u>The social psychology of stereotyping and group life</u> (pp. 94-118). Oxford, England UK: Blackwell Publishers.

Ross, L., Greene, D., & House, P. (1977). The false consensus effect: An egocentric bias in social perception and attribution processes. <u>Journal of Experimental</u> Social Psychology, 13, 279-301.

Sani, F. & Reicher, S. (1998). When consensus fails: An analysis of the schism within the Italian Communist Party (1991). <u>European Journal of Social Psychology</u>, 28, 623-645.

Sani, F. & Reicher, S. (2000). Contested identities and schisms in groups: Opposing the ordination of women as priests in the Church of England. <u>British</u>

Journal of Social Psychology, 39, 95-112.

Smith, E. R., Coats, S., & Walling, D. (1999). Overlapping mental representations of self, in-group, and partner: Further response time evidence and a connectionist model. <u>Personality and Social Psychology Bulletin</u>, <u>25</u>, 873-882.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). Rediscovering the social group: A self-categorization theory. Oxford: Basil Blackwell.

Waldzus, S., Mummendey, A., Wenzel, M., & Weber, U. (2003). Towards tolerance: Representations of superordinate categories and perceived ingroup prototypicality. <u>Journal of Experimental Social Psychology</u>, 39, 31-47.

Weber, U., Mummendey, A., & Waldzus, S. (2002). Perceived legitimacy of intergroup status differences: its prediction by relative ingroup prototypicality. <u>European Journal of Social Psychology</u>, 32, 449-470.

Wenzel, M. (2000). Justice and identity: The significance of inclusion for perceptions of entitlement and the justice motive. <u>Personality and Social Psychology</u> Bulletin, 26, 157-176.

Wenzel, M. (2001). A social categorization approach to distributive justice: Social identity as the link between relevance of inputs and need for justice. <u>British</u> Journal of Social Psychology, 40, 315-335.

Wenzel, M., Mummendey, A., Weber, U., & Waldzus, S. (in press). The Ingroup as Pars pro Toto: Projection from the ingroup onto the inclusive category as a precursor to social discrimination. <a href="Personality & Social Psychology Bulletin">Personality & Social Psychology Bulletin</a>.

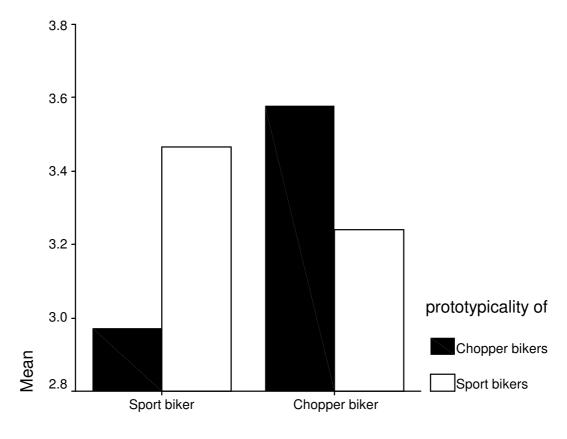
Widdicombe, S. (1998). "But you don't class yourself": The interactional management of category membership and non-membership. In C. Antaki & S. Widdicombe (Eds.), <u>Identities in talk</u> (pp. 52-70). London: Sage Publications, Inc.

Figure Captions

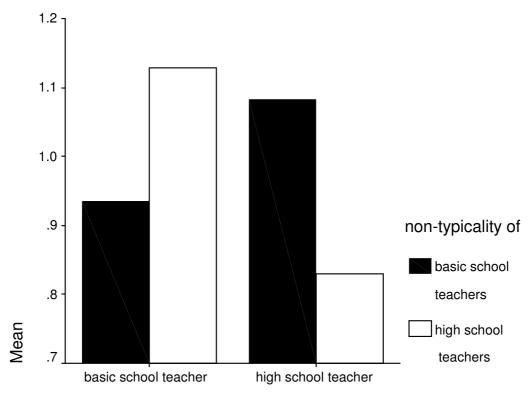
<u>Figure 1.</u> Perspective divergence about the prototypicality of different subgroups of bikers in Study 1. Prototypicality of a subgroup was measured by ratings of bikers in general on attributes stereotypical to the respective subgroup. High values represent high prototypicality.

<u>Figure 2.</u> Perspective divergence about the prototypicality of different subgroups of teachers in Study 2. Prototypicality of a subgroup was measured by profile dissimilarities between the subgroup and teachers in general. High values represent low prototypicality.

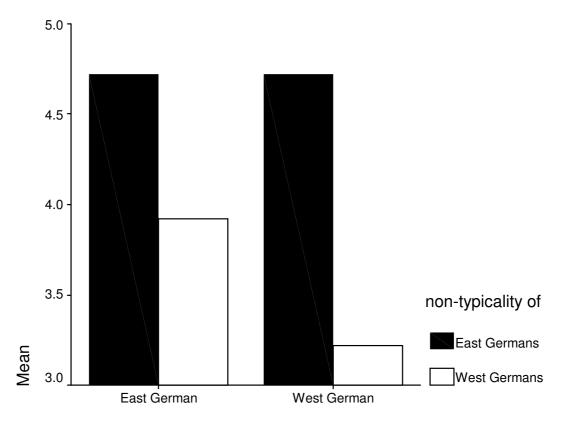
<u>Figure 3.</u> Perspective divergence about the prototypicality of different subgroups of Germans in Study 3. Prototypicality of a subgroup was measured by profile dissimilarities between the subgroup and Germans in general. High values represent low prototypicality.



subject's membership



subject's membership



Subject's membership