Chapter 3

The ingroup projection model

Sven Waldzus, Instituto Superior de Ciências do Trabalho e da Empresa (ISCTE)

Sometimes we do not like a certain group of people. We simply cannot stand them. They did not do anything particular to us. The problem is rather that they are what they are: Different. In 1999, Mummendey and Wenzel (1999) presented an approach that tries to explain intergroup conflict by an analysis of our evaluative response towards outgroups that are different from us. Their theoretical framework, which has become known as the "Ingroup Projection Model", integrates three old themes in social psychology: Self-relevance of social categorization and psychological group formation (G. Allport, 1954, Tajfel & Forgas, 1981, Turner, 1987), the notion of prototypicality in intra-category differentiation (Rosch, 1978), and social projection (F. Allport, 1924; Krueger, 2007). Based on this analysis, they developed ideas on how to overcome intergroup conflict without abandoning intergroup differences by creating a context in which different groups may be able to respect or at least tolerate each other. Since then, much empirical research has been done that supports their ideas, and which has also inspired several theoretical advancements and elaborations of the original approach.

THE OTHERS' DIFFERENCE

How do we usually evaluate others, particularly other groups? One popular answer to this question is the idea of ethnocentrism. When Sumner (1906) described traditional customs and conventions ('mores') of people all over the world, including pre-industrial societies, he defined ethnocentrism straightforwardly as

> "… the technical name of this view of things in which one's own group is the centre of everything, and all others are scaled and rated with reference to it... Each group nourishes its own pride and vanity, boasts itself superior, exalts its own divinities, and looks with contempt on outsiders…"
>
> (Sumner 1906, p. 13).

In established cultures, customs are usually taken for granted, rarely questioned within a group, except in times of socio-economic or geopolitical change. He listed an overwhelming number of examples, including the ancient Greeks considering everybody else as barbarians. Probably everybody can name one or several examples of such an ethnocentric perspective from own experience or hearsay. However, in our complex societies things are not always that easy.

The ethnocentric response is neither the only possible one, nor is it trivial. Sometimes we like others, not although, but rather *because* they are different. Northern Europeans sometimes sympathize with Southern Europeans because they associate with Mediterranean lifestyle certain aspects of quality of life that they miss. Since World War II, US-American pop-symbols have been adopted by adolescents all over the world, since they are cool, and in German universities students of physics are sometimes admired by students of biology and chemistry, since the subjects they study appear to be more difficult or scientifically more fundamental than their own. In other cases, we can easily accept a group's difference, since it has no relevance for us. Our response is neutral, indifferent or interested at most. Hardly anyone in western societies cares if members of a tribe living deep in the Amazon jungle appear naked on a TV screen in a documentary, something that would be considered most of the time unacceptable when done by any one of "us".

If we do look at others in an ethnocentric way, this is not trivial, since it requires a psychological explanation: Why does it happen that we often take our own group's values and norms as a standard not only for our own group, but also for others that by definition do not belong to us? If others are not like us, why do we measure them with the same standard? A fish is a fish and a bird is a bird. Who would blame a fish for not having feathers and being unable to fly?

Thus, in order to understand when and why we sometimes devalue an outgroup because of its difference, a psychological model is needed that specifies the predictors and processes responsible for these kind of evaluations.

Self-categorization and relative prototypicality as a basis for the evaluation of outgroups

Social categorization is not neutral, since it potentially involves us as group members. When thinking of a group, the question whether we are in it or not matters (Tajfel & Forgas, 1981). In decades of research on intergroup bias an impressive amount of knowledge has been accumulated that links categorization into ingroup and outgroup with ingroup favoritism (e.g., Hewstone, Rubin & Willis, 2002). One prominent explanation of this link is our desire to feel good about ourselves. It is a general social psychological principle that people normally tend to value “me and mine” (Smith & Mackie, 2007). People compare their ingroups with relevant outgroups and under certain conditions they may engage in social competition in order to achieve or maintain a positive social identity, something that can be acquired through positive distinctiveness from relevant comparison outgroups (Tajfel & Turner, 1986). However, a closer look at the research inspired by this social identity approach reveals that it speaks more to our ways of evaluating our own group positively than to our hardly deniable tendency to evaluate outgroups negatively. While ‘ingroup love’ can well explain a striving

for positive ingroup distinctiveness, it hardly can explain ‘outgroup hate’ (Brewer, 2001). Moreover, what does it actually mean to be “positively distinct”?

Self-categorization theory (Turner, 1987), which is the theoretical basis of the ingroup projection model, answers the latter question by incorporating the notion of categorization and prototypicality into the explanation of psychological group formation. It assumes that part of our self-concept is categorical knowledge, representing social groups as self-categories in which we are in (ingroups) or not (outgroups). These self-categories differ from each other not only in their domain, but also in their level of inclusiveness, so that less inclusive categories (e.g., biologists) are included in more inclusive ones (e.g., natural scientists) which themselves can be included in even more inclusive categories (e.g., scientists, human beings). Within such a hierarchy, less inclusive ingroups and outgroups are comparable with each other, because (and only if) they are sub-categories of the same superordinate category. Social scientists are comparable with natural scientists because they are all scientists.

Within categories, members, as well as sub-categories, differ in terms of their prototypicality, that is, in the degree to which they are representative exemplars of that category (Rosch, 1978; see also the Spears, Jetten, Scheepers, & Cihangir chapter in this volume). Note that although research on category representation has meanwhile shown that categories are not necessarily stored in memory as abstract prototypes, it is beyond doubt that exemplars differ in terms of

prototypicality (Smith, 1998). Penguins or chickens are less prototypical birds than robins. In the same way, natural and social scientists may differ in the degree to which they are prototypical scientists.

At this point it is important to remember that a superordinate category that includes ingroup and outgroup is also an ingroup, but on a higher level of inclusiveness, and that, if it is self-relevant, people tend to evaluate it positively. Scientists usually think that being a scientist is a good thing. The interesting implication of this is that the more prototypical a sub-group is for that category, the more similar it is to something positive. That makes prototypes of superordinate self-categories standards of value-laden comparisons between ingroups and outgroups. Accordingly, one of the hypotheses of self-categorization theory is that

"… ethnocentrism, attraction to one's own group as a whole, depends upon the perceived prototypicality of the ingroup in comparison with relevant outgroups (relative prototypicality) in terms of the valued superordinate self-category that provides the basis for the intergroup comparison."

(Turner, 1987, p. 61).

Hence, positive distinctiveness of an ingroup means that the ingroup is more prototypical than the outgroup for a positively valued superordinate self-category.

As a logical consequence, Mummendey and Wenzel (1999) conclude that relative prototypicality of the ingroup is not only positively related to attraction to the ingroup, but also negatively related to attraction to the outgroup. The higher the relative prototypicality of the ingroup, the lower is by definition the relative prototypicality of the outgroup, and, thus, the more negative (or less positive) is the evaluation of the outgroup. A natural scientist who thinks that natural scientists are more prototypical (i.e., more scientific) than social scientists will not really appreciate what social scientists do, in particular, what they do in their scientific work differently than natural scientists.

The hypothesis, that prototypicality matters for the evaluation of a group (Turner 1987) had not been tested empirically until Mummendey and Wenzel (1999) moved the question of outgroup evaluations to the top of the agenda. Since then, however, several studies have been conducted in which relative prototypicality of an ingroup is measured together with attitudes towards the outgroup. In a series of studies, German participants had less positive attitudes towards Poles, Italians or the British, the more they considered Germans – in comparison with the respective outgroup – to be prototypical Europeans (Waldzus, Mummendey, Wenzel & Weber, 2003; Waldzus, Mummendey & Wenzel, 2005). In the same vein, the more Psychology students considered themselves to be prototypical students compared to Business students, the less positive were their attitudes towards them (Wenzel, Mummendey, Weber & Waldzus, 2003). In a meta-analysis summarizing over 26 studies within various intergroup contexts, Wenzel,

Mummendey and Waldzus (2007) found a moderate but substantial negative average correlation between relative ingroup prototypicality and positive attitudes towards the outgroup (Figure 3.1).

[insert Figure 3.1 about here]

When thinking of prototypicality as a criterion for group evaluation, it is important to keep in mind that inclusion in the superordinate category is a necessary condition for such a criterion to be applied. A chicken is a non-prototypical bird, but a fish is no bird at all. Waldzus and Mummendey (2004) found that attitudes of Germans towards Poles only depended on their relative prototypicality when Europe was made salient as a superordinate category, since Poles and Germans are both subgroups of Europeans. In contrast, when Western Europe was made salient as a more inclusive category that includes Germans, but not Poles, attitudes towards Poles were independent of their (dis)similarity to Western-Europeans. These findings were replicated in a second study, showing that attitudes of single parenting mothers towards single parenting fathers were correlated with their relative prototypicality for the superordinate category of single parents, but not with their similarity to the prototype of mothers, which is also a more inclusive category but does not include single parenting fathers.

Thus, the borders of superordinate categories actually mark the scope of applicability of category-related standards. This can explain why sometimes the

fact that a group is different from us does not contribute to our evaluation of that group. Natural scientists would criticize social scientists, but not musicians for not being scientific enough.

One interesting consequence of using category prototypes as standards for comparisons is that evaluations of groups depend on the salient contexts and differ from domain to domain. Categories like Europeans and Students are quite general and thus may have an influence on rather global attitudes. However, more specific superordinate categories allow for more differentiated evaluations. For instance, in the study with single parenting mothers evaluating single parenting fathers, relative prototypicality in terms of being a single parent was only related to evaluations of single fathers' ability to raise and educate children, but not to their general attractiveness (Waldzus & Mummendey, 2004).

Projection and disagreement as a source of intergroup conflict

With prototypicality as a common and adaptive – since context-sensitive – basis for group evaluation, everything could end up in harmony. All groups could agree on their relative standing within valued superordinate categories. The more prototypical a group is, the more it would be respected by its own members and by other groups in terms of what is relevant in a particular superordinate category. Surely, such harmonious intergroup relations exist, in which groups accept justified differences in reputation based on shared perceptions of differences in

prototypicality. However, as mentioned above, our self-involvement has an impact on how we see our own groups and others. Moreover, compared to non-social categories, social categories are less clearly defined by observable facts, and their definition is very much a matter of social construction. This invites debate, and groups may disagree on the definition of what it means to be a good representative of the superordinate category, that is, of what is prototypical. Social scientists may have a different idea of what real science is than natural scientists.

Mummendey and Wenzel (1999) assume that group members are inclined to frame the standard of comparison in a way that makes their own group appear to be prototypical. According to them, outgroups are negatively evaluated because of their difference if two conditions come together: a) if they are included together with the ingroup in a more inclusive, superordinate self-category rendering both groups comparable on relevant dimensions (*inclusion*) and b) if ingroup members project distinct characteristics, attributes, values, norms etc. of their own group to the superordinate category (*ingroup projection*). Thus, ethnocentrism is the outcome of a combination of inclusion and ingroup projection. The superordinate category, which is a reference standard for all subgroup comparisons, is seen in an ethnocentric way as being more similar to the ingroup than to the outgroup. The ingroup is taken as a pars-pro-toto and appears to be in line with expectations derived from the superordinate prototype. Conversely, the outgroup is not only different from the ingroup, but also appears to deviate from this superordinate prototype.

Ingroup projection can be considered as a particular case of social projection. While projection has played a prominent role in psychopathology (e.g., Freud, 1917/1999; Holmes & Houston, 1971), social psychologists have studied social projection as a principle that is relevant when we think of and evaluate others (Holyoak & Gordon, 1983). It is defined as the tendency to believe that one's own thoughts, feelings and behaviors are shared by others (F. Allport, 1924; Krueger 2007). Just as social projection in general, ingroup projection is not a directly observable process. That is why in empirical research it is usually defined by the outcome of such a generalization process, namely as an increased overlap between the definition of the ingroup and the definition of the superordinate category.

Evidence for such an overlap has been found in a study by Waldzus, Mummendey and Wenzel (2005), which made use of the flexibility of stereotyping in varying frames of reference. German participants were asked to compare themselves with different outgroups, namely either with Italians or with the British. As expected, Germans did not see themselves the same way in the two conditions. Compared to the Italians they characterized themselves for instance as more reserved and stiff, while compared to the British they thought they had tastier meals and were more companionable. Evidence for ingroup projection would be obtained if these variations in the German self-stereotype were mirrored by parallel variations in the European stereotype. This was indeed what was found. When, due to the manipulation of the comparison outgroup, the Germans' self-stereotype changed

slightly from being reserved and stiff in the direction of having tastier meals and being more companionable, the same happened for the stereotype of Europeans.

Overall, the German participants saw Europeans more similar to the Italians than to the British, but this was less the case when they compared themselves with Italians than when they compared themselves with the British. What is exciting about this result is that from a simple information integration point of view (Anderson, 1981), one would assume the opposite: If Italians are among the two groups to which participants have to pay attention, Europeans should appear to be more Italian than in a condition in which Italians are not mentioned at all. However, the opposite was the case. Those German participants who had to compare themselves with Italians, and, thus, saw themselves as very different from them, also saw Europeans to be less 'Italian' compared to those German participants who compared themselves with the British.

Recently, Bianchi, Mummendey, Steffens, and Yzerbyt (2007) conducted research with response time data revealing that ingroup projection can occur automatically, outside people's conscious awareness. In a study with both Italian and German participants they used a subliminal semantic priming paradigm in which words comprising three group labels (i.e., "Italian", "German" and "European") were presented as primes for only a few milliseconds on a computer-screen. After each prime, participants had to recognize words as target stimuli, which were attributes that varied in their valence as well as in their relevance to the groups under

consideration. As predicted, Italian participants were faster in recognizing typical Italian rather than the typical German characteristics following the prime European. In contrast, German participants showed a spontaneous association between the prime European and typical German characteristics. Valence had no impact on the results. Moreover, in a further study Bianchi et al. found that these associations between the ingroup stereotype and the stereotype of Europeans were sensitive to the comparison context, just as in the results of Waldzus et al. (2005) mentioned above.

Further evidence for ingroup projection was found in studies comparing the perspectives of different groups within the same intergroup context. If all groups project, so goes the idea, two groups within the same superordinate category should disagree about their relative prototypicality. Social scientists should consider themselves to be comparatively more scientific than they are seen by natural scientists and vice versa. Such a disagreement has been found in various studies and different intergroup contexts. Students of different subjects disagree about their prototypicality for the category students (e.g., psychology vs. business administration, Wenzel et al., 2003). Different subgroups of bikers (chopper-bikers vs. sport-bikers), teachers (primary-school teachers vs. secondary-school teachers) and Germans (East-Germans vs. West-Germans) see themselves as relatively more prototypical of the larger category than they are seen by members of the respective outgroup (Waldzus, Mummendey, Wenzel & Boettcher, 2004). In the same vein, Black Americans associate America-related words more

strongly with the group of Black Americans than do White- and Asian-Americans (Devos & Banaji, 2005).

The fact that groups disagree on their relative prototypicality is extremely important for the study of intergroup conflicts. Projection leads to conflicting world views not only in terms of preferences for one or the other group, but also in terms of what is considered an adequate treatment of members of certain groups: importantly, being prototypical relates to social justice. Self-categories are not only sources of group-based attraction (Hogg & Hains, 1996), but also of social status, which includes specific privileges that are associated with group membership. Scientists have a certain reputation as experts and a right to receive funding for their research. Differences in relative prototypicality between groups legitimize differences in social status and entitlements (Wenzel, 2004; see also the Wenzel chapter in this volume). Weber, Mummendey and Waldzus (2002, study 1), found that business administration (B.A.) students, who consider B.A. students from a university to be more prototypical than B.A. students from a polytechnic school, also consider status differences between these two groups legitimate. The same was found for Germans considering themselves more prototypical European than Poles (study 2) and for members of artificial groups created in the laboratory (study 3).

Thus, when groups disagree about their relative prototypicality, this can lead to intergroup conflicts about the legitimacy of status differences and the equal or

unequal distribution of resources. The more groups disagree about their prototypicality, the more illegitimacy is perceived by one or the other group, and the stronger should be the intergroup conflict. While groups may or may not see intergroup difference in itself to be a problem, they very likely feel threatened and questioned in their world view and in their beliefs about themselves when confronted with an outgroup that disagrees on their value and sometimes allegedly legitimate superiority.

Intergroup discrimination as disagreement on relative prototypicality

The explanation of how disagreement on relative prototypicality triggers intergroup conflict has consequences for our understanding of intergroup discrimination. In the studies above, the diverging perspective of the respective outgroup has been taken as a criterion to detect ingroup projection, since in most cases it is impossible to say objectively what is the "true" level of prototypicality and how far a group exaggerates this prototypicality due to projection. Though we know that if there is disagreement on relative prototypicality 'someone' does project, we can hardly say which of the groups does it more than the other. If natural scientists would claim that they are more prototypical scientists than social scientists, and social scientists would disagree with that, who would be right? Whose perspective is based on projection, and whose perspective simply reflects accurate estimations of existing or non-existing differences in prototypicality?

Indeed, some studies on perspective differences revealed that the two involved groups often agree on which of them is more prototypic. Asian-Americans, for instance, showed stronger implicit associations between America and White-Americans than between America and Asian-Americans (Devos & Banaji, 2005). Nevertheless, even in cases of agreement on which of the two groups is more prototypical, there might still be potential for intergroup conflict when groups disagree on the *degree* to which they differ in prototypicality. For instance, although East-Germans in the study of Waldzus et al. (2004) agreed that West-Germans are more typical Germans than East-Germans, they saw a smaller difference in prototypicality than West-Germans did.

The conflict does not come from the fact that one group claims to be more prototypical, but rather from the disagreement on this matter. In a long tradition of intergroup research, intergroup discrimination has often been operationalized as simple ingroup favoritism, or as an unequal, mostly negative treatment of members of certain groups. In contrast, Mummendey & Wenzel (1999) consider the disagreement between the two groups involved as the essence of intergroup discrimination, potentially resulting from the reciprocal process of projecting ingroup attributes onto the more inclusive category. They define social discrimination as "…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).

The emphasis on disagreement in this definition is in line with an older definition by G. Allport (1954), who stated that “Discrimination comes about … when we deny to individuals or groups of people equality of treatment which they may wish.” (p. 51). Interestingly, Allport refers to a United Nations memorandum of the Secretary-General[1] that does not include disagreement in the definition. Like many subsequent documents in international law, it does, however, include the notion of illegitimacy, which means that differentiation between groups is not always discrimination, but only if it is unjustified. As psychologists we know that there can be a great deal of disagreement about what is “justified”, and by including the “which they may wish” in the definition of discrimination, Allport gives some authority on this issue to the groups involved.

Thus, following up on earlier work by Amélie Mummendey and her co-workers on perspective-specific divergence in aggressive interactions (e.g., Mummendey, Linneweber & Löschper, 1984; Mummendey, Bornewasser, Löschper & Linneweber, 1982, Mummendey & Otten, 1989; Otten & Mummendey, 2002; Otten, Mummendey & Wenzel, 1995), the ingroup projection model clearly emphasizes that social discrimination is a concept that is specific to certain contexts and to the perspectives of the groups involved.

Evaluations and decisions about the allocation of resources are done with reference to expectations and standards, and those standards are often open for debate. Thus, what is justified from the point of view of one group might be seen

as unjustified from the point of view of another (see also the chapter by Leyens & Demoulin in this volume).

It is important to note that such an understanding has nothing to do with political indifference or moral relativism. There is no doubt that we are dealing with an unacceptable case of intergroup discrimination when people are disadvantaged in job applications because of their being female or being black. However, our evaluation of such behavior as discrimination has to do with our own group memberships, political values and interests rather than with the psychology behind the behavior itself. What we gain by taking into account perspective dependency is that we can explain how it happens that people often engage in discriminative behavior without any consciousness of doing something wrong, which makes it difficult to change. For any intervention in intergroup relations, this has to be taken into account (see also the Jonas chapter in this volume).

DETERMINANTS OF INGROUP PROJECTION AND NEW APPROACHES TO REDUCE INTERGROUP CONFLICT

The ingroup projection model was not only developed to understand the evaluation of outgroups, but also to analyze conditions of intergroup tolerance. For a long time intergroup researchers assumed that prejudice comes out of social categorization combined with a desire for positive distinctiveness. Not surprisingly, most previous approaches to prejudice reduction tried in one or the

other way to reduce the importance of intergroup differences (Park & Judd, 2005). Inspired by Allport's contact hypothesis (1954; see also the Wright chapter in this volume) and social identity theory, they often relied on alternative ways to represent the categorical structure of the intergroup situation, such as de-categorization as individuals (Brewer & Miller, 1984), or re-categorization of ingroup and outgroup into a more inclusive common ingroup (Gaertner, Dovidio, Anastasio, Bachman & Rust, 1993). Only a few researchers suggested changing the context of intergroup difference rather than the difference itself, for instance by making intergroup difference normative and desirable by involving groups in complementary tasks necessary for shared success (Brown & Hewstone, 2005; Hewstone & Brown, 1986).

The ingroup projection model offers a similar, but more general approach to the reduction of prejudice. The key for this new approach is the assumption that outgroups are negatively evaluated because of their deviance from superordinate prototypes rather than because of their being different from the ingroup. If it would be possible to hinder ingroup projection from turning perception of difference into perception of deviance, intergroup conflict could be reduced even if intergroup differences were maintained (Park & Judd, 2005). However, how can one reduce or block ingroup projection?

To answer this question one has to understand the determinants of ingroup projection. Mummendey and Wenzel (1999) propose two important predictors.

First, they assume that ingroup projection is stronger for those group members who are strongly identified with both their ingroup on the subgroup level and the inclusive category on the superordinate level (*dual identification*). Second, they assume that ingroup projection will be reduced if the prototype of the superordinate category for one or the other reason is not definable as a simple ethnocentric standard.

Dual identification

Group members who identify strongly with their group should be particularly motivated to see it in a positive light and to see their group scoring high on dimensions they consider relevant. At the same time, the standards for group evaluation, which are derived from the prototype of a superordinate category, should be considered more important if people identify with the group that this superordinate category represents. Social scientists who identify strongly with their group of social scientists should have a particular interest in seeing social scientists as being scientific, but only if being a scientist is important for their own personal self-definition. Moreover, people who are used to thinking of themselves as members of a certain group and also as members of the superordinate category should, after a while, develop a cognitive association between the two in their mind, since both are often activated when people think about themselves.

Indeed, Wenzel et al. (2003, study 1) found that those students who highly identified with both their study major (psychology, business administration) and with being a student had a stronger tendency for ingroup projection than the others. The same pattern has been found for Germans identifying strongly with both Germany and with Europe: When comparing themselves with Poles, these dual identifiers saw themselves more relatively prototypical for Europeans than the other participants did (study 2; Waldzus et al., 2003). Moreover, in a study with more than 1500 participants from five different regions in Spain, Strotmann (2007) found that participants identifying strongly with both their region and Spain saw their regional group as more prototypical than did other participants.

The definition of the superordinate prototype

Changing – at least within a decent time-span – identification with groups is an almost impossible ambition. Thus, for interventions the fact that dual identification is a precondition for ingroup projection seems to be of limited relevance. More effective is probably focusing on another determinant of ingroup projection suggested by Mummendey and Wenzel (1999), namely the *representation of the superordinate category*. They hypothesize that ingroup projection should be contingent on the possibility of representing the superordinate category as a definable prototype; if it is not easily definable what characterizes the superordinate category, such characteristics can hardly be used as a standard from which the outgroup deviates. This hypothesis is of considerable

relevance, since interventions that reduce prejudice by changing the representation of the superordinate category can leave the identification with the subgroup and perception of intergroup differences untouched, two things people often resist changing (see also the Brewer chapter in this volume).

In a first attempt, and using somewhat different vocabulary, Mummendey and Wenzel (1999) suggested several ways in which the definability of the superordinate prototype can be diminished. Three of them have been studied empirically: vagueness, complexity and limitation of scope.

Vagueness

If the definition of the superordinate category implies that it is vague or unclear, it cannot be assumed that the prototype of this category carries the ingroup's characteristics more than those of the outgroup. If it would be clear that, given the long history of science, nobody is really able or in the position to tell what a real scientist is, natural scientists should be less able to project their model of science to the superordinate category of scientists. This hypothesis has been tested in a study by Waldzus et al., (2003, study 1). After rating Europe on several characteristics, half of the German participants (vagueness condition) received feedback that other Germans' ratings of Europe on the same characteristics differed completely from their own ratings and from each other, suggesting that there was no agreement within the ingroup on what Europeans are like. The other

half of the participants (control condition) received feedback that the ratings of other Germans closely resembled their own ratings. As expected, relative prototypicality of Germans in comparison with Poles was higher in the control than in the vagueness condition.

One intuitive argument that could be made here is that a vague or unclear superordinate category might facilitate rather than inhibit projection. Indeed, in the vagueness condition, projection was as high as in the control condition for those participants who were dually identified, and, thus, had probably a stronger interest in projection. However, what the notion of "being unclear" actually means according to Mummendey and Wenzel (1999) is that the prototype is unclear *by definition* rather than just left open for any motivated interpretation. A typical vague category like this is artists. Hardly anyone can claim what it means to be an artist without taking the risk of disqualifying him/herself from the discourse. There is a prescriptive component involved, similar to the one in negative theology, which defines the nature of God by what he/she is *not* rather than by applying concrete attributes.

Complexity

Mummendey and Wenzel (1999) define a complex prototype as a case in which "…the distribution of representative members on the prototypical dimension is … multimodal" (p. 167). Although this statement is not very accessible, one can get

the idea if one thinks of an example, such as a robin and an eagle. Most people would agree that both are prototypical birds, although quite different at the same time. The world of birds would be much poorer if one of them would not exist. A superordinate category that allows for different ways to be prototypical is called complex. Since complexity makes it difficult to identify “the one and only” prototype, some researchers prefer to talk of a complex representation of the superordinate category (represented by multiple prototypes) instead of a complex prototype. In any case, inducing or stressing complexity of the superordinate category should reduce ingroup projection.

In a first approach to this hypothesis, Waldzus et al. (2003, study 3) operationalized complexity by making participants focus on diversity. Half of their German participants were asked to imagine that they would have to explain to another person what the “diversity” of Europe is (complexity condition). The other half of participants received the same instruction except that the word “diversity” was replaced by the word “unity” (control condition). Participants had to write down their ideas into an open text-field. Participants in the control conditions showed the usual pattern of ingroup projection: They saw Germans to be more prototypical than Poles for the superordinate category of Europe, and this difference was even more pronounced for participants who identified with Germans and Europeans simultaneously. For participants in the complexity condition, as expected, ingroup projection was reduced. They considered Germans and Poles as equally prototypical, irrespective of identification.

With the same manipulation, a reduction of ingroup projection was achieved in the study of Waldzus et al. (2005), again with Germans as ingroup and Europeans as superordinate category, but with the British and Italians as outgroups. Moreover, in this study, complexity also led to more positive attitudes towards the outgroup, mediated by a reduction of perceived relative prototypicality of the ingroup.

One cognitive explanation for the effect of complex superordinate categories is that they might facilitate the use of orthogonal, that is independent dimensions when relating subgroups to the superordinate category (high-complexity mindset). In line with this reasoning, a recent study by Meireles (2007) showed that Business Administration students who had to compare themselves with Accountancy students showed less ingroup projection to the superordinate category of Management Science students when they were primed with such a high-complexity mindset before.

Note that the intergroup context in which ingroup projection was measured (Business Administration students vs. Accountancy students) was not mentioned in the mindset priming task. Thus, the reduction of relative ingroup prototypicality by the high complexity priming cannot be explained by the activation of ideological or normative concepts, which eventually had been the case in the previous studies when participants were asked to focus on diversity. This is not to say that normative concerns could not contribute to the reduction of ingroup

projection through complexity. The important conclusion is rather that one way to reduce ingroup projection of high prototypical groups is the induction of a high-complexity mindset.

Narrow scope

The prototype of a superordinate category has a narrow scope if it is defined only by a few dimensions and, thus, only applies to a few aspects of life. For instance, if everybody who has German citizenship is considered a German, the German prototype has a narrower scope than if only those are considered German who also speak German, follow German customs and identify themselves as Germans. A prototype with narrow scope should make ingroup projection more difficult since it abstains from prescriptions in all those domains in which a prototype with broader scope would define normative positions.

This hypotheses was tested in the study of Meireles (2007) mentioned above. Apart from the manipulation of low-complexity vs. high-complexity mindset, it also manipulated scope by priming the use of either many (broader scope) or few dimensions (narrow scope). Indeed, ingroup projection was not only reduced in the high-complexity condition, but also in the narrow scope condition.

MODERATORS OF THE MEANING OF RELATIVE PROTOTYPICALITY

Group status and size

Even though overall results of numerous studies are consistent with the originally hypothesized relations in the ingroup projection model, there is nonetheless a considerable amount of heterogeneity in the findings (see Figure 3.1). One important moderator for ingroup projection has already been identified: The available evidence suggests that all manipulations that render the prototype of the superordinate category less definable (i.e., unclear, complex or being of narrow scope) only reduce relative prototypicality for higher status majorities, which indeed consider themselves as more prototypical than the outgroup. For lower status minority groups, who see themselves often as less prototypical for one or another reason, they had no effect. One explanation would be that such groups represent the superordinate category already by default in a more complex way, since they acknowledge the outgroup's prototypicality anyway. However, this speculation needs further testing.

Evaluation of the superordinate category

Another important moderator is the evaluation of the superordinate category. Although people tend to evaluate their ingroup generally positively, they can sometimes be members of negative reference groups (Turner, 1987). If the

superordinate category is such a negative reference group, it is of course more desirable if the ingroup is less prototypical than the outgroup. Thus, all relations of relative prototypicality with ingroup identification, outgroup evaluation and legitimacy of status differences should be reversed. This hypothesis was tested in a study with German participants as ingroup and Poles as outgroup. The evaluation of Europe as the superordinate category was manipulated by asking participants to write down either what they think is positive about Europe or what is negative about Europe. As predicted, in the positive Europe condition, identification with Germans was positively related to relative prototypicality of Germans, which in turn was negatively related to attitudes towards Poles and positively related to perceived legitimacy of Germans' higher status. All these relations reversed in the negative Europe condition. (Weber et al., 2002, Wenzel et al., 2003).

Group-based motivation

A final group of moderators are related to the motivational dynamic of ingroup projection. In their original approach, Mummendey and Wenzel (1999) put much emphasis on the function of ingroup projection as a way to achieve positive distinctiveness within a relevant intergroup context, which can contribute to one's social identity. Indeed, some studies support this idea. For instance, Ullrich, Christ and Schlüter (2006) found that dual identified Germans were more resistant to the entry of Turkey into the European Union when they felt threatened, and Finley

(2006) found in studies on group mergers that ingroup projection is related to distinctiveness threat. However, there is early experimental evidence that ingroup projection can also occur as a cognitive bias, which needs not necessarily be motivated by the particular intergroup relation (Machunsky, Meiser & Mummendey, 2007)[2]. Indeed it seems that both social identity concerns and cognitive principles play a role and that which of them triggers ingroup projection in a particular situation depends on variables at both the individual (e.g., mood, need for closure) and the societal level (security of intergroup context) (see also the Machunsky & Meiser chapter in this volume; Waldzus, Rosa & Meireles, 2007). One issue for future research will be to disentangle these two motivational processes.

CHALLENGES AND OUTLOOK TO FUTURE RESEARCH

Measurement issues

As mentioned above, ingroup projection as a process is not directly observable, which makes measurement a challenge for anyone who wants to study this phenomenon. Often, measures of ingroup projection is based on ratings of the typicality of certain attributes for the ingroup, the outgroup, and the superordinate group, respectively. The more ingroup-typical rather than outgroup-typical traits are associated with the superordinate group, the stronger ingroup projection. Other explicit measures work with graphical presentations allowing for global

prototypicality ratings or just use blatant uni-polar items asking for the ingroup's and the outgroup's prototypicality.

One problem of all these measures is that they are very different in their response format. As a result, they are often not as highly correlated as one would expect from different measures of the same construct. Moreover, attribute-based prototypicality measures work with aggregated data, whereas global graphical or item-based ratings of the groups' overall prototypicality assess a potentially quite different aspect. Future research with larger sample sizes is required to clarify these issues.

A further problem with measures of relative prototypicality results from their relational character. Since it is theoretically a relative construct, it has two components, namely prototypicality of the ingroup and of the outgroup. Combining both in a difference score is consistent with the theoretical construct, but produces statistical problems, such as reduced reliability. This problem is not specific to prototypicality, but is typical for all relational constructs, such as ingroup favouritism. Moreover, it also applies to the implicit measures that have been used, such as semantic priming (Bianchi et al., 2007) and the implicit association test (Devos and Banaji, 2005). These problems are a challenge for research on ingroup projection and it seems that there is no fast and universal solution. Sometimes it can be very informative to analyse ingroup prototypicality and outgroup prototypicality separately (Wenzel et al., 2008, Edwards, 1994;

Ullrich, in press). In general, these measurement issues have to be addressed differently in each case, weighing construct validity, consistency demands and practicality in a reasonable way.

Common ingroup or superordinate category: Contradictory implications of dual identity

Dual identity has been found to increase ingroup projection and to potentially trigger intergroup conflict. Although logically convincing and empirically supported, this result is at odds with another prominent approach to prejudice reduction, the common ingroup identity model (CIIM; Gaertner et al., 1993). This model started from encouraging findings that prejudice could be reduced by representing the intergroup situation rather as a one-group situation in which the ingroup and the outgroup are included in a more inclusive common ingroup, so that previous outgroup members turn into members of the more inclusive common ingroup.

Confronted with the fact that group members often stick to their subgroup identity, the model was modified insofar as a dual identity condition was suggested to solve the problem: Groups may maintain their subgroup identity but at the same time identify with the common ingroup (Gaertner & Dovidio, 2000; Gaertner, Dovidio, Nier, Ward & Banker, 1999). Thus, whereas the CIIM predicts positive effects of dual identity on intergroup relations, the ingroup projection

model predicts the opposite, since dual identity increases ingroup projection and, in turn, disagreement and conflict.

Interestingly, the effects of dual identity are rather mixed. Sometimes dual identity improves attitudes towards the outgroup, sometimes it does not or makes things even worse. Researchers working on both models are currently collaborating with each other in order to identify under which conditions one can expect processes predicted by the CIIM or those predicted by the ingroup projection model. Several moderators such as the relevance of the superordinate category/common ingroup for subgroup comparisons or the activation of the superordinate category as figure vs. its activation as ground have been suggested, but conclusive results are still pending. Thus, the role of dual and other complex identities in the improvement of intergroup relations is still open for debate and a hot issue in current intergroup research (see also the Brewer chapter in this volume).

FINAL CONCLUSIONS

Overall, the ingroup projection model offers an inspiring new approach to the study of intergroup relations and the role of prototypicality. It is, to a certain degree, a sophisticated application of self-categorization theory, which, combined with the idea of social projection, can explain evaluative judgments in intergroup relations. Results are supportive for most of the model's hypotheses. At the same

time they show how important it is to take into account perspectivity and context specific interpretations of social reality whenever the evaluation of outgroups and its implications for intergroup relations are studied.

References

Allport, F. H. (1924). *Social psychology*. Boston: Houghton Mifflin.

Allport, G. W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.

Anderson, N. H. (1981). *Foundation of information integration theory*. New York: Academic Press.

Bianchi, M., Mummendey, A., Steffens, M., & Yzerbyt, V. (2007). *What do you mean by European? Evidence for spontaneous ingroup projection.* Unpublished Manuscript.

Brewer, M. B. (2001). Ingroup identification and intergroup conflict: When does ingroup love become outgroup hate? In R. D. Ashmore & L. Jussim (Eds.), *Social identity,intergroup conflict,and conflict reduction* (pp. 17-41). London, England: Oxford University Press.

Brewer, M. B. & Miller, N. (1984). Beyond the contact hypothesis: Theoretical perspectives on desegregation. In N.Miller & M. B. Brewer (Eds.) *Groups in contact: The psychology of desegregation* (pp. 281-302). New York: Academic Press.

Brown, R., & Hewstone, M. (2005). An integrative theory of intergroup contact. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 37, pp. 255-343). San Diego, CA: Elsevier Academic Press.

Devos, T., & Banaji, M. R. (2005). American = White? *Journal of Personality and Social Psychology, 88*, 447-466.

Edwards, J. R. (1994). The study of congruence in organizational behavior research: Critique and a proposed alternative. *Organizational Behavior and Human Decision Processes*, 58, 51-100.

Finley, S. (2006). *Social groups in times of change: The impact of a threatened identity*. Unpublished Doctoral Thesis. Australian National University, Canberra, Australia.

Freud, S. (1917/1999). Vorlesungen zur Einfüuhrung in die Psychoanalyse (Introductory lectures on psychoanalysis). In A. Freud (Ed.), *Gesammelte Werke/Sigmund Freud (Vol. 11)*. London: Imago Publishing (Original work published 1917).

Gaertner, S. L. & Dovidio, J. F. (2000). *Reducing intergroup bias: The common ingroup identity model*. Philadelphia, PA, US: Psychology Press/Taylor and Francis.

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.), *European review of social psychology Vol. 4* (pp. 1-26). Chichester, England UK: John Wiley & Sons.

Gaertner, S. L., Dovidio, J. F., Nier, J. A., Ward, C. M., & Banker, B. S. (1999). Across cultural divides: The value of a superordinate identity. In D. A. Prentice & D. T. Miller (Eds.), *Cultural divides. Understanding and overcoming group conflict* (pp. 173-212). New York: Sage.

Hewstone, M. & Brown, R. (1986): Contact is not enough: An intergroup perspective on the "contact hypothesis." In M. Hewstone & R. Brown (Eds.), *Contact and conflict in intergroup encounters* (pp. 1-44) Oxford, UK: Blackwell

Hewstone, M., Rubin, M., & Willis, H. (2002). Intergroup bias. *Annual Review of Psychology, 53*, 575-604.

Holmes, D. S., & Houston, B. K. (1971). The defensive function of projection. *Journal of Personality and Social Psychology*, *20,* 208–213.

Holyoak, K. J., & Gordon, P. C. (1983). Social reference points. *Journal of Personality and Social Psychology, 44*, 881–887.

Hogg, M. A., & Hains, S. C. (1996). Intergroup relations and group solidarity: Effects of group identification and social beliefs on depersonalized attraction. *Journal of Personality and Social Psychology, 70,* 295-309.

Krueger, J. (2007). From social projection to social behaviour. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology Vol. 18,* (pp. 1-35). Hove, UK: Psychology Press.

Machunsky, M., Meiser, T., & Mummendey, A. (2007). *Subtyping the ingroup: On the moderating role of subtyping on the ingroup prototypicality-ingroup bias link*. Manuscript in preparation, University of Jena, Germany.

Meireles, C.S. (2007). *Tolerance in intergroup relations: Cognitive representations reducing ingroup projection.* Unpublished Masters Thesis. Lisbon: Lisbon University Institute (ISCTE).

Mummendey, A., Bornewasser, M., Löschper, G., & Linneweber, V. (1982). Defining interactions as aggressive in specific social contexts. *Aggressive Behavior, 8,* 224-228.

Mummendey, A., Linneweber, V., & Löschper, G. (1984). Actor or victim of agression: Divergent perspectives – divergent evaluations. *European Journal of Social Psychology, 14,* 297-311.

Mummendey, A., & Otten, S. (1989). Perspective specific differences in the segmentation and evaluation of aggressive interaction sequences. *European Journal of Social Psychology, 19,* 23-40.

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

Otten, S. & Mummendey, A. (2002) Social discrimination and aggression: A matter of perspective-specific divergence? In W. Kallmeyer & C.F.Graumann (Eds.). *Perspectivity and perspectivation in discourse*. (pp. 233-250) Wilrijk: John Benjamins Publishers

Otten, S., Mummendey, A., & Wenzel, M. (1995). The evaluation of aggressive interactions in interpersonal and intergroup contexts. *Aggressive Behavior, 21*, 205-224.

Park, B., & Judd, C. M. (2005). Rethinking the link between categorization and prejudice within the social cognition perspective. *Personality and Social Psychology Review, 9*, 108-130.

Rosch, E. (1978) Principles of categorization. In: E. Rosch and B.B. Lloyd (Eds.): *Cognition and categorization*. Hillsdale, NJ: Erlbaum, 27-48

Smith, E. R., & Mackie, D. M. (2007). *Social psychology (3rd ed.).* Philadelphia, PA: Psychology Press.

Smith, R.E. (1998). Mental representation and memory. In: D.Gilbert & S.Fiske (Eds.) *Handbook of Social Psychology. 4th Ed., Vol. 1*. (pp. 391-445). Boston: McGraw Hill

Strotmann, B. (2007). *Regional and national identity in Spain: The role of relative prototypicality.* Unpublished Masters thesis. University of Marburg, Germany

Sumner, W.G. (1906). *Folkways*. Boston: Ginn & Company.

Tajfel, H. & Forgas, J.P. (1981) Social Categorization: Cognitions, Values and Groups. *Social Cognition*, 113-140

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & G. Austin (Eds.), *Psychology of intergroup relations* (pp. 7-24). Chicago: Nelson-Hall.

Turner, J. C. (1987). A self-categorization theory. In J. C. Turner, M. A. Hogg, P. J. Oakes, S. D. Reicher & M. S. Wetherell (Eds.), *Rediscovering the social group: A self-categorization theory* (pp. 42-67). Oxford: Blackwell.

Ullrich (in press.). Reconsidering the ‘relative’ in relative ingroup prototypicality. *European Journal of Social Psychology.*

Ullrich, J., Christ, O., & Schlüter, E. (2006). Merging on Mayday: Subgroup and superordinate identification as joint moderators of threat effects in the context of European Union's expansion. *European Journal of Social Psychology, 36,* 857-875.

Waldzus, S., & Mummendey, A. (2004). Inclusion in a superordinate category, in-group prototypicality, and attitudes towards out-groups. *Journal of Experimental Social Psychology, 40,* 466-477.

Waldzus, S., Mummendey, A., & Wenzel, M. (2005). When "different" means "worse": In-group prototypicality in changing intergroup contexts. *Journal of Experimental Social Psychology, 41,* 76-83.

Waldzus, S., Mummendey, A., Wenzel, M., & Boettcher, F. (2004). Of bikers, teachers and Germans: Groups' diverging views about their prototypicality. *British Journal of Social Psychology, 43,* 385-400.

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

Weber, U., Mummendey, A., & Waldzus, S. (2002). Perceived legitimacy of intergroup status differences: Its prediction by relative ingroup protypicality. *European Journal of Social Psychology, 32,* 449-470.

Waldzus, S., Rosa, M. & Meireles, C. (2007) News from the freezer: Cognitive aspects of ingroup projection. Oral presentation on the *10th Jena Workshop on Intergroup Processes,* June 15. to 19., 2007 at Schloß Oppurg, Germany

Wenzel, M. (2004). A social categorisation approach to distributive justice. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology* (Vol. 15, pp. 219-257). Hove, UK: Psychology Press.

Wenzel, M., Mummendey, A. & Waldzus, S. (2008). Superordinate identities and intergroup conflict: The ingroup projection model. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology. Vol. 18* (pp. 331-372). Hove, UK: Psychology Press.

Wenzel, M., Mummendey, A., Weber, U., & Waldzus, S. (2003). The ingroup as pars pro toto: Projection from the ingroup onto the inclusive category as a precursor to social discrimination. *Personality and Social Psychology Bulletin, 29,* 461-473.

Footnotes

[1] It states that "…discrimination might be defined as a detrimental distinction based on grounds which may not be attributed to the individual and which have no justified consequences in social, political or legal relations (color, race, sex, etc.), or on grounds of membership in social categories (cultural, language, religious, political or other opinion, national circle, social origin, social class, property, birth or other Status)." (The Main Types and Causes of Discrimination, Memorandum submitted by the Secretary-General, E/CN.4/Sub.2/40/Rev.1, 7 June 1949, paras. 87-88, cited in Expulsion of aliens, Memorandum by the Secretariat, International Law Commission, Geneva, 1 May-9 June and 3 July-11 August 2006, p. 180)

[2] Some years ago a West-German friend of mine started a sentence with "Do you remember that time, when East-Germany came to Germany…". Looking at me he stopped in the middle of the sentence, and we both couldn't help laughing.