Chapter 13

Meta-Cognition in Stereotypes and Prejudice

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Stereotypes have huge interpersonal and intergroup consequences (for a review, see Yzerbyt & Demoulin, 2010). Social psychologists view stereotypes as the cognitive component of a triad that also comprises prejudice, corresponding to the emotional side, and discrimination, that refers to the behavioral facet. Modern wisdom on intergroup relations suggests that stereotypes are best seen as the antecedent of prejudice and discrimination: because people think of group members or the entire group as having certain features, emotional reactions ensue and behavioral tendencies materialize. As is the case with other primary cognitions, i.e., initial associations of some object with some attribute (Petty, Briñol, Tormala, & Wegener, 2007), people can think about their stereotypic beliefs along a number of dimensions. In particular, the evaluation of and confidence about stereotypes play a role in how these beliefs shape subsequent dealings with group members. The present chapter examines several lines of research that deal with those secondary cognitions.

A first section starts by examining perceivers' secondary cognitions about their stereotypic judgments, i.e., various aspects that people pay attention to when in position to be using stereotypes as a basis for social judgment. This includes social desirability and presentational concerns as well as the (naïve) theories of judgments that people rely upon when judging others in stereotypic terms. The section then turns to implicit theories about groups that likely boost perceivers' confidence in their stereotypic beliefs. A second section focuses on the growing literature on meta-stereotypes. Admittedly, meta-stereotypes are perhaps not to be seen as 'standard' meta-cognitions because they do not concern people's thoughts about their *own* thoughts. Rather, meta-stereotypes deal with people's thoughts about *other people*'s stereotypic beliefs. After focusing on the content of these meta-stereotypes, a series of moderating factor are considered. Finally, the section dwells on the consequences of people paying attention to meta-stereotypes.

METACOGNITIONS

A variety of factors lead perceivers to appraise social targets in terms of social categories and, as a consequence, to activate the associated network of stereotypic beliefs (Fiske, 1998; Kunda, 1999). Whether these stereotypes end up shaping judgments is an entirely different question. Oftentimes, perceivers are not in a condition that alerts them about the possible intrusion of stereotypes in their judgment (Devine, 1989; Gilbert & Hixon, 1991). There is then little than can prevent stereotypes from influencing emotional and behavioral reactions. However, when a minimal degree of cognitive control is available and when there is awareness that stereotypes could interfere, perceivers are likely to gauge whether their judgment rests on firm ground and forms a strong foundation for future (re)actions. The applicability of a stereotypic judgment has much to do with what can be considered its subjective acceptability. Because stereotypes are widely taken to be an improper basis for judgment, perceivers need to cross-check the validity and appropriateness of their judgment both in their own eyes and in the eyes of others. If successful, this check leads to the application of the stereotypes, along with its consequences.

Appropriateness and validity of stereotypic judgments

Few consider that relying on stereotypic beliefs is a decent way to come up with a verdict about a target person (but see, Leyens, Yzerbyt & Schadron, 1994; Oakes, Haslam & Turner, 1994; Park & Judd, 2005; Yzerbyt, 2010). Indeed, most of the work builds around the idea that stereotypic beliefs ought to be seen with suspicion and that their constant interference in social judgment should be fought against with the greatest energy (Fiske & Neuberg, 1989).

Several research efforts illustrate that people vary in how they avoid expressing their stereotypes. Constructs such as modern racism (McConahay, 1986) or aversive racism (Dovidio & Gaertner, 2004) address the various ways by which perceivers handle the simultaneous presence of an egalitarian value system and of their negative thoughts and feelings about minorities. These measures tap people's willingness to rely on or stay away from stereotypes in a rather direct way, i.e, primary cognitions. Several individual difference measures also assess people's secondary cognitions about stereotyping, gauging their motivation to control and suppress prejudice and preconceptions.

Plant and Devine (1998) propose that the desire to respond without prejudice stems from two sources: personal beliefs and social pressure. Violations against internal motivations (i.e., personal beliefs) should produce feelings of guilt, whereas failure to conform to social pressures (i.e., external motivation) results in reactions of anger and threat regarding other people's reactions. Interestingly, people high in internal motivation but low in external motivation respond in more positive ways than those high on both. Dunton and Fazio (1997) speak of a general concern with acting against prejudice that finds its roots in a pro-egalitarian upbringing and positive experiences with stigmatized people. These authors point to people's restraint to avoid disputes that stem from a prejudiced background and negative experiences with stigmatized members, which involves staying away from trouble and arguments with targets of the prejudice.

Because avoiding bias in judgment is a prime goal on people's agenda, they are prone to evaluate the appropriateness and the validity of their judgments, and several theoretical and empirical efforts have examined how people correct their judgments when they perceive them to be inappropriate or incorrect. Martin's (1986) set-reset model, Schwarz and Bless' (1992) inclusion-exclusion model, as well as the flexible correction model (Petty & Wegener, 1993; Wegener & Petty, 1995, 1997) all posit that people may recognize the fact that their judgment is likely to be biased and needs to be corrected. Whereas the first two models point to subtraction of (assumed) unwanted influences as the key process (e.g., people suspect the undue impact of primes and correct in their judgment), the third model stresses the role of specific naïve theories of bias (e.g., people believe that gender should not be come into play when assessing leadership and overcorrect for this aspect). These various correction models are decidedly concerned with secondary cognitions (see Petty, et al., 2007). They differ from a number of judgment models in which correction, considered as a final step in judgment construction, remains at the level of primary cognitions (Gilbert, 1998; Trope, 1986).

A nice illustration of the role of naïve theories in stereotypical judgment can be found in social judgeability theory (SJT; Leyens, Yzerbyt & Schadron, 1992; Yzerbyt, Schadron, Leyens, & Rocher, 1994). These authors wanted to address the fact that people may sometimes feel free to judge others, even in stereotypical ways, provided that certain conditions are fulfilled. They argued that people rely on a number of assumptions embodied in rules about social judgments making. They hold theories concerning the conditions that are sufficient and/or necessary to make a decision. For example, there is wide consensus that a decision about an individual is precluded when no relevant individuating information is available (Darley & Gross, 1983). According to SJT, a conclusion that is potentially seen as being tainted by stereotypes could still be promoted as long as it appears to be based on sound evidence or to result from a process that is beyond any doubt.

Yzerbyt and colleagues (1994) conducted a series of studies to test this idea. The first experiment (Yzerbyt et al., 1994, Expt. 1) purportedly concerned the impact of daily activities on social judgment processes. Participants were confronted with minimal category information about a target person. One half of the participants received category information related to introversion (i.e., the target was an archivist) and the other half to extraversion (i.e., the target was a comedian). Next, participants performed a vigilance task, i.e., a dichotic listening task. Half of the participants then immediately proceeded to the third part of the experiment. The other participants learned that, during the vigilance task, they had received information about the target in the unattended ear. Actually, participants had received no information at all. Finally, all participants conveyed their impressions of the target by answering a series of questionnaires. As expected, participants who did not hear about the alleged subliminal individuating information refrained from judging the target. In sharp contrast, participants who thought that they had received individuating information felt entitled to judge and produced stereotypical answers.

A second experiment (Yzerbyt et al., 1994, Expt. 2) replicated this pattern and confirmed that the nature of the information allegedly provided to participants was a key aspect of the rule. Specifically, when participants thought that they had received information about the social category of the target rather than about the specific target, they refrained from using their stereotypes and their answers no longer differed from a no-information condition. In sum, perceivers are likely to make a stereotypical judgment to the extent that they can convince themselves that stereotypes are not their main source of information. Any factor promoting the awareness either that individuating information is not informative, or that social categorization forms the basis for judgment, will lead to a *less biased* evaluation, presumably because it decreased the subjective validity of this judgment.

Closely related to the ideas of SJT, Crandall and Eshleman (2003) developed their suppression-justification model and suggested that social perceivers often feel (or know)

that they should not rely on their stereotypes when evaluating other people. Social norms exist in this domain pointing to the stereotypic views that are less problematic and may be expressed (e.g., stereotypes of child abusers) as to those that need to be silenced (e.g., stereotypes of African Americans) (Crandall, Eshleman, & O'Brien, 2002). For those stereotypic thoughts that are condemned by public sanction, perceivers will try and suppress their influence. This force of suppression involves the thwarting of a motivational state and creates tension and reactance. As a result, people become motivated to relieve this tension and to seek ways to express the suppressed prejudice. This is where a second force comes into play which refers to any kind of justification that can serve as an opportunity to express genuine prejudice without suffering external or internal sanction. Only when some justification presents itself do perceivers fall back on their spontaneous inclination.

Several illustrations of this suppression-justification mechanism can be found in the literature (Dovidio & Mullen, 1992; Esses, Dietz, & Bhardwaj, 2006; Norton, Vandello & Darley, 2004). In a classic study, Snyder, Kleck, Strenta, and Mentzer (1979) had nondisabled participants chose whether they wanted to watch a movie alongside a disabled individual or next to a nondisabled individual (both were confederates). When participants thought that the exact same (versus a different) movie was being played, they chose to watch the movie slightly more often (versus almost never) in the company of the disabled individual. There is an even more radical way to avoid the impact of bias in general and stereotypes in particular and it is to keep these thoughts from coming to mind altogether. Unfortunately, inhibition of stereotypes is not always effective and comes

with a cost (Macrae, Bodenhausen, Milne, & Jetten, 1994; for a review, see Yzerbyt & Demoulin, 2010).

Although the contempt for stereotypes as potential bases for judgment seems to be shared by perceivers and researchers alike, some voices have taken issue with the idea that stereotypes would necessarily be despicable sources of information. Indeed, stereotypes serve a series of important goals in the context of interpersonal and intergroup relations (Park & Judd, 2005; Yzerbyt & Corneille, 2005; Yzerbyt, 2010). As such, they may thus be of immense benefit from the perspective of the individual but also the group (see, for instance, Brown & Hewstone, 2005; Wolsko, Park, Judd & Wittenbrink, 2000). Still, a great deal of work suggests that perceivers are generally prone to suspicion when they come to realize that stereotypes may influence their judgment. This is mainly because perceivers have internalized, but also feel pressured by, the fact that they should avoid relying on preconceptions to judge others. These secondary cognitions regarding appropriateness may trigger a number of corrective attempts or initiate a consideration for criteria thought to lead to correct judgment. When the (subjective) validity of the conclusions increases, stereotypes are quick to sneak in again and to influence social judgment.

Structural properties and implicit theories in the perception of groups

Although stereotypes may possibly concern all sorts of group aspects, the association between personality traits and certain groups constitute the example *par excellence* of

what a stereotype is all about. But whereas traits are hardly disputed as providing valid ways to describe specific individuals, it is widely understood that a trait should normally not be associated with a group in any strict sense. In line with this reasoning, the strength of a stereotype has been defined as the extent to which people perceive variability among group members for a given trait (Judd & Park, 1988). Two classes of factors lead perceivers to consider that the members of a given group can be defined by a given trait, factors associated with the target group and factors associated with perceivers (Yzerbyt, Rocher, & Schadron, 1997; Yzerbyt, Corneille, & Estrada, 2001).

As far as the target factors are concerned, a number of variables increase perceivers' confidence that their stereotypic views are legitimate. These variables are all related to what is known as 'entitativity', a term coined by Campbell (1958) to refer to the extent to which a social aggregate is or is not perceived as a coherent, unified and meaningful entity (Lickel, Hamilton, Wieczorkowska, Lewis, Sherman & Uhles, 2000; Hamilton, 2007). The recent revival of interest for this concept stemmed from the observation that individuals and groups triggered qualitatively different information processes. Hamilton and Sherman (1996) proposed that on-line processes are initiated for entitative targets such as individuals whereas memory-based processes dominate for less entitative targets such as a group. When high unity is expected, however, on-line processes are initiated both for individual and group targets (McConnell et al., 1997). That is, entitative groups trigger the same information processes than individuals do.

Several researchers examined the impact of various group properties on the emergence of entitativity (Gaertner & Schopler, 1998; Lickel et al., 2000; Wilder & Simon, 1998). Their work suggests the existence of two clusters of group attributes: the similarity cluster (homogeneity, similarity, size, proximity, etc.) and the organization cluster (organization, interdependence, interaction, goals, etc.). In isolation or in combination, these properties encourage the perception of groups as entitative (Brewer & Harasty, 1996; Castano, Yzerbyt & Bourguignon, 2003; Dasgupta, Banaji & Abelson, 1999; McGarty, Haslam, Hutchinson, & Grace, 1995). The perception of entitativity, in turn, increases the likelihood that people feel comfortable at characterizing groups in terms of personality traits. For instance, Yzerbyt, Rogier and Fiske (1998) showed that perceived entitativity promotes perceivers' readiness to rely on traits in dealing with a group. That is, entitativity triggers higher levels of (unwarranted) dispositional inference and a disregard for the impact of the situation on people's behavior.

Turning to factors associated with the perceivers, research suggests that holding an *essentialistic* view of groups is a prime determinant of the willingness to rely on stereotypes in judgments. As an implicit theory, essentialism refers to the fact that some categories are represented as having deep, hidden, and unchanging properties that make their members what they are (see, for instance, Haslam, Rothschild, & Ernst, 2000; Rothbart & Taylor, 1992; Yzerbyt, Rocher & Schadron, 1997). Empirical evidence suggests that essentialist beliefs increases people's tendency to see similarity among group members (Miller & Prentice, 1999; Yzerbyt, Corneille & Estrada, 2001) and favors the emergence of stereotypic judgments (Bastian & Haslam, 2006; Hoffman & Hurst,

1990; Martin & Parker, 1995; Williams & Eberhardt, 2008; Yzerbyt, Corneille & Estrada, 2001). For instance, Williams and Eberhardt (2008) found that individuals who endorsed a biological conception of race were more likely to endorse African American stereotypes than were individuals who endorsed a social conception of race. Also, psychological essentialism was found to reduce people's motivation to eliminate disparities between groups and to cross category boundaries.

Essentialist and non-essentialist perception in the intergroup domain bears striking resemblance to the distinction between entiteism and incrementalism that Dweck and her colleagues introduced in the area of developmental and personality psychology (Chiu, Hong & Dweck, 1997; Dweck, Hong & Chiu, 1993). Whereas entity theorists believe that personal attributes are fixed, incremental theorists are convinced that traits are malleable. Several studies found that entity theorists make stronger trait inferences from behavior and use traits or trait-relevant information to make stronger future behavioral predictions than incrementalists. The same pattern has been observed when implicit beliefs are manipulated. More relevant to the present discussion, peoples' implicit theories about the fixedness versus malleability of human attributes predict differences in social stereotyping (Levy, Stroessner & Dweck, 1998). Relative to those holding an incremental theory, people holding an entity theory make more stereotypical trait judgments of ethnic and occupational groups, and form more extreme trait judgments of novel groups. Implicit theories also influence the degree to which people attribute stereotyped traits to inborn group qualities versus environmental forces. Along similar lines, Plaks, Stroessner, Dweck, and Sherman (2001) found that people holding an entity

(versus incrementalist) theory display greater attention to and recognition of stereotype consistent (inconsistent) information. In general, thus, entity theorists are more prone than their incrementalist counterparts to lay dispositionism, that is, the tendency to use traits as the basic unit of analysis in social perception (Ross & Nisbett, 1991).

Although the concepts of entitativity and essentialism need to be distinguished, they also go hand in hand (Demoulin, Leyens & Yzerbyt, 2006; Martin & Parker, 1995; Prentice & Miller, 2007; Yzerbyt et al., 1997, 2001). One way to formalize the respective roles of entitativity and essentialism is to distinguish two aspects of social perception: Whereas entitativity stands for the more ecological side of group perception, essentialism refers to its inferential facet. What Yzerbyt et al. (2001) have called the *phenotypic* and the *genotypic* levels of social perception both contribute to make people members of a real unitary social entity. This means that the (assumed) structural properties of the groups and the implicit theories of the perceivers about the group combine to give way to a strong sense that the group can be described in stereotypic terms. In other words, the nature of perceivers' primary cognitions about a given group (e.g., Italians are creative and they are so 'naturally') may greatly constrain their secondary cognitions with respect to using stereotypic beliefs about the group or one of its members (e.g., it is appropriate and valid to say that this specific Italian is creative).

Summary

Although stereotypes are quick to intrude social judgment, people tend to make sure that their judgment does not come across as manifestations of bigotry and prejudice. In general, most perceivers would try and avoid making stereotyped judgments unless they have the feeling that some good rationale underlies their seemingly partisan decision. With a few notable exceptions, a priori expectations about groups are thus banned from judgments. In contrast, naïve rules of judgment and rationalizations as well as perceptions and implicit theories relating to groups may strengthen stereotypic beliefs and color social judgment.

INTERGROUP META-BELIEFS

Aside from the work on people's justifications, heuristics, and other implicit theories, a growing area of research in the field of intergroup relations relates to meta-perceptions. For decades, scholars have devoted a great deal of energy in order to document people's stereotypes, that is, their beliefs about their own and other groups. Recently, however, some scholars have called attention to the study of intergroup meta-beliefs and their consequences on intergroup relations.

Intergroup meta-beliefs have sometimes been referred to as "reflected ingroup stereotypes" (Bond, 1986; Horenczyk & Belerman, 1997), but most authors now rely on the more common label of "meta-stereotype" that was introduced by Sigelman and Tuch in 1997. Meta-stereotypes are people's beliefs about (out)group members' stereotypes concerning their ingroup. As such, meta-stereotypes are but one specific kind of primary cognitions in a larger constellation of attributed beliefs. Judd, Park, Yzerbyt, Gordijn & Muller (2005) proposed a typology that aptly characterizes beliefs in terms of the people to whom the beliefs are attributed (oneself, ingroup members, outgroup members) and in terms of the target group that is the object of these beliefs (endo-beliefs for the ingroup, and exo-beliefs the outgroup of the perceiver). In Judd et al.'s (2005) terminology, meta-stereotypes are known as *outgroup attributed exo-beliefs*, that is, outgroup members' beliefs about *their* outgroup (i.e., the ingroup of the perceiver).

The content of meta-stereotypes

What do meta-stereotypes look like? A first possibility is that they are unpredictable and correspond to a combination of traits and features that vary as a function of the specific groups in presence. Indeed, a number of studies have examined meta-stereotypes using ad-hoc characteristics (Kamans, Gordijn, Oldenhuis, & Otten, 2009). In contrast to a complete lack of specification, some scholars have argued that meta-stereotypes are uniformly negative in valence (Sigelman & Tuch, 1997). Others have nuanced this proposal and suggested that negativity of meta-stereotypes is a function of perceivers' level of prejudice (Vorauer et al., 1999). Specifically, low-prejudice individuals would be holding more negative meta-stereotypes than high-prejudice persons. Yet others have hypothesized that the valence of meta-stereotypes depends on the specific motivation of the perceiver (Lammers, Gordijn, & Otten, 2008). To the extent that self-enhancement motivation prevails, people should use only positive meta-stereotypes to repair or favor their self-worth. When comprehension goals are at stakes, however, both positive and

negative information should be useful in predicting and comprehending how others think about our group (van den Bos & Stapel, 2009).

A study by Lammers and colleagues (2008) confirms the importance of both positive and negative meta-stereotypes in intergroup contexts. These authors investigated the activation and application of meta-stereotypes as a function of group status. They found that all groups tended to activate and apply both positive and negative meta-stereotypes but that members of low status, low power groups tended to do so to a larger extent. In addition, the increased tendency for low status groups to activate and apply positive and negative meta-stereotypes is partly explained by their motivation to take the other group's perspective into account.

To the extent that meta-stereotypes can be considered as intergroup beliefs just as stereotypes are, it is also plausible to assume that the content of meta-stereotypes would vary in some systematic ways (just like stereotypes do). Recent research on the content of stereotypes demonstrated that only a limited number of "themes" account for people's characterization of social groups. According to the stereotype content model (SCM; Fiske, Cuddy, Glick, & Xu, 2002; for a review, see Cuddy, Fiske & Glick, 2008), groups are perceived along two fundamental dimensions, i.e., warmth and competence (see also Judd, James-Hawkins, Yzerbyt, & Kashima, 2005). Whereas the relations of cooperation versus competition between groups give rise to high versus low evaluations on the warmth dimension, the groups' respective statuses determine competence ascription with high status groups being granted higher levels of competence.

By analogy, it could be argued that the content of people's meta-stereotypes is organized in terms of the two fundamental dimensions of warmth and competence, and that these evaluations depend on group members' representation of the intergroup structure. Interestingly, this approach predicts that people's meta-stereotypes should very much resemble their endo-stereotypes (i.e., people's beliefs about their own ingroup). For instance, if perceivers see their group as being dominant and expect outgroup members to make the same analysis, they should reach the conclusion that they are competent and conclude that outgroup members see them as such. Empirical evidence however fails to support this simplistic view that meta-stereotypes are in line with people's own stereotypes.

There are at least three reasons explaining the discrepancy between people's metastereotypes and their endo-stereotypes. First, according to social identity theory, group members are motivated to positively distinguish their ingroup from other groups in the social environment (Tajfel & Turner, 1979). As a consequence, people's stereotypes about their ingroup should largely be biased towards positivity. Consistent with this prediction, SCM theorists have argued that the quadrant where groups are assigned both high competence and high warmth is usually reserved to ingroups or aspirational groups. In contrast, the two ambivalent and the negative quadrants are largely populated by outgroups (Cuddy, et al., 2008). In a similar vein, van de Bos and Stapel (2009) have shown that self-enhancement goals led to high levels of negative but not positive stereotypes about the outgroup. Second, it has been argued that people rely on their own perceptions in order to gain insights on how outgroup members might think of their ingroup (Ames, 2004; Frey & Tropp, 2006). Because intergroup relations are generally characterized as distrustful and because stereotypes about outgroups are often negative, people should thus expect outgroup members to evaluate them negatively. That is, people expect to be treated badly by bad persons. This hypothesis is put forth by Frey and Tropp (2006) who propose that negative prototypical characteristics of the ingroup are the bases of intergroup metaperceptions whereas positive prototypical features are prevalent in intragroup metaperceptions (see also, Krueger, 1998). Similarly, Judd and colleagues (2005) report a series of studies showing that people attribute to others (both ingroup and outgroup members but especially the latter) more evaluative biases than themselves espouse.

A third reason that may explain a lack of correlation between meta-stereotypes and people's stereotypes about their ingroup is related to their antecedents. As stated above, perceptions of groups' warmth and competence depend on participants' representations of the social structure (Fiske et al., 1999). It could be that dissimilarity expectations that usually characterize intergroup relations prevent people from directly projecting their own views and representations of the social structure onto outgroup members (Ames, 2004). This idea is supported by Robbins and Krueger's (2005) meta-analysis on social projection showing that projection is much weaker with outgroup members than it is with ingroup members. Thus, if people believe outgroup members to perceive the social structure differently, they shall make different inferences concerning the stereotype ingroup and outgroup members associate with the ingroup. In addition, people might also be tempted to believe that outgroup members do not share their views concerning the perceived legitimacy of a given social arrangement. If this is the case, they may infer that meta-stereotypes will likely be different from their endo-beliefs. For instance, metaperceptions that the group's high status is illegitimate should give rise to perception of high status groups' arrogance rather than competence.

In addition to the issue of the valence, Judd and colleagues (2005) also tackled structural aspects of stereotypic beliefs, namely stereotypes and meta-stereotypes perceived variability in terms of stereotypicality and judgment's dispersion. Stereotypicality refers to the perceived difference *between groups* on stereotypical attributes. Dispersion speaks to the perceived degree of *within-group* variation. Their studiesrevealed that, on top of assuming more evaluative biases from the part of others, people also believe that others are more biased in their evaluation of perceived variability between and within groups. Specifically, individuals expect others to display larger between groups and smaller within-group differences in their social judgments.

Moderators of meta-stereotypic beliefs

Before delineating the various consequences of meta-stereotypes, it is necessary to understand the circumstances under which these beliefs will be activated and applied in a given social environment. A first element that moderates meta-stereotype activation is the groups' relative position within the social structure. Lammers and colleagues (2008) investigated the role of membership in high versus low status groups on meta-stereotype activation and application. They reasoned that powerless people should be especially motivated to predict and ascertain how powerful outgroup members see them because of their general orientation to prevent losses and threats (Keltner, Gruenfeld, & Anderson, 2003), their tendencies to see themselves as tools in the attainment of the goals of others (Keltner et al., 2003), and their greater likelihood to spontaneously take the perspective of others (Galinsky, Magee, Inesi, & Gruenfeld, 2006). In four experiments using a variety of methods to manipulate power, these authors showed that powerless people indeed activate and make more use of meta-stereotypes than their powerful counterparts. Metastereotype activation was made independently of traits' valence and the effect were partially mediated by participants' tendency to take the outgroup's perspective into account. These three factors notwithstanding, it is also likely that members of low status groups are generally more uncertain about their views than members of high status groups. Evidence from the persuasion domain support the idea that, compared to high status groups members, low status group members need to think more about their environment, including how others see them (Briñol, Petty, Valle, Rucker, & Becerra, 2007).

Social status alone may not be sufficient to predict the activation of meta-stereotypes. In her information search model of evaluative concerns, Vorauer (2006) proposes that the importance that an individual attaches to another person's opinion depends on the perceived diagnosticity of that person's evaluation. Perceived diagnosticity is a function of the person's control over resources (contingency) and/or this person's ability to provide accurate assessments (expertise). Clearly, Lammers and colleagues (2008) findings reported above speak to the contingency part of the model, with high status group members controlling larger shares of resources, and therefore triggering strong activation and use of meta-stereotypes among low status group members.

According to the information search model, reliance on meta-stereotyping also depends on people's perception that the outgroup has special expertise to provide valid evaluations in a given domain. In line with this conjecture, Vorauer and Sakamoto (2008) report evidence that concerns about an outgroup member's opinion increase with the perception that the outgroup has expertise in a particular domain (i.e., the competence domain for high status groups under legitimate status differences and the moral domain for low status groups under illegitimate status differences). In short, it is plausible to assume that the activation (and application) of meta-stereotypes is not only be a function of group members' standing in the social environment but is also a matter of other contextual variables such as the outgroup's expertise, the goals pursued in the intergroup interaction, and the like.

Consequences of meta-stereotypic beliefs

Given that meta-stereotypic beliefs are predominantly negative in tone, it is most likely the case that they will induce negative feelings of anxiety and threat in individuals. The very first reaction to meta-stereotypic beliefs should thus be one of avoidance. As a matter of fact, an impressive number of studies reveal that intergroup encounters are anxiety-arousing (Cunnigham, Johnson, et al., 2004; Phelps, Cannistraci, & Cunningham, 2003; Phelps, O'Connor, Cunningham, Funayama, Gatenby, Gore, & Banaji, 2001; see also, Hart, Whalen, Shin, McInerney, Fischer, & Rauch, 2000) and that people are prompt to avoid outgroup members. The intergroup anxiety model (Stephan & Stephan, 1985) proposes that anxiety arises because of the negative expectations people hold concerning the intergroup interaction. These negative expectations derive to a large extent from people's primary cognitions concerning the outgroup (i.e., their stereotypes) but most definitely also because of their cognitions concerning the way outgroup members perceive their ingroup (i.e., their meta-stereotypes).

Disconfirmatory behaviors

To the extent that intergroup encounters are inevitable, the anxiety caused by the prospect of intergroup encounters is likely to represent a serious threat for the individual. As people fear the association between the negative meta-stereotype they hold and their personal self, they will be motivated to overcome or disconfirm it.

High and low status group members likely face very different type of threats. Specifically, dominant group members are mainly concerned with the fact that they come across as being prejudiced (Vorauer & Kumhyr, 2001). In contrast, members of stigmatized groups are more often afraid of meeting with a negative evaluation of their performance (e.g., Steele & Aronson, 1995; Schmader, Johns & Forbes, 2008). In other words, members of high-status groups face a threat on the social dimension of social judgment whereas low-status groups deal with a difficulty on the competence dimension of social judgment. This rationale is at the heart of a fascinating series of studies conducted by Bergsieker, Shelton, & Richeson (2010).

These authors theorized that the pervasive stereotypes associated with racial groups lead their members to pursue divergent impression management strategies during interracial interactions. They proposed that because Blacks and Latinos are often stereotyped as incompetent and lazy and because (in)competence is closely related to (dis)respect (Cuddy, Fiske, & Glick, 2008), members of those groups should primarily be concerned with seeking respect (rather than liking) in mixed- (as compared to same-) race interactions where stereotype activation is prevalent. In contrast, White people face the threat of being seen as bigots and amoral people. Because morality is related to liking (Cuddy et al., 2008), they should thus primarily seek likeable (rather than respectful) evaluations in interracial interactions. Results confirmed the divergent goal hypothesis with divergent goals translating into specific impression management behaviors displaying self-promotion, respect-seeking behaviors, or ingratiation, liking-seeking behaviors as a function of the type of group under scrutiny (Jones & Pittman, 1982).

Stereotype activation was never explicit in Bergsieker et al.'s (2010) studies suggesting that category membership of the interaction partner is the sole determinant for the observed effect. It is unclear at this stage whether divergent impression management goals result from the activation of exo-stereotypes (i.e., "I believe that members of this group usually treat members of my group disrespectfully and I want to avoid that"), from the activation of endo-stereotypes (i.e., "I believe that members of my group are incompetent and I want to avoid being assimilated with them"), or from the activation of meta-stereotypes (i.e., "I believe that members of this group usually think that members of my group are incompetent, and I want to avoid being perceived as such").

A partial response to this question can be found in the work of Vorauer and colleagues (Vorauer, Hunter, Main, & Roy, 2000). These authors propose and found that when people find themselves in intergroup contexts and when the potential for evaluation is high, they "spontaneously frame the interaction in terms of how they are perceived by outgroup members" (p. 691). That is, meta-stereotypes rather than stereotypes are automatically activated in such intergroup context and become the focus of evaluative concerns. Still, because the activation of endo-stereotypes was not measured in these studies, it remains difficult to conclude that meta-stereotypes constitute the unique determinant of impression management goals in intergroup interactions.

Trying to disconfirm a negative social reputation often comes at a cost for the individual. People often perform less well in domains that are related to a negative stereotype about their group (Steele & Aronson, 1995). The motivation to prevent failure and to avoid being assimilated to the stigmatized group creates an additional burden that interferes with the successful completion of the task (e.g., Schmader, 2010). For stereotypes to produce their threatening effect, targets of these stereotypes first need to be made aware of the possibility that a negative belief can be applied to them (Wout, Shih, Jackson, & Sellers, 2009). Second, they need to assess the probability that the perceiver will apply this negative belief to them (Wout et al., 2009). Stereotype threat impairs performance only to the extent that the stereotyped targets believe that their evaluators hold such stereotypic expectations about them. Supporting this idea, Wout and colleagues (2009) showed that, in the absence of individuating information about the evaluator, targets rely on the evaluator's group membership to determine the probability of being negatively stereotyped (see also Sloan, Wilburn, Van Camp, Barden, Glover, & Martin, 2008). Because stereotyping is more probable in intergroup than intragroup settings, performance impairment only occurred under conditions in which targets thought that they would be evaluated by an outgroup member. These latter results suggest that the phenomenon is less a matter of the targets' own beliefs, i.e., exo- and endo-stereotypes, than a question of their beliefs concerning other people's stereotypes about the ingroup, i.e., meta-stereotypes.

On top of the various consequences observed at the individual level, meta-stereotyping and the motivation to disconfirm the negative reputation also trigger interpersonal consequences in the interaction (Richeson & Shelton, 2007). Indeed, self-regulation efforts are sometimes praised leading to the paradoxical consequence that those who need the most to disconfirm the negative reputation (e.g., high prejudice individuals) make more efforts at controlling their behaviors, appear more engaged in the interaction, and therefore are better appreciated by their outgroup partner than those whose implicit attitude are less in line with the negative meta-stereotype (e.g., low prejudice individuals) (Shelton, Richeson, Salvatore, & Trawalter, 2005). In addition, dominant and dominated group members' tendency to focus on different aspects of judgment (liking versus respect, respectively; see Bergsieker et al., 2010) increases the probability for intergroup misunderstandings (for a review see, Demoulin, Leyens, & Dovidio, 2009) and disliking in intergroup interactions.

Meta-stereotypes confirmation

The studies reported in the previous subsection suggest that perceivers facing negative meta-stereotypes are largely motivated to try and disconfirm their negative reputations. Still, there are cases in which confirmation rather than disconfirmation is the strategy that group members pursue. In a recent series of studies, Gordijn, Oldenhuis, and Otten (2009) investigated the conditions under which assimilation to the negative metastereotype is preferred over disconfirmation. These authors reasoned that under intergroup conflict conditions, people are motivated to distance themselves from the outgroup (Spears, Gordijn, Dijksterhuis, & Stapel, 2004) and as a result assimilate their behaviors to the negative meta-stereotype. Because high prejudice people are more likely than low prejudice individuals to frame the intergroup context in conflictual terms, they should also be more inclined to assimilate to the negative meta-stereotype of their ingroup. Indeed, survey data among Dutch Moroccan teenagers confirmed that those who expected indigenous Dutch people to perceive Moroccans as fundamentalists and who were also high in prejudice acted in line with the negative meta-stereotype by legitimizing criminality, aggression, and Muslim extremism (Kamans et al., 2009). Similarly, high prejudiced Christians who thought they would be evaluated by a non-Christian outgroup displayed higher levels of conservative behaviors (a stereotype

strongly associated with Christianism) than low prejudice individuals and individuals that did not anticipate outgroup evaluations (Gordijn, Oldenhuis, & Otten, 2009; see also Oldenhuis, Gordijn, & Otten, 2009). Interestingly, when positive rather than negative meta-stereotypes are at stakes, low prejudiced rather than high prejudiced people were the ones to assimilate to the meta-stereotype presumably because of low prejudice people's inclination to search for positive intergroup relations and smaller intergroup distancing.

According to these studies, the activation of the meta-stereotype leads to confirmatory behaviors for individuals that are highly vested in intergroup conflict (e.g., high prejudice people), searching for intergroup distancing, and anticipating outgroup evaluations. Further research is needed in order to better understand the exact conditions under which confirmation versus disconfirmation behaviors occur. For instance, one could examine whether assimilation or contrast to the meta-stereotypes vary as a function of social structural factors. That is, does group status moderate the direction of behavioral responses to the meta-stereotype. Similarly, intergroup interdependence could be an important factor. As suggested by the research of Gordijn, Oldenhuis, and Otten (2009) intergroup competition might indeed be an important determinant of behavioral confirmation of negative meta-stereotypes. In addition, whereas interdependence direction between groups might influence behavioral responses on the sociability dimension of judgment, it is plausible to assume that group status might moderate behavioral responses on the competence dimension (see Bergsieker et al., 2010).

Summary

Intergroup meta-beliefs have recently become the focus of extensive research. Most studies in this domain investigated the content, moderators, and consequences of metastereotypes, that is, people's beliefs concerning the stereotypes outgroup members hold about their ingroup. Clearly, research efforts addressing other types of intergroup metabeliefs are much needed.

CONCLUSIONS

Metacognitions are a key aspect of people's cognitive life. As is the case for other psychological constructs such as attitudes, the self, and the like, people have perceptions, knowledge, and additional judgments about stereotypes or stereotype-relevant judgments. The present chapter reviewed the work on people's secondary cognitions about their own stereotype-relevant beliefs (e.g., appropriateness, justifiability, social judgeability), and on implicit theories about groups (entitativity, essentialism). Another important facet of stereotypes and prejudice studies concerns what is commonly referred to as meta-stereotypes. As was made clear, in all these cases, meta-cognitions related to stereotypes, because they determine the extent to which perceivers go along with the stereotyped judgment, are likely to be quite consequential and to determine the shape of intergroup interactions.

REFERENCES

- Ames, D. (2004). Strategies for social inference: A similarity contingency model of projection and stereotyping in attribute prevalence estimates. *Journal of Personality* and Social Psychology, 87, 573–85.
- Bastian, B., & Haslam, N. (2006). Psychological essentialism and stereotype endorsement. *Journal of Experimental Social Psychology*, 42, 228-235.
- Bergsieker, H.B., Shelton, J.N., & Richeson, J.A. (in press). To be liked versus respected:Divergent goals in interracial interaction. *Journal of Personality and SocialPsychology*.
- Bond, M.H. (1986). Mutual stereotypes and the facilitation of interaction across cultural lines. *International Journal of Intercultural Relations*, *10*, 259-276.
- Brewer, M.B. & Harasty, A.S. (1996). Seeing groups as entities: The role of perceiver motivation. In R. M. Sorrentino & E. T. Higgins (Eds.), *Handbook of motivation and cognition* (Vol. 3, pp. 347-370). New York: Guilford.
- Briñol, P., Petty, R.E., Valle, C., Rucker, D.D., & Becerra, A. (2007). The effects of message recipients' power before and after persuasion: A self-validation analysis. *Journal of Personality and Social Psychology*, 93, 1040-1053.
- Brown, R.J., & Hewstone, M. (2005). An integrative theory of intergroup contact. Advances in Experimental Social Psychology, 37, 255-343.
- Campbell, D.T. (1958). Common fate, similarity, and other indices of the status of aggregates of persons as social entities. *Behavioral Sciences*, *3*, 14-25.

- Castano, E., Yzerbyt, V.Y., & Bourguignon, D. (2003). We are one and I like it: The impact of group entitativity on group identification. *European Journal of Social Psychology*, 33, 735-754.
- Chiu, C., Hong, Y., & Dweck, C.S. (1997). Lay dispositionism and implicit theories of personality. *Journal of Personality and Social Psychology*, *73*, 19-30.
- Crandall, C.S., & Eshleman, A. (2003). A justification-suppression model of the expression and experience of prejudice. *Psychological Bulletin*, *129*, 414-446.
- Crandall, C.S., Eshleman, A., & O'Brien, L. (2002). Social Norms and suppression of prejudice: The struggle for internalization. *Journal of Personality and Social Psychology*, 82, 359-378.
- Cuddy, A.J.C., Fiske, S.T., & Glick, P. (2008). Warmth and competence as universal dimensions of social perception: The stereotype content model and the BIAS Map. *Advances in Experimental Social Psychology*, 40, 61-149.
- Cunnigham, W.A., Johnson, M.A., Raye, C.L., Gatenby, J.C., Gore, J.C., Banaji, M.R.(2004). Separable neural components in the processing of black and white faces.*Psychological Science*, *15*, 806-813.
- Darley, J.M., & Gross, P.H. (1983). A hypothesis-confirming bias in labeling effects. Journal of Personality and Social Psychology, 44, 20-33.
- Dasgupta, N., Banaji, M.R., & Abelson, R.P. (1999). Group entitativity and group perception: Associations between physical features and psychological judgment. *Journal of Personality and Social Psychology*, 77, 991-1003.
- Demoulin, S., Leyens, J.-Ph., & Dovidio, J.F. (2009). *Intergroup misunderstandings: Impact of divergent social realities*. New York: Psychology Press.

- Demoulin, S., Leyens, J.-Ph., & Yzerbyt, V.Y. (2006). Lay theories of essentialism. Group Processes and Intergroup Relations, 9, 25-42.
- Dovidio, J.F., & Gaertner, S.L. (2004). Aversive racism. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 36, pp. 1-52). Thousand Oaks, CA: Sage.
- Dovidio, J.F., Kawakami, K., Johnson, C., Johnson, B., & Howard, A. (1997). On the nature of prejudice: Automatic and controlled processes. *Journal of Experimental Social Psychology*, *33*, 510-540.
- Dunton, B.C., & Fazio, R.H. (1997). An individual difference measure of motivation to control prejudiced reactions. *Personality and Social Psychology Bulletin*, 23, 316-326.
- Dweck, C.S., Hong, Y., & Chiu, C. (1993). Implicit theories: Individual differences in the likelihood and meaning of dispositional inference. *Personality and Social Psychology Bulletin*, 19, 644-656.
- Esses, V.M., Dietz, J., & Bhardwaj, A. (2006). The role of prejudice in the discounting of immigrant skills. In R. Mahalingam (Ed.), *The cultural psychology of immigrants* (pp. 113-130). Mahwah, NJ: Erlbaum.
- Fiske, S.T. (1998). Stereotyping, prejudice, and discrimination. In D.T. Gilbert, S.T. Fiske, & G. Lindzey (Eds.), *The Handbook of Social Psychology* (4th ed., Vol. 2, pp. 357-411). New York: McGraw-Hill.
- Fiske, S.T., Cuddy, A.J.C, Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from the perceived status and competition. *Journal of Personality and Social Psychology*, 82, 878-902.

- Fiske, S.T., & Neuberg, S.L. (1990). A continuum of impression formation from category-based to individuating processes: Influences of information and motivation on attention and interpretation. In M.P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 23, pp. 1-74). New York: Academic Press.
- Fiske, S.T., Xu, J., Cuddy, A.J.C., & Glick, P. (1999). (Dis)respecting versus (dis)liking: Status and interdependence predict ambivalent stereotypes of competence and warmth. *Journal of Social Issues*, 55, 473-489.
- Frey, F.E., & Tropp, L.R. (2006). Being seen as individuals versus as group members: Extending research on metaperception to intergroup contexts. *Personality and Social Psychology Review*, 10, 265-280.
- Gaertner, L., & Schopler, H. (1998). Perceived ingroup entitativity and intergroup bias:
 An interconnection of self and others. *European Journal of Social Psychology*, 28, 963-980.
- Galinsky, A.D., Magee, J.C., Inesi, M.E., & Gruenfeld, D.H. (2006). Power and perspectives not taken. *Psychological Science*, *17*, 1068-1074.
- Gilbert, D.T. (1998). Ordinary personology. In D.T. Gilbert, S.T. Fiske, & G. Lindzey (Eds.), *The Handbook of Social Psychology* (4th ed., Vol. 2, pp. 89-150). New York: McGraw-Hill.
- Gilbert, D.T. & Hixon, J.G. (1991). The trouble of thinking: Activation and application of stereotypic beliefs. *Journal of Personality and Social Psychology*, *60*, 509-517.
- Gordijn, E., Oldenhuis, H., & Otten, S. (2009). "If that is what you think about us...": Reacting to others' perceived stereotypes as a function of prejudice. University of Groningen. Unpublished Manuscript.

- Hamilton, D.L. (2007) Understanding the complexities of group perception: Broadening the domain. *European Journal of Social Psychology*, 37, 1077-1101.
- Hamilton, D.L., & Sherman, S.J. (1996). Perceiving persons and groups. *Psychological Review*, 103, 336-355.
- Hart, A.J., Whalen, P.J., Shin, L.M., McInerney, S.C., Fischer, H., & Rauch, S.L. (2000).
 Differential responses in the human amygdala to racial outgroup vs ingroup face stimuli. *Neuroreport: For Rapid Communication of Neuroscience Research*, 11, 2351-2355.
- Haslam, N., Rothschild, L., & Ernst, D. (2000). Essentialist beliefs about social categories. *British Journal of Social Psychology*, 39, 113-127.
- Hoffman, C., & Hurst, N. (1990). Gender stereotypes: Perception or rationalization?Journal of Personality and Social Psychology, 58, 197-208.
- Horenczyk, G., & Bekerman, Z. (1997). The effects of intercultural acquaintance and structured intergroup interaction on ingroup, outgroup, and reflected ingroup stereotypes. *International Journal of Intercultural Relations*, 21, 71-83.
- Jones, E.E., & Pittman, T.S. (1982). Toward a general theory of strategic self-presentation. In J. Suls (Ed.), *Psychological perspectives on the self* (pp. 231-262).Hillsdale, NJ: Erlbaum.
- Judd, C.M., & Park, B. (1988). Out-group homogeneity: Judgments of variability at the individual and group levels. *Journal of Personality and Social Psychology*, 54, 778-788.

- Judd, C.M., James-Hawkins, L., Yzerbyt, V.Y., & Kashima, Y. (2005). Fundamental dimensions of social judgment: Understanding the relations between competence and warmth. *Journal of Personality and Social Psychology*, 89, 899-913.
- Judd, C.M., Park, B., Yzerbyt, V.Y., Gordijn, E., & Muller, D. (2005). They show more intergroup bias and have stronger stereotypes than do I: Evidence from ethnic, gender, and nationality intergroup contexts. *European Journal of Social Psychology*, 35, 677-704.
- Kamans, E., Gordijn, E., Oldenhuis, H., & Otten, S. (2009). What I think you see is what you get: Influence of prejudice on assimilation to negative meta-stereotypes among Dutch Moroccan teenagers. *European Journal of Social Psychology*, *39*, 842-851.
- Keller, J. (2005). In genes we trust: The biological component of psychological essentialism and its relationship to mechanisms of motivated social cognition. *Journal of Personality and Social Psychology*, 88, 686-702.
- Keltner, D., Gruenfeld, D.H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, *110*, 265-284.
- Krueger, J. (1998). On the perception of social consensus. Advances in experimental social psychology, 30, 163-240

Kunda, Z. (1999). Social cognition: Making sense of people. Cambridge, MA: MIT Press.

Lammers, J., Gordijn, E.H., & Otten, S. (2008). Looking through the eyes of the powerful. Power (or lack thereof) and metastereotyping. *Journal of Experimental Social Psychology*, 44, 1229-1238.

- Levy, S.R., Stroessner, S.J., & Dweck, C.S. (1998). Stereotype formation and endorsement: The role of implicit theories. *Journal of Personality and Social Psychology*, 74, 1421-1436.
- Leyens, J.-Ph., Cortes, B.P., Demoulin, S., Dovidio, J., Fiske, S.T., Gaunt, R., Paladino, M.P., Rodriguez, A.P., Rodriguez, R.T., & Vaes, V. (2003). Emotional prejudice, essentialism, and nationalism. *European Journal of Social Psychology*, 33, 703-717.
- Leyens, J.-Ph., Yzerbyt, V.Y., & Schadron, G. (1992). The social judgeability approach to stereotypes. In W. Stroebe & M. Hewstone (Eds.), *European Review of Social Psychology* (Vol. 3, pp. 91-120). Chichester, UK: Wiley.
- Leyens, J.-Ph., Yzerbyt, V.Y., & Schadron, G. (1994). *Stereotypes and Social Cognition*. London: Sage.
- Lickel, B., Hamilton, D.L., Wieczorkowska, G., Lewis, A., Sherman, S.J., & Uhles, A.N.
 (2000). Varieties of groups and the perception of group entitativity. *Journal of Personality and Social Psychology*, 78, 223-246.
- Macrae, C.N., Bodenhausen, G.V., Milne, A.B., & Jetten, J. (1994). Out of mind but back in sight: Stereotypes on the rebound. *Journal of Personality and Social Psychology*, 67, 808-817.
- Martin, C.L., & Parker, S. (1995). Folk theories about sex and race differences. *Personality and Social Psychology Bulletin*, 21, 45-57.
- Martin, L.L. (1986). Set/reset: The use and disuse of concepts in impression formation. Journal of Personality and Social Psychology, 51, 493-504.

- McConahay, J.B. (1986). Modern racism, ambivalence, and the Modern Racism Scale. In J.F. Dovidio & S.L. Gaertner (Eds), *Prejudice, discrimination, and racism*. (pp. 91-125). Orlando, USA: Academic Press.
- McConnell, A.R., Sherman, S.J., & Hamilton, D.L. (1997). Target entitativity: Implications for information processing about individual and group targets. *Journal* of Personality and Social Psychology, 72, 750-762.
- McGarty, C., Haslam, S.A., Hutchinson, K.J., & Grace, D.M. (1995). Determinants of perceived consistency: The relationship between group entitativity and the meaningfulness of categories. *British Journal of Social Psychology*, 34, 237-256.
- Miller, D.T., & Prentice, D.A. (1999). Some consequences of a belief in group essence:
 The category divide hypothesis. In D.A. Prentice & D.T. Miller (Eds.), *Cultural divides: Understanding and overcoming group conflict* (pp. 213-238). New York:
 Russell Sage Foundation.
- Norton, M.I., Vandello, J.A., & Darley, J.M. (2004). Casuistry and social category bias. Journal of Personality and Social Psychology, 87, 817-831.
- Oakes, P.J., Haslam, S.A., & Turner, J.C. (1994). *Stereotyping and social reality*. Oxford, England: Basil Blackwell.
- Oldenhuis, H., Gordijn, E., & Otten, S. (2009). *If you don't like us, we won't be likeable: The influence of meta-stereotype activation on behavior and attitudes*. University of Groningen. Unpublished manuscript.
- 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.

- Petty, R.E., Briñol, P., Tormala, Z.L., & Wegener, D.T. (2007). The role of metacognition in social judgment. In E.T. Higgins & A.W. Kruglanski, (Eds.) Social psychology: A handbook of basic principles (2nd ed., pp. 254-284). New York: Guilford Press.
- Petty, R. E., & Wegener, D. T. (1993). Flexible correction processes in social judgment: Correcting for context-induced contrast. *Journal of Experimental Social Psychology*, 29, 137-165.
- Phelps, E.A., Cannaistraci, C.J., & Cunningham, W.A. (2003). Intact performance on an indirect measure of race bias following amygdala damage. *Neuropsychologia*, 41, 203-208.
- Phelps, E.A., O'Connor, K.J., Cunningham, W.A., Funayma, E.S., Gatenby, J.C., Gore, J.C., Banaji, M.R. (2000). Performance on indirect measures of race evaluation predicts amygdala activity, *Journal of Cognitive Neuroscience*, *12*, 1-10.
- Plaks, J.E., Stroessner, S.J., Dweck, C.S., & Sherman, J. (2001). Person theories and attention allocation: Preferences for stereotypic vs. counterstereotypic information. *Journal of Personality and Social Personality*, 80, 876-893.
- Plant, E.A., & Devine, P.G. (1998). Internal and external motivation to respond without prejudice. *Journal of Personality and Social Psychology*, 75, 811-832.
- Prentice, D.A., & Miller, D.T. (2007). Psychological essentialism of human categories. *Current Directions in Psychological Science, 16*, 202-206.
- Richeson, J.A., & Shelton, J.N. (2007). Negotiating interactial interactions: Costs, consequences, and possibilities. *Current Directions in Psychological Science*, 16, 316-320

- Robbins, J.M., & Krueger, J.I. (2005). Social projection to ingroups and outgroups: A review and meta-analysis. *Personality and Social Psychology Review*, *9*, 32-47.
- Ross, L., & Nisbett, R.E. (1991). *The person and the situation: Perspectives of social psychology*. New York: McGraw-Hill.
- Rothbart, M. & Taylor, M. (1992). Category labels and social reality: Do we view social categories as natural kinds? In G.R. Semin & K. Fiedler (Eds.), Language, interaction and social cognition (pp. 11-36). London, UK: Sage.
- Schmader, T. (2010). Stereotype threat deconstructed. *Current Directions in Psychological Science*, *19*, 14-18.
- Schmader, T., Johns, M., & Forbes, C. (2008). An integrated process model of stereotype threat effects on performance. *Psychological Review*, *115*, 336-356.
- Schwarz, N., & Bless, H. (1992). Constructing reality and its alternatives: An inclusion/exclusion model of assimilation and contrast effects in social judgment. In
 L. Martin & A. Tesser (Eds.), *The construction of social judgment*. Hillsdale:
 Erlbaum.
- Shelton, J.N., Richeson, J.A., Salvatore, J., & Trawalter, S. (2005). Ironic effects of racial bias during interracial interactions. *Psychological Science*, *16*, 397-402.
- Sigelman, L., & Tuch, L.A. (1997). Metastereotypes Blacks' perceptions of Whites' stereotypes of Blacks. *Public Opinion Quarterly*, 61, 87-101.
- Sloan, L., Wilburn, G., Van Camp, D., Barden, J., Glover, C., & Martin, D. (2008).
 Stereotype threat impacts in uniformly minority contexts may require both majority presence and majority-involved evaluation. *International Journal of Psychology*, *43*, 809-810.

- Snyder, M.L., Kleck, R.E., Strenta, A., & Mentzer, S.J. (1979). Avoidance of the handicapped: An attributional ambiguity analysis. *Journal of Personality and Social Psychology*, 37, 2297-2306.
- Spears, R., Gordijn, E.H., Dijksterhuis, A., & Stapel, D.A. (2004). Reaction in action: Intergroup contrast in automatic behavior. Personality and Social Psychology Bulletin, 30, 605-616.
- Steele, C.M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69, 797-811.
- Steele, C.M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist, 52,* 613-629.
- Steele, C.M., Spencer, S.J., & Aronson, J. (2002). Contending with bias: The psychology of stereotype and social identity threat. In M.P. Zanna (Ed.), *Advances in Experimental Social Psychology*, Vol. 34, pp. 277-341. San Diego: Academic Press.
- Stephan, W.G., & Stephan, C.W. (1985). Intergroup anxiety. *Journal of Social Issues*, 41, 157-175.
- Tajfel, H., & Turner, J.C. (1979). An integrative theory of intergroup conflict: The social identity theory of intergroup behaviour. In W.G. Austin, & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Monterey, CA: Brooks/Cole.
- Trope, Y. (1986). Identification and inferential processes in dispositional attribution. *Psychological Review*, *93*, 239-257.

- van den Bos, A., & Stapel, D.A. (2009). Why people stereotype affect how they stereotype: The differential influence of comprehension goals and self-enhancement goals on stereotyping. *Personality and Social Psychology Bulletin*, *35*, 101-113.
- Vorauer, J.D. (2006). An information search model of evaluative concerns in intergroup interaction. *Psychological Review*, *113*, 862-86.
- Vorauer, J.D., & Kumhyr, S.M. (2001). Is this about you or me? Self- versus otherdirected judgments and feelings in response to intergroup interaction. *Personality* and Social Psychology Bulletin, 27, 706-719.
- Vorauer; J.D., & Sakamoto, Y. (2008). Who cares what the outgroup thinks? Testing an information search model of the importance individuals accord to an outgroup members' view of them during intergroup interaction. *Journal of Personality and Social Psychology*, 95, 1467-1480.
- Vorauer, J.D., Hunter, A.J., Main, K.J., & Roy, S.A. (2000). Meta-stereotype activation: Evidence from indirect measures for specific evaluative concerns experienced by members of dominant groups in intergroup interaction. *Journal of Personality and Social Psychology*, 78, 690-707.
- Vorauer, J.D., Main, K.J., & O'Connell, G.B. (1999). How do individuals expect to be viewed by members of lower status Groups? Content and implications of metastereotypes. *Journal of Personality and Social Psychology*, 75, 917-937.
- Wegener, D.T., & Petty, R.E. (1995). Flexible correction processes in social judgment: Correcting for context-induced contrast. *Journal of Experimental Social Psychology*, 29, 137-165.

- Wegener, D.T., & Petty, R.E. (1997). The flexible correction model: The role of naïve theories of bias in bias correction. In M.P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 29, pp. 141-208). Mahwah, NJ: Erlbaum.
- Wilder, D.A., & Simon, A. (1998). The group as a category and an interactive entity:
 Implications for social perception and intergroup behavior. In C. Sedikides, J.
 Schopler, & C.A. Insko (Eds.), *Intergroup cognition and intergroup behavior* (pp. 27-44). Hillsdale, NJ: Erlbaum.
- Williams, M.J., & Eberhardt, J.L. (2008). Biological conceptions of race and the motivation to cross racial boundaries. *Journal of Personality and Social Psychology*, 94, 1033-1047.
- Wolsko, C., Park, B., Judd, C.M., & Wittenbrink, B. (2000) Framing interethnic ideology: Effects of multicultural and color-blind perspectives on judgments of groups and individuals. *Journal of Personality and Social Psychology*, 78, 635-654.
- Wout, D.A., Shih, M.J., Jackson, J.S., & Sellers, R.M. (2009). Targets as perceivers:How people determine when they will be negatively stereotyped. *Journal of Personality and Social Psychology*, *96*, 349-362.
- Yzerbyt, V.Y. (2010). Motivational Processes in Prejudice, Stereotyping, and Discrimination. In J. Dovidio, M. Hewstone, & P. Glick (Eds.), *Handbook of Prejudice, Stereotyping, and Discrimination* (pp. 146-162). Thousand Oaks, CA: Sage.
- Yzerbyt, V.Y., & Corneille, O. (2005). Cognitive process: Reality constraints and integrity concerns in social perception. In J.F. Dovidio, P. Glick, & L. Rudman (Eds.), *On the nature of prejudice: 50 years after Allport*. London, UK: Blackwell.

- Yzerbyt, V.Y., Corneille, O., & Estrada, C. (2001). The interplay of subjective essentialism and entitativity in the formation of stereotypes. *Personality and Social Psychology Review*, 5, 141-155.
- Yzerbyt, V.Y., & Demoulin, S. (2010). Intergroup relations. In S.T. Fiske, D.T. Gilbert,
 & G. Lindzey (Eds.), *Handbook of Social Psychology* (5th edition, Vol. 2, pp. 1024-1083). Hoboken, NJ: Wiley.
- Yzerbyt, V.Y., Judd, C. M., & Corneille, O. (2004). *The psychology of group perception: Perceived variability, entitativity, and essentialism.* London: Psychology Press.
- Yzerbyt, V.Y., Rocher, S.J., & & Schadron, G. (1997). Stereotypes as explanations: A subjective essentialistic view of group perception. In R. Spears, P. Oakes, N. Ellemers & A. Haslam (Eds.), *The psychology of stereotyping and group life* (pp. 20-50). Oxford: Basil Blackwell.
- Yzerbyt, V.Y., Rogier, A., & Fiske, S. (1998). Group entitativity and social attribution:
 On translating situational constraints into stereotypes. *Personality and Social Psychology Bulletin*, 24, 1090-1104.
- Yzerbyt, V.Y., Schadron, G., Leyens, J.-Ph., & Rocher, S. (1994). Social judgeability: The impact of meta-informational cues on the use of stereotypes. *Journal of Personality and Social Psychology*, 66, 48-55.