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3 Intergroup Contact

An Integration of Social Psychological and Communication Perspectives

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This chapter examines the literature on intergroup contact from a communication perspective. The basic idea of intergroup contact theory—that contact between groups reduces prejudice—is presented. Research examining this idea from a communication perspective is described and integrated with the large social-psychological body of work. We focus first on direct, face-to-face contact between members of different groups. We then discuss various forms of indirect contact including vicarious, extended, imagined, and computer-mediated forms of contact. Finally, we present an extended research agenda for the field of communication to contribute to what is fundamentally a communicative event.

The idea that communication between groups results in increased intergroup cooperation and reduced prejudice is intuitive and appealing. If communication facilitates perspective taking, personal insight, and the building of relationships, it should do so across group boundaries, and such communication should result in reductions in both prejudice and intergroup conflict. This idea has spawned a long tradition of research on intergroup contact and prejudicial attitudes which spans psychology, sociology, education, and more recently communication. In this chapter we review the research on contact from an interdisciplinary perspective, emphasizing the work that explicitly considers communication variables, and laying out an agenda for where scholars interested in communication processes can best contribute to future work in this area. As will become clear, our understanding of the effects of contact is at this point clear and conclusive: contact typically has positive

effects. The size of those effects is moderated by other variables, and certainly contact is not a panacea in all circumstances, but a strong claim concerning contact's effectiveness is justified. Our knowledge of the *communicative processes* of contact is considerably weaker, and it is more intensive work in this area that we are hoping to stimulate with this chapter.

We start by distinguishing *direct* and *indirect* forms of contact. Although we typically think of intergroup contact as being in the form of face-to-face encounters (i.e., direct contact), this is not exclusively the case. As technology and research have developed, researchers have explored how we experience members of out-groups in alternate, indirect ways (e.g., via virtual communication). We will review the evidence for direct and indirect contact in separate sections, highlighting the overall research evidence, and both moderating and mediating factors. After the review of direct and indirect contact, we examine the evidence for the broad impact of intergroup contact on dependent measures beyond self-report measures of explicit attitudes. Finally, we propose an agenda for communication research on intergroup contact, and draw some conclusions.

Direct Contact

Williams (1947), a sociologist, was the first scholar to systematically expound on the idea that intergroup contact could improve intergroup relations. But it is the Harvard social psychologist Gordon Allport (1954) who is generally credited with being the first scholar to propose details on how members of different groups can be brought together in face-to-face encounters to reduce intergroup hostility. Allport coined the term the *contact hypothesis* (Hewstone & Brown, 1986; Hewstone & Swart, in press), and proposed that contact would be more likely to reduce prejudice and improve intergroup relations if four conditions were met. First, there should be *equal status* among the individuals in the contact situation. Second, the situation should require *cooperation* between groups or offer common goals to both groups. Third, the contact situation should be structured in such a way as to allow the development of *close relationships* with members of the out-group. Finally, contact should be legitimized through *institutional support*.

Allport's (1954) formulation of the contact hypothesis has proven extremely influential and has inspired considerable research that tested and extended its basic principles (Brown & Hewstone, 2005; Dovidio, Gaertner, & Kawakami, 2003; Pettigrew & Tropp, 2006). This work has used diverse research methods (field studies, lab experiments, longitudinal surveys), and has had a profound impact on social policy in many countries (Hewstone, 2009; Tausch, Kenworthy, & Hewstone, 2005). However, the impressive body of research on the contact hypothesis is not without its limitations, which include the reliance on self-report measures of contact as well as on survey studies rather than experiments; these are briefly noted where relevant.

Research Evidence

The prejudice-reducing effect of contact is now well-established, with the most convincing evidence accumulated by Pettigrew and Tropp (2006). Their ground-breaking meta-analysis covered 515 studies (including 713 independent samples), and was based on a total of over 250,000 participants. Summarizing greatly, we highlight here three of their most important findings. First, there was a highly significant negative relationship between contact and prejudice (mean effect size $r = -.22$, $p < .001$), suggesting that contact is an effective tool for reducing prejudice. Second, the effect size in the 134 samples where contact was structured to meet Allport's optimal contact conditions ($r = -.29$, $p < .001$) was significantly greater than in studies that did not ($r = -.20$, $p < .001$). Third, having contact with out-group friends was found to be significantly more predictive of reduced prejudice ($r = -.26$) than was general intergroup contact ($r = -.22$), lending further support to the contention that cross-group friendships are the most effective form of intergroup contact (Hamberger & Hewstone, 1997; Pettigrew, 1997).

Pettigrew and Tropp (2006) also found a number of variables that moderated the size of the contact effect, including contact setting, target group, dependent measure, and majority vs. minority group status. The effect of contact was greater in laboratory and recreational, than in educational and residential settings; for target groups based on sexual-orientation and ethnicity than for those based on physical or mental disability; for affective measures (emotions and feelings) than for cognitive measures (beliefs and stereotypes); and for majority than for minority-status groups. It must be emphasized that these moderation effects qualify the *extent* of the contact effect, not its existence. Across all studies, the baseline effect is that contact is associated with reduced prejudice. Thus, notwithstanding the booster effect of contact involving Allport's four conditions, these factors should be seen as facilitating rather than as necessary conditions (Pettigrew, 1998). We consider theoretically based moderators of direct contact below.

One limitation of the database for this meta-analysis is that many studies are cross-sectional, rather than experimental or longitudinal. In these studies, we cannot be sure whether varying amounts of contact bring about change in intergroup attitudes, or whether people with different prior attitudes differentially seek or avoid out-group contact, or both. Complex modeling techniques can compare both directional effects using cross-sectional data, and sometimes both paths are significant (Tausch et al., 2005); but typically the path from contact to attitudes is somewhat greater than the reverse (Pettigrew, 1998; Powers & Ellison, 1995). Studies have also assessed the effect of contact when people were given *no choice* about participating in intergroup contact; thus prior attitudes could not be driving contact. Pettigrew and Tropp's (2006) meta-analysis reported that no-choice studies yielded the *largest* effect sizes between contact and attitudes.

Notwithstanding these attempts to exploit cross-sectional data, longitudinal designs permit stronger causal interpretations, and show that under certain conditions contact does indeed lead to generalized attitude change. Several impressive longitudinal studies have recently emerged; these studies illuminate contact processes and enhance our confidence in the value of contact as a social intervention (Christ, Hewstone, Tropp, & Wagner, in press; see Christ & Wagner, in press, for methodological issues in longitudinal research). Next, we discuss one prominent longitudinal study.

Levin, van Laar, and Sidanius (2003; Sidanius, Levin, van Laar, & Sears, 2009) collected data from American college students over a period of 5 years. Their results indicate that students reporting less favorable ethnic attitudes (and more intergroup anxiety) in their first year were less likely to have out-group friends (from different racial and ethnic groups) during their second and third years of college—consistent with the argument that prior attitudes determine the extent of intergroup contact. Nevertheless, those students with more out-group friends in years 2 and 3 had more positive attitudes and were less anxious in year 5, even after their prior attitudes, friendships, and a number of relevant background variables were controlled. Notably, both causal paths were equally strong. Given that the relationship between contact and prejudice should be regarded as an ongoing, reciprocal process (Eller & Abrams, 2004), these bidirectional paths are to be expected. What is most crucial in terms of assessing contact as a social intervention, however, is that the path *from* contact *to* out-group attitudes remains statistically significant even after the reverse causal path has been accounted for. This underscores the viable role of contact in improving out-group evaluations overall, notwithstanding the acknowledged evidence for self-selection bias.

Moderators of Direct Contact

As noted above, Pettigrew and Tropp's (2006) meta-analysis reported numerous variables that moderated the overall negative impact of contact on prejudice. In this section we highlight two broad types of variable found to moderate the impact of direct contact on attitudes and other dependent variables: varying levels of categorization during contact, and participant factors as boundary conditions (Tausch & Hewstone, 2010).

Varying Levels of Categorization during Contact. Some theoretical approaches have argued that contact situations should be structured to reduce the salience of available social categories and increase the likelihood of a more interpersonal mode of thinking and behaving (e.g., Brewer & Miller, 1984, 1988; N. Miller, 2002). This would allow those in the intergroup interaction to focus on personal information and individuate out-group members. In contrast, we argue that this approach is limited, because it tends to create positive *interpersonal* relations, rather than changing generalized views of out-groups as a whole. In short, by focusing solely on individuating information, the out-

group member would not be seen as an out-group member at all, and thus any positive outcomes that result from the interaction would fail to generalize to other members of the category.

We propose that there are advantages in maintaining intergroup *salience* during contact, so long as some of Allport's key conditions apply (Brown & Hewstone, 2005; Hewstone, 1996). If the contact is arranged so that it takes place between in-group and out-group members who can be regarded as sufficiently typical or representative of their groups, then the positive changes that occur should generalize to the groups as a whole. Experimental and correlational studies now provide extensive evidence for this view (Brown & Hewstone, 2005).

In the experimental studies (e.g., Brown, Vivian, & Hewstone, 1999, Study 1; Van Oudenhoven, Groenewoud, & Hewstone, 1996; Wilder, 1984), researchers have manipulated whether contact under favorable conditions takes place with a member of the relevant target group who is either typical or atypical of the group as a whole. The correlational studies (e.g., Brown et al., 1999, Study 2; Voci & Hewstone, 2003), have been conducted in naturalistic settings where it is generally not possible to manipulate typicality or salience. Thus, this research includes self-report measures of both the quantity and quality of contact that respondents report having with members of an out-group, as well as assessments of subjective group salience or perceived typicality of the out-group person. Moderated regression or similar techniques are then used to test whether the association between contact and intergroup attitude is qualified by group salience (i.e., whether the association between contact and attitudes was greater for respondents who report "high" vs. "low" salience during contact). For example, Harwood, Hewstone, Paolini, and Voci (2005, Study 1) investigated whether grandchildren's attitudes toward older adults were affected by the amount and quality of contact the grandchildren had with the grandparents they saw most frequently. A significant positive effect of contact quality on attitudes emerged when grandchildren were aware of age differences and saw their grandparents as typical of other older people during contact. The effect was weaker when awareness of age and perceived typicality of the grandparent were lower. In other words, group (in this case age) salience moderates the effects of contact on attitudes.

Research on the communication factors that enhance group salience is very limited (e.g., Harwood, 2010; Harwood, Raman, & Hewstone, 2006). Nonetheless, the literature suggests that treating group memberships as a *topic* of discussion, talking about group-related topics, or talking in a style that is (perhaps stereotypically) characteristic of one's group are relatively straightforward communicative manifestations of group salience.

Atypical out-group members are not completely ineffective in influencing attitudes. For example, research has shown that encountering largely atypical out-group members can increase the perceived *variability* of the out-group as a whole (Hamburger, 1994), even if it does not impact central tendencies (Paolini, Hewstone, Rubin, & Pay, 2004).

Participant Factors as Boundary Conditions. One challenge of research on intergroup contact is that the same objective contact conditions can be perceived differently by different people, which affects the success of contact interventions (Tropp, 2008). For example, individual difference variables can influence the effectiveness of contact (Stephan, 1987). Allport (1954) recognized participants' initial level of prejudice as they enter a contact situation as a potential barrier to prejudice reduction. Interacting with out-group members is highly challenging and requires increased self-regulation among highly prejudiced individuals, which can result in impaired executive function (Richeson & Trawalter, 2005; Vorauer & Kumhyr, 2001).

Nonetheless, there is evidence that contact may, apparently paradoxically, be particularly effective for more prejudiced participants. Dhont and Van Hiel (2009), for example, showed that the impact of contact with immigrants on individuals scoring high on right-wing authoritarianism (RWA) and social dominance orientation (SDO) was *greater* than the impact of contact on respondents who scored low on RWA and SDO. Likewise, Hodson (2008) showed that White prison inmates with higher SDO scores reported less in-group bias with increasing direct contact with Black inmates, compared to White inmates scoring lower in SDO. Similarly, Maoz (2003) showed that, although Israeli "hawks" were less motivated to interact with Palestinians and had more negative out-group attitudes before an encounter program than did "doves," they showed greater positive attitude change in response to the intervention. Of course, more prejudiced participants have more room for their attitudes to change, while it is rather difficult to show reduced prejudice among individuals who are unprejudiced to start with.

Turning to group factors, Tropp and Pettigrew's (2005a) meta-analysis showed that the contact-prejudice link was significantly weaker for members of disadvantaged groups ($r = -.18$), than dominant groups ($r = -.23$). They also demonstrated that Allport's (1954) optimal contact conditions did not predict the strength of contact effects among minority group members. Additional findings indicate that personalized contact is less effective for members of minority groups (Bettencourt, Charlton, & Kernahan, 1997; see also Binder et al., 2009; Gómez, Tropp, & Fernández, 2011). These findings suggest that members of disadvantaged groups may construe intergroup interactions in different ways than do members of advantaged groups. In particular, members of disadvantaged groups may be less likely to believe that they have equal status (Robinson & Preston, 1976). They are also more likely to anticipate prejudice and discrimination against them from dominant group members, which may further reduce the effectiveness of contact (Shelton, 2003; Tropp, 2006).

This may be a good moment to acknowledge that not all group contexts are the same. The contact literature sometimes takes a rather homogeneous view of contact effects (i.e., contact with a member of group X has effects on attitudes about group X). However, contact effects actually vary by group and we know relatively little about why that might be (e.g., Pettigrew & Tropp's meta-analysis shows stronger effects for contact with gay people than for contact

with elderly people). Perspectives that attend to structural and psychological differences between specific intergroup relations contexts may provide more information about why such differences exist, and could be developed into better understandings of what type of contact works for whom (Fiske, Cuddy, Glick, & Xu, 2002). We would advocate attending to the sociohistorical conflicts between groups to explain some of the variance here. It might also be profitable to examine the degree of communicative “availability” of one group to the other: the extent to which communication is plausible based on both linguistic commonality and cultural similarity in the meaning and purpose of communication might be a significant influence on the potential for communication to solve problems. Some degree of communicative accessibility is undoubtedly essential for meaningful contact; however, in some contexts it is easy to imagine that communicative barriers might be functional in providing attributions for breakdown, and apparent communicative similarity between groups (e.g., a shared language) might mask deeper barriers that cause miscommunication.

Mediators of Direct Contact

A major development since Allport’s (1954) pioneering work is that researchers have moved from the mere demonstration that contact works, to the more demanding question of *how* it works. Although the effects of contact may partly be due to mere exposure (i.e., the principle that familiarity fosters liking; Bornstein, 1989), the published research demonstrates that more sophisticated mechanisms are at work. Sufficient evidence on mediators has accrued to merit extensive coverage in a narrative review (Brown & Hewstone, 2005) and a meta-analysis specifically of mediators of contact (Pettigrew & Tropp, 2008). We consider three classes of mediator: cognitive, affective, and communication variables. Within each category, we consider simpler studies of single mediators first, but later introduce more ambitious studies that simultaneously explored both multiple mediators and their interplay with moderating variables.

Cognitive Variables. Allport (1954) suggested that unfavorable out-group attitudes are due to a lack of information about that out-group, and that contact can thus reduce prejudice by providing opportunities to learn about the out-group. *Increased knowledge* can reveal similarities and thus lead to liking (Pettigrew, 1998), and reduces uncertainty about how to interact with others (Stephan & Stephan, 1985). For example, Stephan and Stephan (1984) demonstrated that White Americans’ amount of contact with Hispanics increased knowledge about Hispanic culture, which partially mediated the effects of contact on out-group attitudes, although the variance in attitudes explained by gains in knowledge is modest (Eller & Abrams, 2004).

As well as increasing factual knowledge, contact can also teach alternative behaviors toward out-group members (Pettigrew, 1997). This, in turn,

can change attitudes by (a) setting new norms for intergroup behavior, and (b) reducing cognitive dissonance (Leippe & Eisenstadt, 1994), which serves to justify attitude-inconsistent behavior. There is empirical support that behavior change partially mediates the relationship between contact and attitudes (Eller & Abrams, 2004).

Gaertner and Dovidio's (2000) common in-group identity model suggests that contact situations could be transformed so that the current in-group and out-group are recategorized into a larger superordinate entity. They provide experimental and field evidence that cognitive representations of intergroup relations mediate contact effects. Several studies using artificial groups have attested to the power of a superordinate categorization to reduce the amount of in-group bias shown, especially in comparison to situations where two group memberships remain salient, but also compared to individualized conditions in which categories are not mentioned and the focus is on provision of individuating information (see Gaertner, Dovidio, & Houlette, 2010, for review). In the field, students at a multiethnic high school who adopt a "school" identity as more important than an ethnic identity demonstrate less bias and more positivity toward ethnic out-groups (Gaertner, Rust, Dovidio, Bachman, & Anastasio, 1996).

Another line of research has shown that repeated, intimate contact causes the out-group to become incorporated into the self-concept (Aron, Aron, Tudor, & Nelson, 1991; Pettigrew, 1997), and that this process leads to more positive out-group attitudes (Eller & Abrams, 2004). There is also evidence that extended contact (discussed later) works through this process.

Affective Variables. Current work points to affective processes as more pivotal than cognitive processes in contact (Brown & Hewstone, 2005; Pettigrew & Tropp, 2008; Tropp & Pettigrew, 2005b). Contact appears to exert its effect both by reducing negative affect (e.g., anxiety and threat), and by inducing positive affective processes such as empathy.

Intergroup *anxiety* is a negative affective state experienced when anticipating future contact with an out-group member. It stems from the expectation of negative consequences for oneself during intergroup interactions (e.g., embarrassment, rejection), and may be augmented when there are negative out-group stereotypes, a history of intergroup conflict, or a high ratio of out-group to in-group members (Stephan & Stephan, 1985). Anxiety is accompanied by a narrowed cognitive and perceptual focus, and information-processing biases that can undermine positive effects of contact (Wilder & Shapiro, 1989). Intergroup anxiety may lead to the avoidance of contact (Plant & Devine, 2003; Shelton & Richeson, 2005) or, if contact does occur, render the interaction awkward and less enjoyable (e.g., Shelton, 2003). Because this negative affective state is linked to out-group members, it is strongly associated with negative out-group attitudes (Stephan & Stephan, 1985).

Extensive research has shown that successful intergroup contact helps to overcome these apprehensions, and that reduced anxiety is a key media-

tor in the negative relationship between contact and prejudice (e.g., Islam & Hewstone, 1993; Voci & Hewstone, 2003). Two recent studies have added impressive longitudinal evidence of anxiety as a mediator. Binder et al. (2009) conducted a two-wave study (over approximately 6 months) on minority- and majority-status secondary school children in Belgium, Germany, and England. They explored the relationship between contact (quality and quantity), intergroup anxiety, and two measures of prejudice. They found support for bidirectional paths between contact and prejudice over time, but more pertinent here, they found that intergroup anxiety mediated the contact-prejudice relationship over time. Swart, Hewstone, Christ, and Voci (2011) further extended the analysis, by conducting a three-wave study (over 12 months) of Coloured junior high-school students' attitudes to Whites in South Africa (the term *Coloured* is still widely used in South Africa as an official category and self-reference group; this population has its origins in unions between White, male settlers and local slaves). This study tested, for the first time, the full mediation of the effects of cross-group friendships on three measures of prejudice (attitudes, perceived out-group variability, and negative action tendencies) via the mediators of intergroup anxiety and empathy. Support was found for the bidirectional relationship between contact and the various dependent variables, but full mediation of the relationship between the variables at Time 1 and the variables at Time 3 was only supported from contact at Time 1 to prejudice at Time 3 (via mediators at Time 2). Cross-group friendships decreased prejudice via both reduced intergroup anxiety and increased affective empathy over time.

Intergroup relations are often characterized by perceptions that the out-group poses a *threat to the in-group*. These threats can be realistic and involve conflicting interests (e.g., competition for scarce resources, territory, political or economic power), or they can be symbolic, involving perceived discrepancies in beliefs and values (Stephan & Stephan, 2000). Stephan and Stephan's integrated threat theory argued that both the amount and the nature of intergroup interactions (e.g., whether contact is cooperative or competitive, intimate or superficial) are likely to determine the extent to which the out-group is seen as realistically or symbolically threatening (Stephan, Ybarra, & Morrison, 2009). Tausch, Tam, Hewstone, Kenworthy, and Cairns (2007) demonstrated cross-sectionally, in samples of Catholic and Protestants in Northern Ireland, that reduction in perceived group-level threats significantly mediated the relationship between contact and prejudice reduction, but only for people who identify strongly with their in-group. For low identifiers, reduction in individual-level concerns (i.e., intergroup anxiety) mediated the relationship between contact and prejudice reduction. Thus, this work demonstrates a case of moderated mediation (Muller, Judd, & Yzerbyt, 2005), showing that different mediators can operate for different subgroups.

Al Ramiyah, Hewstone, Little, and Lang (under review) provided further evidence that perceived threats mediate the impact of contact on attitudes. In a cross-lagged multigroup field study, they tested a combination of integrated threat theory (Stephan & Stephan, 2000) and intergroup contact theory

in Malaysia's three-month National Service Camp program, which aims to promote positive relations between ethnic Malays, Chinese, and Indians. Controlling for initial levels of the constructs, postcamp intergroup contact was negatively associated with perceived threat and positively associated with out-group evaluations, and perceived threat and out-group evaluations were negatively associated. Precamp intergroup contact also positively predicted postcamp out-group evaluations, even in the presence of a strong reciprocal path from precamp out-group evaluations to postcamp intergroup contact. These results speak to the potential of contact for improving intergroup relations in nation-building interventions.

Empathy has both emotional (empathic concern) and cognitive (perspective taking) facets and is associated with positive attitudes and prosocial behavior (Batson et al., 1997; Batson & Ahmad, 2009). A handful of studies have demonstrated that contact positively affects empathy and perspective taking, and that these variables partially mediate contact-prejudice effects (Harwood et al., 2005; Tam, Hewstone, Harwood, Voci, & Kenworthy, 2006). Aberson and Haag (2007) provided further evidence consistent with a three-stage theoretical model in which contact was associated with increased perspective taking, which was associated with more positive views of the out-group, partly by reducing intergroup anxiety.

Communication Variables. Only two distinct communication variables have thus far been investigated as potential mediators of intergroup contact: self-disclosure and communication accommodation. Pettigrew (1997, 1998) identified *self-disclosure* as a central process in cross-group friendship. Self-disclosure is the presentation of significant aspects of oneself to another person, and is important in the development of interpersonal relationships; it may also contribute to more positive attitudes in an intergroup situation. In addition to reducing anxiety for the recipients of disclosures, self-disclosure serves to give the disclosers control of how others see them (Berger & Bradac, 1982). By self-disclosing, disclosers tell others how to understand the way they see themselves, or how to empathize with them. Self-disclosure also promotes relational intimacy and depth (Laurenceau, Barrett, & Pietromonaco, 1998; Reis & Shaver, 1988), which may result in more positive affect toward the out-group if used during intergroup contact. By personalizing an interaction, self-disclosure focuses attention on individuating features of participants, which may reduce stereotyping in a contact situation (Fiske & Neuberg, 1990). Central to the notion of self-disclosure as a mediator is that it establishes mutual trust and detailed knowledge about the other party, which may disconfirm negative attitudes. Finally, self-disclosure is theoretically important because it is typically reciprocal and reciprocated. Self-disclosure is, thus, something that happens at the level of the dyad and hence something that can be seen as a shared activity—a point of connection between individuals building a relationship.

Tam et al. (2006) examined the effects of contact with grandparents on implicit attitudes (measured with the Implicit Association Test; Greenwald,

McGee, & Schwartz, 1998). Implicit attitudes do not require direct report of attitudes, are beyond conscious control, and are less likely to be influenced by social desirability than are explicit measures. Implicit measures are also important because they predict spontaneous behavior better than explicit measures (Dovidio, Kawakami, Johnson, Johnson, & Howard, 1997). This study measured self-disclosure, anxiety, and empathy as mediators at the level of one out-group exemplar (the grandparent with whom participants interacted most regularly). Quantity of contact with older people had a direct, positive effect on young people's implicit attitudes, and positively predicted self-disclosure. In turn, self-disclosure negatively predicted anxiety, and positively predicted empathy; and anxiety negatively predicted explicit attitudes, while empathy positively predicted them (see Soliz, Ribarsky, Harrigan, & Tye-Williams, 2009, for similar effects relating to anxiety and disclosure).

In their research on contact between young White and South Asian students in the United Kingdom, Turner, Hewstone, and Voci (2007, Study 4) also found that self-disclosure significantly mediated the effect of contact on out-group attitudes. Further probing revealed that having Asian friends predicted greater self-disclosure that, in turn, predicted more positive out-group attitudes via increased empathy, self-disclosure importance, and trust. Exemplifying the complex interconnections between a number of these variables, Soliz, Thorson, and Rittenour (2009) demonstrate that self-disclosure enhances the perception of sharing a common group membership with an out-group member—in this particular case, perceptions of sharing a “family” identity within a multiracial family context. Thus, variables that we distinguish as mediators may themselves influence one another.

The second communication variable of interest, *communication accommodation*, was investigated by Harwood et al. (2005, Study 2). They examined five potential mediators of the effect of contact with the most frequently seen grandparent on attitudes toward the elderly: intergroup anxiety, perspective-taking, individuation, self-disclosure, and communication accommodation. The accommodation measure tapped the degree to which young people adapted communicatively to their grandparents, a crucial signal of interpersonal solidarity, the absence of which may signal intergroup differentiation (Shepard, Giles, & LePoire, 2001). When examined separately, three variables proved to be reliable mediators of the effects of contact quality on attitudes: anxiety, perspective-taking, and accommodation. When all significant mediators were entered together, perspective-taking was the only significant mediator. These mediation effects for out-group attitudes were also moderated by group salience, holding only for respondents for whom the young–elderly relationship was above the average in salience. Further analyses showed that the paths affected by group salience were the ones between contact quality and mediators. Contact quality affected perspective-taking more when salience was high rather than low; anxiety was reduced by contact more when group salience was high rather than low; and the link between contact and accommodation was significant only when salience was high.

This study, like that of Tam et al. (2006), measured mediators at the individual, rather than group, level: mediators were tapped in terms of the relationship and interaction with the same grandparent with whom we assessed quality of contact. Both types of mediators are necessary for a complete understanding of the mechanisms behind contact effects (Paolini, Hewstone, Voci, Harwood, & Cairns, 2006). If quality of contact with a specific out-group individual influences general out-group attitudes, then very specific interactional experiences might affect group level mediators and serve as mechanisms for such influence. Experiencing a specific affect, cognition, or behavior in interaction with a particular out-group member (i.e., individual-level mediator) makes it more likely that such a phenomenon might be seen as possible with other out-group members (i.e., group-level mediator). This perception may extend to more general expectations for intergroup contact, and hence the nature of the entire out-group.

Moving away from the specific contact literature, there is considerable work on communication between groups, particularly cultural groups, in the communication discipline (Gudykunst & Mody, 2002). The most relevant of such work for the current article focuses on the variables that make for effective communication between different cultures. This includes consideration of inherent communicative barriers (e.g., different languages, different understandings of the purpose of communication; Ting-Toomey & Oetzel, 2001), varying verbal and nonverbal communication styles across cultural groups (Kim, 2002), and individual differences (e.g., intercultural competence: Deardorff, 2009). This research also examines ways in which psychological constructs such as identity are constructed and maintained in communication (both inter- and intracultural; Abrams, O'Connor, & Giles, 2002). While already described, research on communication accommodation processes is common in the study of intercultural communication, including examinations of how accommodation can emphasize group differences or interpersonal similarities (Gallois, Giles, Jones, Cargile, & Ota, 1995). Perhaps most intriguing at this point in the discussion are ties between accommodation and negative contact (the topic of the next section). Divergent behaviors (those that emphasize in-group identities and distinctiveness from an out-group interlocutor) have distinctly negative consequences for intergroup encounters (Giles, Coupland, & Coupland, 1991) and hence, presumably, for contact's attitudinal outcomes. Such themes tend to be skirted in much contact research. While familiar to many readers of this chapter, brief mention of this huge body of research is warranted to emphasize the ways in which separate literatures might usefully inform one another. Many constructs examined in the intercultural communication literature contribute to positive communication (i.e., contact) between groups, and positivity contributes greatly to desirable effects of contact. Hence, seeking out intercultural communication research will yield sensible (yet novel) hypotheses for contact researchers. As hinted at in the previous paragraph, intercultural communication research can also direct us to some of the pitfalls of intergroup contact, to which we now move.

Negative Contact

Thus far we have reviewed evidence for the impact of positively structured intergroup contact. Relatively little research in the contact paradigm has examined the opposite valence (negative contact). This is understandable given that the framework was developed to promote positive intergroup encounters and thereby reduce prejudice. Nonetheless, awareness that poorly designed or executed contact can have negative effects is essential to real world contact applications as well as our theoretical understanding of the psychological and communicative processes underlying the effect.

One area of current interest is the connection between group salience (which has already been described as facilitating generalization of contact effects), and valence. In spite of its beneficial generalization effects, considerable work now shows that group salience and valence are frequently negatively related (Paolini, Harwood, & Rubin, 2010). Harwood et al. (2006) discuss communicative phenomena that should theoretically be linked to group salience in intergenerational communication, showing that negative behaviors (e.g., painfully detailed disclosures of illness from an older person) indeed predicted group salience, but positive behaviors such as story-telling did not predict salience. Similarly, Soliz, Ribarsky, Harrigan, and Tye-Williams (2009) show that group salience is negatively associated with supportive and accommodative communication.

Building on this work, Paolini et al. (2010) demonstrate a causal link between valence and salience such that negative encounters increase group salience. Paolini et al. elaborate on the slightly disturbing possibility that negative intergroup contact has greater power to influence prejudice than does positive intergroup contact. Paolini et al. note that more work is needed to investigate negative effects of contact and to understand how to jointly enhance salience and positivity. Harwood (2010) presents some preliminary ideas of positive communication strategies that should retain high levels of group salience. For example, group-relevant questions that demonstrate genuine curiosity about the out-group place groups “front and center,” while deferring to the out-group member as to the specific content, tone, and detail of the discussion. This contrasts with conversations wherein group memberships either remain implicit (and stereotypes drive the conversation), or where group characteristics are framed as fixed and known by both parties, perhaps in ways that appear constraining or derogatory to the other.

Summary of Research on Direct Contact

Direct contact between groups has been conclusively shown to improve intergroup attitudes (Pettigrew & Tropp, 2006). Its effectiveness is facilitated by, but does not require, Allport's (1954) conditions. Contact is particularly effective under conditions of high group salience, although group salience carries with it some complexities related to valence. The positive effects of

contact are mediated by cognitive, affective, and communicative variables, with affective mechanisms receiving the most study and support. Communicative mechanisms have received less research attention overall, but there is great scope for examining novel verbal (e.g., social support, humor) and non-verbal (smiling, backchannels) communicative mechanisms as mediators of the effect of contact. Communicative mediators have the advantage of being potentially easier targets of interventions. Asking people to “be less anxious” in an interaction is less reasonable than suggesting that they “smile more” or “ask questions.”

Indirect Contact

Pettigrew (1997) suggested that a reduction in prejudice might be achieved by promoting direct friendship between members of rival groups. As we have seen, there is strong meta-analytic support for this. Unfortunately, however, direct cross-group friendships can only be used as an intervention to reduce prejudice when group members have the opportunity for contact in the first place. If people do not live in the same neighborhood, attend the same school, or occupy the same workplace as out-group members, they are unlikely to develop friendships with them. Given the practical obstacles to direct intergroup contact posed by segregation or outright conflict, recent approaches have investigated the effectiveness of less direct forms of contact. Recently, Dovidio, Eller, and Hewstone (2011) proposed that indirect contact can be conceived in three ways: (a) *extended* contact: learning that an in-group member is friends with an out-group member; (b) *vicarious* contact: observing an in-group member interact with an out-group member; and (c) *imagined* contact: imagining oneself interacting with an out-group member. We will consider the evidence separately for each form of indirect contact, as well as current knowledge regarding moderating and mediating factors. We also examine a fourth form of indirect contact: mediated contact with a real out-group member via computer or other technology. Harwood (2010) discusses in more detail some of the complexities of differentiating forms of indirect contact, and the dimensions on which they differ from direct contact.

“Extended” Contact

The most widely researched of these indirect forms of contact, extended contact, refers to the impact on prejudice of knowing about, or observing, at least one, and preferably more than one, in-group member who has an out-group friend (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997). Pettigrew and Tropp (2006) excluded tests of extended cross-group friendship from their meta-analysis, because they do not involve face-to-face contact. However, this form of contact, which was examined during a relatively recent period, is important and effective in its own right.

Research Evidence of the Impact of Extended Contact. Wright et al. (1997) provided both correlational and experimental evidence in support of this hypothesis. They showed that respondents—belonging to either majority or minority groups—who knew at least one in-group member with an out-group friend reported weaker out-group prejudice than did respondents without indirect friends; furthermore, the greater the number of members of the in-group who were known to have friends in the out-group, the weaker was the prejudice.

Wright and colleagues (1997) give two reasons why interventions involving extended friendship are more effective and easier to implement than direct friendship. First, to observers of cross-group friendship, the group memberships of those involved are relatively salient (e.g., it is clear that a White child has an Asian friend); in contrast, the observer may be unacquainted with individual characteristics of the out-group member, thus increasing the likelihood that his or her behavior is taken as typical or representative of the group (Hewstone & Lord, 1998). This characteristic of extended contact should facilitate generalization of positive attitudes from the individuals engaged in direct contact to the views of their respective groups (Brown & Hewstone, 2005; Hewstone & Brown, 1986). Second, when one is merely observing another in-group member engaged in contact with an out-group member, any intergroup anxiety felt about interacting with members of that out-group (Stephan & Stephan, 1985) should be lower than when one is involved directly in the contact. Intergroup interactions that go unpunished and have been observed or known about may also change the perceived in-group and out-group norms regarding intergroup interactions. Experimental, quasi-experimental, and correlational studies have provided empirical evidence that people knowing about or observing intergroup friendships show less prejudice than those who do not, even while controlling for direct contact with out-group members (for reviews see Turner, Hewstone, Voci, Paolini, & Christ, 2007; Vonofakou et al., 2008).

Extended contact has also been applied as a quasi-experimental intervention to reduce prejudice among elementary school children (e.g., Cameron, Rutland, Brown, & Douch, 2006; Liebkind & McAllister, 1999). For example, 5- to 10-year-old children who read stories of friendships between nondisabled and disabled children showed more positive attitudes and intended behavior toward disabled children (Cameron & Rutland, 2006). Extended contact using media stimuli (e.g., books) becomes intertwined with forms of *vicarious contact* described later (see Harwood, 2010, for extensive discussion of these distinctions).

Moderators of Extended Contact. Evidence has accrued for four factors that moderate the impact of extended contact. The negative relationship between extended cross-group friendship and reduced prejudice is consistently stronger for participants with few direct cross-group friends or living in segregated rather than mixed communities (Christ et al., 2010; Dhont & Van Hiel, 2011).

Thus extended contact may be especially useful for those in segregated neighborhoods.

Tausch, Hewstone, Schmid, Hughes, and Cairns (2011) examined the effects of extended contact via different types of *in-group* contacts (neighbors, work colleagues, friends, and family members), showing that extended contact interacted with closeness of *in-group* relationship in predicting out-group trust. As predicted, extended contact via more intimate *in-group* relationships (friends and family) was more strongly related to out-group trust than extended contacts via less intimate *in-group* relations (neighbors and work colleagues). Within each level of intimacy, extended contact was related to out-group trust only at high levels of rated closeness to *in-group* contacts.

Three recent studies have identified individual differences that moderate the impact of extended contact. Paralleling the earlier evidence that SDO moderated direct contact, Hodson, Harry, and Mitchell (2009) found stronger effects of extended contact on heterosexuals' prejudice toward homosexuals for respondents higher in SDO. Similarly, Dhont and Van Hiel (2011), using a representative Dutch sample, found that participants higher in authoritarianism showed stronger positive effects of extended contact on intergroup attitudes. Again, these effects might partially be explained by regression to the mean for more extreme scorers; however, Dhont and Van Hiel found that the positive effects were mediated by lower feelings of threat and greater trust of out-group members, which reduces the power of the simple regression explanation. Using a different individual difference measure, Sharp, Voci, and Hewstone (2011) found that social comparison moderated the effects of extended contact. White, heterosexual participants with stronger social comparison tendencies exhibited stronger positive extended contact effects involving both Asian and gay target groups, consistent with these authors' contention that social comparison taps into sensitivity to normative forces, a proven mediator of extended contact effects (see below).

Finally, Paolini, Hewstone, and Cairns (2007) tested whether the effectiveness of extended (vs. direct) contact was moderated by the bases (cognitive vs. affective) of prejudice. Dovidio, Brigham, Johnson, and Gaertner (1996) classified close intergroup contact between members of racial groups as an affective experience, because of the inherently affective nature of interpersonal situations. In contrast, Wright et al. (1997) argued that an advantage of extended friendship is that it evokes weaker emotions and makes cognitive aspects of the contact experience more accessible. Attitude change is greater when the bases of the persuasive message match, rather than mismatch, the bases of the attitude (Huskinson & Haddock, 2004). In three cross-sectional studies, Paolini et al. (2007) showed that effects of extended friendship were larger for out-groups generating cognitive than affective responding (the opposite pattern was found for direct friendship effects).

Notwithstanding this evidence of moderators of extended contact, it is noteworthy that whereas group status moderates the effects of both direct (Pettigrew & Tropp, 2006) and imagined contact (Stathi & Crisp, 2008; see below),

the effects of extended contact were equally strong for majority and minority groups (Gómez et al., 2011).

Mediators of Extended Contact. When Wright et al. (1997) outlined the extended contact idea, they proposed, but did not test, four mechanisms that might underlie the prejudice-reducing impact of extended cross-group friendship: observing a positive relationship between members of the in-group and the out-group, (a) should involve less anxiety than found in initial direct intergroup encounters (Stephan & Stephan, 1985), (b) should lead to the perception that there are positive in-group norms regarding the out-group, (c) should lead to the perception that there are positive out-group norms about the in-group, and (d) should lead the observer to include the in-group member's out-group friend as part of the observer's self (e.g., Aron et al., 1991; see earlier section on cognitive mechanisms in direct contact). Turner, Hewstone, Voci, and Vonofakou (2008) tested simultaneously the role of all four mechanisms proposed by Wright and colleagues in the context of contact between Whites and South Asians in Britain. Both their studies supported the four mediators proposed by Wright et al. (1997). Other studies have also confirmed that extended contact effects are mediated by reduced anxiety (Paolini, Hewstone, Cairns, & Voci, 2004; but cf. Eller, Abrams, & Zimmermann, 2011; Gómez et al., 2011), stronger in-group norms (De Tezanos-Pinto, Bratt, & Brown, 2010; Gómez et al., 2011), reduced threat and increased trust (Dhont & Van Hiel, 2011), and lower perceived ignorance about the out-group, greater awareness of more positive out-group behavior, and greater inclusion of the other in the self (Eller et al., 2011).

Vicarious Contact

The key distinction between extended and vicarious forms of contact is that vicarious contact typically involves *observing* an out-group member via some form of medium; sometimes the out-group member is interacting with an in-group member, and typically the out-group member is a stranger or even a fictional character. Much of this research is influenced by work on parasocial relationships with media figures; notably the tradition of work stemming from Horton and Wohl (1956). Within this tradition, relationships with media characters can be as "real" and influential in some people's lives as relationships with real people. Hence, intergroup contact with out-group media characters can mirror real contact with real out-group members. As elaborated below, some of the work is also informed by Bandura's (e.g., 2001) social cognitive theory.

Research Evidence of the Impact of Vicarious Contact. Vicarious contact has already been exploited by communication research. Mutz and Goldman's (2010) review shows that television, radio, and the Internet are primary sources of information for people's impressions of other social groups. Encounters with

portrayals of out-group members on television, sometimes termed *parasocial* contact (Schiappa, Gregg, & Hewes, 2005), can influence the attitudes of vast numbers of viewers, often without their conscious awareness. Allport himself (1954, pp. 200–202) noted the importance of the mass media in prejudice, but he did not expressly link it to the contact hypothesis. Schiappa et al. point out that people's parasocial contact with (some) out-groups may be much greater than their actual, or even extended contact. As such, one would expect the impact of parasocial contact to be greater in contexts where the opportunities for and actual contact with out-group members are lower (see section on moderators, below).

Schiappa, Gregg, and Hewes (2006) studied correlational responses to viewing of a television show with a prominent gay character. They reported a significant negative association between the level of prejudice towards gay men and viewing frequency. Additional experimental research tested whether people exposed to positive cross-group interactions in television programs would reveal more positive attitudes to the target out-group than participants not exposed to the programs. In three studies, Schiappa et al. (2005) investigated parasocial contact shown in three television programs (two involving viewing parasocial contact with gay men, and one involving parasocial contact with comedian and male transvestite Eddie Izzard). All three studies demonstrated that parasocial contact was associated with lower levels of prejudice.

These results were reinforced by Ortiz and Harwood (2007), who showed comparable effects for both gay–straight and Black–White interactions presented in two television programs. Ortiz and Harwood focus on the viewing of *intergroup relationships* (as opposed to just out-group characters). From a social cognitive theory perspective (Bandura, 2001), they suggest that viewing intergroup relationships allows for modeling (hence learning) of positive intergroup behavior. As such, exposure to a quality intergroup relationship should be more powerful in influencing attitudes than mere exposure to a positive portrayal of an out-group member. The social cognitive theory approach also has implications for moderators of the vicarious contact effect, as elaborated below.

While the preceding research on parasocial contact has involved television, a study by Paluck (2009) has demonstrated that radio too has potential for parasocial contact. In a year-long randomized field experiment in Rwanda she compared the effects of listening to a reconciliation program versus a health program. She showed the impact of norms and empathy experienced vicariously through characters in a peace-building radio soap opera designed by an NGO. Communities exposed to the reconciliation program showed changes in social norms and behaviors relating to trust and cooperation compared to communities who listened to a control radio soap opera.

Negative Effects of Media Exposure. In contrast to the relatively small body of work on positive media effects from contact theory, there is a substantial body of work that discusses *negative* effects of media on intergroup attitudes.

Very little of this work is framed from a contact theory perspective—again unsurprisingly given the primarily positive goals of contact theory. This research typically describes the media environment via systematic content analysis of group portrayals, demonstrating that the media show minority or low status groups stereotypically and negatively, or else fail to show these groups at all (Mastro, 2010). This work is complemented by either survey or experimental research demonstrating that exposure to negative portrayals has negative consequences for attitudes and behaviors concerning the out-group (Dixon, 2008).

This literature is large and unsuitable for review in the present context (see Mastro, 2010). However, it does complement trends in the contact literature such as an interest in the effects of negative contact (e.g., Paolini et al., 2010). It is consistent with a vicarious contact model (albeit the dark side of that model). The work also raises the intriguing possibility that the media may show in-group and out-group members working together cooperatively to engage in *antisocial* activities, which adds numerous complexities to understanding vicarious contact (Ortiz & Harwood, 2011). Globally, we advocate less mutual ignorance between research on contact and research on negative effects of media's group portrayals. Empirical and theoretical cross-fertilization across these areas would benefit all concerned (e.g., examining positive effects of positive portrayals, while minimizing negative effects using media literacy; Ramasubramanian, 2007). The content analytic side of this research draws attention to a major barrier in expecting mass mediated contact to have positive effects on attitudes. If media portrayals of social groups are largely negative, the most likely effects of exposure to such portrayals will be negative (Brown Givens & Monahan, 2005; Gerbner, Gross, Morgan, & Signorielli, 2002).

Selective Exposure and Perception. As already described, the traditional literature on intergroup contact has struggled to understand whether correlational data indicate effects of contact or selective *seeking* of contact. Similar issues are apparent in the media literature. Harwood (1997, 1999) has noted that people tend to seek out in-group portrayals and at times actively avoid out-group portrayals altogether (Abrams & Giles, 2007; Allen & Bielby, 1979); such preferences are driven by social identity concerns (Harwood & Roy, 2005). Hence, while potentially beneficial media portrayals may exist, we cannot force people to watch them. One means for overcoming this barrier is to diversify casts (e.g., shows with major characters of multiple ages tend to draw a more diverse audience in terms of age; Harwood, 1997). Interestingly, such shows would presumably also feature more portrayals of intergroup contact, a factor that might be meaningful from the social cognitive theory perspective described above as well as extended contact (Ortiz & Harwood, 2007).

Selective perception includes understanding when and for whom specific portrayals have specific effects. Vidmar and Rokeach's (1974) classic study demonstrates that a portrayal of a racist is understood as a parody mocking

racism by some viewers, but that highly prejudiced viewers identify with the racist character and have their attitudes reinforced. In other words, media consumers are creative beings who assign meaning to messages in ways that do not necessarily conform to senders' intent (Harwood & Roy, 2005). As such, we must examine media effects as the result of an interaction between content and active viewership based on initial attitudes as well as the many other reasons people have for seeking specific messages (Krcmar & Strizhakova, 2008).

Moderators of Vicarious Contact. Several studies showed an effect parallel to that found by Christ et al. (2010), whereby the impact of extended contact was moderated by the level of direct contact. In Schiappa et al. (2005, 2006) the impact of vicarious contact was stronger for respondents who reported low prior out-group contact. Ortiz and Harwood's (2007) research also provided evidence of moderators. First, and consistent with the authors' social cognitive theory account, contact effects were stronger when viewers identified with the in-group character involved in the intergroup contact (Cohen, 2001). For a straight viewer who identifies with a straight character on television, that straight character's friendship with a gay character will more strongly influence homophobia because the in-group (straight) character is more closely included in the self (Aron et al., 1991; Wright et al., 1997). There are clear links here to the idea underlying extended contact, that *observing* intergroup contact influences attitudes over and above *experiencing* contact. Indeed, some studies of vicarious contact effects frame the results explicitly as *extended* contact effects (Cameron & Rutland, 2006). Second, the effect of vicarious contact is stronger when the out-group character is perceived as more typical of the out-group (see also Joyce & Harwood, in press). This suggests that effects of group typicality operate in similar ways in mass communication and direct contact. Both effects were restricted to the gay-straight televised contact, and were not found for Black-White contact, possibly as a result of the specific television shows used in the study.

Mediators of Vicarious Contact. There has been little research on mediators of vicarious contact. However, Mazziotta, Mummendey, and Wright (2011) found a difference between *viewing* and merely knowing about a positive interaction between an in-group member and an out-group member, and that the two forms of contact involved different underlying processes. They found that vicarious contact had greater impact on attitudes than in control conditions, and that it impacted favorable attitudes via reduced uncertainty and greater feelings of self-efficacy for future interactions involving the self (see also Mallett & Wilson, 2010). Harwood and Vincze (2011) investigated the effects of consuming second-language media in a bilingual context. They found that effects on prejudice were differentially mediated by language-learning motivations, with integrative language learning motivations mediating a classic contact effect, but instrumental motivations not mediating. Integrative

motivations focus on learning language to feel more included in the culture and desiring out-group friends; instrumental motivations focus on needing to know the language for work or other instrumental tasks. Given the growth in multilingual media environments, people's use of nonnative language media, including the motivations they seek when using such media, should be a focus of future research (Harwood & Vincze, 2012).

Imagined Contact

Work on extended and vicarious contact demonstrates that the actual experience of contact with out-group members may not be necessary to improve intergroup attitudes. Turner, Crisp, and Lambert (2007) extended this idea still further. Based on work on the effects of mental imagery on social perception, these authors investigated whether simply imagining contact with out-group members could improve intergroup attitudes.

Research Evidence of the Impact of Imagined Contact. The earliest demonstration of an effect of imagined contact that we are aware of comes from Desforges et al. (1997), although their use of the technique was grounded in a desire for experimental control rather than developing a new paradigm for contact interventions. Their research, nonetheless, demonstrated that for an individual to merely imagine working with an out-group member (observed on a video screen) had positive effects. Turner, Crisp, and Lambert (2007) were the first to frame imagined contact as its own paradigm, and to demonstrate that participants who imagined talking to an out-group member showed lower levels of prejudice and viewed the out-group as more variable than did participants who were instructed to just think about an out-group member. Turner and colleagues' work also develops the early Desforges studies by using a pure "imagined" intervention rather than including a supplementary video or other stimuli.

The proponents of imagined contact do not claim that we can imagine away prejudice. Rather, noting that for some out-groups contact can be difficult to orchestrate, and may well involve an element of risk (Corrigan et al., 2002; Schulze & Angermeyer, 2003), Turner, Crisp, and colleagues have suggested that imagined intergroup contact can be *part of* a program for reducing intergroup bias; thus they see it as "an inexpensive and practical means of reducing intergroup anxiety and prejudice that would be useful even where direct contact is very limited" (Turner, Crisp, & Lambert, 2007, p. 439; see also Crisp, Stathi, Turner, & Husnu, 2008). A number of studies have found that imagined contact can reduce intergroup bias and improve both explicit and implicit out-group attitudes (Turner & Crisp, 2010; Turner, Crisp, & Lambert, 2007), enhance intentions to engage in future contact (Crisp & Turner, 2009, in press; Husnu & Crisp, 2010), and even improve attitudes about out-groups not featured in the imagined contact (Harwood, Paolini, Joyce, Rubin, & Arroyo, 2011; for review see Crisp, Husnu, Meleady, Stathi, & Turner, 2010).

Skeptical views and alternate approaches to this paradigm are provided by Bigler and Hughes (2010) and Honeycutt (2010). Honeycutt, in particular, describes links between this research and his more directly communication-related work on “imagined interactions.” Honeycutt’s work has not explicitly examined intergroup relations or intergroup contact effects, but integration of his imagined interaction work with imagined contact research has great potential. Honeycutt defines and operationalizes specific dimensions of imagined interactions which are immediately applicable to imagined contact. His dimension of “emotional valence” maps onto valence of contact; “discrepancy” connects to issues of whether imagined contact is representative of real world interaction; “variety” pertains to effects on perceived out-group heterogeneity; and “specificity” connects to assessments of vividness (Husnu & Crisp, 2010). In some cases, the two literatures are calling fundamentally similar concepts by different names, and in others the literatures are developing independent constructs that would mutually benefit one another.

Moderators of Imagined Contact. Stathi and Crisp (2008) are the only researchers, thus far, to have investigated conditions that might moderate the effectiveness of imagined contact. In their first study they found that an ethnic minority was more resistant to the benefits of imagined contact than an ethnic majority (Mestizos and Indigenous people, respectively, in Mexico). The weaker effect of imagined contact for the minority group parallels the pattern for direct contact (Pettigrew & Tropp, 2006; Tropp, 2003), and is consistent with the idea that minority groups tend to experience more anxiety at the thought of intergroup contact than do majorities (Plant & Devine, 2003). In their second experiment, Stathi and Crisp found that in-group identification also moderated the impact of imagined contact. For British students, effects of imagined contact with French students were stronger for participants who did not identify strongly with their national in-group.

Mediators of Imagined Contact. Consistent with the mediating effect of intergroup anxiety in direct contact and, albeit less consistently, extended contact, Turner, Crisp, and Lambert (2007, Study 3) found that intergroup anxiety mediated the impact of male heterosexual participants’ imagined contact with a gay man on their attitudes toward gay people. In a series of three studies on imagined contact with people with schizophrenia, West, Holmes, and Hewstone (2011) demonstrated that a neutral imagined contact task with such a target group can have negative effects, compared to a control condition, and that an enhanced form of imagined contact scenario must be used. When this is done, ensuring that imagined contact is positive, reduced intergroup anxiety mediates more positive attitudes, even toward this challenging group. West et al.’s analyses of participants’ descriptions of the imagined interactions in and across all three studies (something not done in previous studies) confirmed that positive and high quality imagined contact is important for reducing prejudice via lowered anxiety.

As the work of Crisp and colleagues has increasingly drawn on other techniques that involve imagery (e.g., therapeutic interventions for anxiety), they have added cognitive mediators to the original affective mediator of intergroup anxiety. Husnu and Crisp (2010, Expt. 2) explored British non-Muslim students' future contact intentions with Muslims. They reported evidence consistent with the existence of two routes from imagery to intentions: a cognitive (i.e., vividness) pathway and an affective (i.e., anxiety) pathway. The impact of imagined contact on behavioral intentions was mediated both by out-group attitudes (preceded by intergroup anxiety) and by the reported vividness of the imagined scenario (consistent with social cognitive research on script availability).

Finally, Crisp and Husnu (2011) found that imagining intergroup contact enhances script availability, that perceivers' metacognitive judgments as to their own tolerance reflect this availability, and these mediate future contact intentions. They also found that imagining intergroup contact from a third-person perspective (i.e., "see the event from an external viewpoint"), compared with a first-person perspective (i.e., "see the event through your own eyes"), enhanced future contact intentions. These authors theorized that imagining contact from a third-person perspective would enhance future contact intentions because it places the (imaginary) spotlight on the self, making a dispositional attribution more likely. Analyses confirmed that the impact on intentions of taking a third-person perspective in the imagined contact task was mediated by the extent to which participants' attributed to themselves a positive orientation toward out-group contact.

Computer-Mediated Contact

Amichai-Hamburger and McKenna (2006) categorize the major challenges in organizing direct face-to-face contact in terms of practicality, anxiety, and generalization. They note that Internet contact ameliorates these problems. *Practicality* refers to the logistical problems encountered when organizing face-to-face contact between rival groups which fulfills all the contact prerequisites, including those prior to the meeting (Pettigrew, 1971; Trew, 1986). Contact over the Internet is far less costly in terms of time, travel, and accommodation than direct contact. It streamlines difficulties in scheduling, and by design provides a "neutral place" in which to hold the encounters. Virtual workgroups show that collaboration through the Internet has proved to be an effective tool worldwide in developing cooperation toward superordinate goals (Spears, Postmes, Lea, & Wolbert, 2002). *Anxiety* has already been discussed, including its tendency to exacerbate stereotype use (Stephan & Stephan, 1985). Online, participants have more control over how they present themselves and their views (e.g., being able to edit comments before presenting them), and presumably feel less threatened by a nonpresent interlocutor, all of which should reduce anxiety (Amichai-Hamburger, 2005). *Generalization* refers to the fact that while many face-to-face contacts are successful on the interpersonal level,

participants do not necessarily change their stereotyped view of the out-group as a whole (Hamburger 1994; Hewstone & Brown, 1986). Online, one can quite easily manipulate the degree of individual versus group salience in a given contact situation to achieve a positive generalization from the intergroup contact (Thompson & Nadler, 2002).

Research Evidence of Computer-Mediated Contact Effects. The use of the Internet in improving intergroup conflict is in its early stages, with much of the focus on Israel and its Arab neighbors. An important example is found in the work of McKenna, Samuel-Azran, and Sutton-Balaban (2009). They opened a blog in which representatives of different communities in the Middle East wrote articles discussing political and cultural issues, and readers commented on the articles. An ethnography of 18 months of activity on the blog showed little impact. This was explained by three factors: fear, insecurity about communicating in English, and an unwillingness to interact with the enemy. There were, however, some examples of shifts in perception among participants from rival sides toward commonly held values, goals, and worldviews, indicating the potential of the medium. In this case the process of change was difficult to measure because there was no examination of the number and the staying power of participants, and it appears that the majority of contributors “came and went.”

Mollov (2006) discusses an e-mail-based dialogue between Israeli-Jewish and Palestinian students focusing on the religious practices of Jews and Muslims. Jews and Arabs were paired up and instructed to introduce themselves and describe a Muslim or Jewish holiday, after which they discussed the topic further. Most exchanges were friendly and included significant amounts of information concerning the religious culture of the two holidays. Questionnaires run prior to and following the dialogue revealed an increase in the knowledge of both the Jewish and Palestinian participants concerning the festivities of the two religions, but no change in the mutual perceptions of the two groups. This was attributed to the fact that participants from both groups had held very positive perceptions of the other side *prior to* the dialogue encounter. The project also took place during the year 2000, when the Oslo peace accords were believed to hold great promise for peace.

As is discussed elsewhere in this review, the extent to which people selectively seek contact is apparent in some of this research on computer-mediated contact. This literature is challenged to account for such selective seeking, and to examine ways in which computer-mediated contact can be effectively and meaningfully implemented for those who would not otherwise seek it.

Hoter, Shonfeld, and Ganayem (2009) have been conducting Internet-based courses designed for Arab students, religious and secular Jewish students in nine colleges of education in Israel. Hoter et al. report using the contact hypothesis framework to maximize the effectiveness of the Internet-based contacts they organized. Throughout the project, students were required to record their thoughts on blogs, which were later analyzed by the researchers. At the end

of the course, satisfaction levels of the participants were assessed. The last meeting between the students was held as an offline, face-to-face encounter, in which students discussed their experience of the project; this encounter was recorded and reviewed by the organizers. Participants expressed interest in learning about different cultures and religions, and reported high levels of satisfaction.

In November 1999, the Departments of Education in Northern Ireland and the Republic of Ireland established The Dissolving Boundaries project. Its aim was to use Information Communications Technology (ICT) to link schools across the political borders within Ireland (Austin, Abbot, Mulkeen, & Metcalfe, 2003). The objectives of the Dissolving Boundaries project are to use ICT to facilitate valuable curricular work between schools and through a collaborative educational program to increase mutual understanding. The contact hypothesis is used as the theoretical background for the entire project. In the 2003 report, pupils commented explicitly on increased cultural awareness emerging through the project. In response to a question about whether the exchange of information in an online student café had helped them develop friendships, 86% of primary-school aged pupils agreed with this as compared to only 34% of the older students. Austin and Anderson (2008a), reporting on the continuation of the Dissolving Boundaries project, state that 68% of teachers interviewed rated the impact of the program on "North-South understanding" as either "very significant" or "significant," with that number increasing to 75% among primary school teachers. The success of the project is gradual and steady with increasing numbers of schools and upwards of 5,000 children taking part (Austin & Anderson, 2008b).

These studies serve to illustrate that online contact between groups can help to reduce intergroup conflict. The studies differ significantly as to how much they adhere to the stipulations of the contact hypothesis (Amir, 1969). Amichai-Hamburger (2008a) advocated a more structured and supervised intergroup contact. He notes that two of the main obstacles to successful online contact are flaming and lack of commitment. To avoid flaming, he advocates a careful process of choosing the people to participate in the contact and a signed commitment from participants to behave appropriately. The contact itself should be carefully supervised by a social psychologist who places special emphasis on proper conduct. To enhance commitment and motivation, organizers should ensure that the vision of the intergroup contact is a frequent topic of discussion for each group. The group leaders should encourage participants to get actively involved in the online session, rather than observing it from the side. The leader should give group members frequent feedback on their level of involvement in the contact.

Amichai-Hamburger (2008b) advocates supplementary online intergroup contact when face-to-face contact sessions are held infrequently (e.g., due to busy schedules). This is important because there is a danger that the results of successful contact may be lost if the positive dynamic is not maintained. Amichai-Hamburger (2008a) emphasized the importance of the use of a

significant superordinate goal. This joint goal should be designed to exploit the special components of the Internet, enabling users to participate in projects across the world without moving out of their own environments (e.g., the task group volunteering in a socially important assignment such as building an AIDS awareness website). The superordinate goal would be chosen according to the abilities and wishes of both groups. Such a project helps to break the us vs. them mindset and allows people to learn about cross-cutting categories and common in-group identities in the setting (Gaertner & Dovidio, 2000). Another component that can lead to the success of the encounter is a "cultural databank." Before actual contact, each group describes its own culture, art, history, and customs, in writing online. This provides a unique firsthand source of information that can help the out-group to prepare more effectively for the contact, and can also be used in real time during contact to avoid cultural misunderstandings (Amichai-Hamburger, 2008a).

As discussed in detail elsewhere (Amichai-Hamburger & Furnham, 2006; Amichai-Hamburger & McKenna, 2006; Harwood, 2010; Walther, 2009), computer-mediated contact offers a productive first step in a continuum of graded contact. As participants become comfortable with contact on the Internet, they can move slowly toward face-to-face contact via stages of increasing media richness and interactivity (e.g., from text, to text with images, to online video and audio, to direct contact). This approach has been supported by the work of McKenna and colleagues (Bargh, McKenna, & Fitzimmons, 2002; McKenna, Green, & Gleason, 2002). They found that people who participate in graded contact like one another more than if they had begun their interaction in person, and experience greater liking and kinship when a face-to-face meeting does take place.

An additional benefit of the online context is that the environment can be designed to address the specific profile of prejudice within the specific intergroup context. Prejudice against different groups may be based on different types of negative affect (e.g., anger, fear, guilt, envy, or disgust: Cottrell & Neuberg, 2005; Glick, 2002; Mackie & Smith, 2002). These emotions yield different kinds of discrimination against the out-group (e.g., prejudice based on fear causes defensive protection of in-group status; Neuberg & Cottrell, 2002). Attempts to reduce prejudice must tackle the relevant affect (e.g., by analyzing its sources and ensuring that the data bank addresses them explicitly, and that the relevant information is conveyed to the out-group). It is evident that, compared with direct contact and other forms of indirect contact, computer-mediated contact is still in its infancy. There are, as yet, no studies identifying moderators and mediators of contact in this form, and this is an important area for future research.

Summary of Research on Indirect Contact and an Integrative Framework

A wide variety of forms of indirect contact exist, each of which lacks certain elements of face-to-face contact (e.g., access to nonverbal cues, personal

involvement, a real interlocutor). However, each has specific advantages (e.g., reduced anxiety, asynchronicity, logistical ease). All show promise as routes to reduce prejudice that complement (while not necessarily replacing) face-to-face contact.

In an attempt to synthesize work across various direct and indirect contact literatures into a single framework, Harwood (2010) describes the “contact space.” The space is defined by two dimensions, broadly recognizing (a) the degree to which the self is *directly* involved in the contact, and (b) the *richness* of the self’s experience of the out-group. The first dimension distinguishes, for instance, direct contact and mediated interpersonal contact (both of which feature the self interacting in some way with an out-group member) from experiences in which the self is an observer (e.g., seeing intergroup contact in the media, or having an in-group friend who has an out-group friend). The second dimension draws on the concept of “richness”—the extent to which the experience of the out-group features multiple cues conveyed through multiple channels (Daft & Lengel, 1984). This dimension distinguishes instances in which someone has a rich experience of an out-group member (e.g., by talking with them face-to-face, or seeing them engage in interactions in the immediate social space) from more impoverished experiences of the out-group (e.g., computer-mediated contact, or merely hearing about intergroup contact). Following our discussion of extended contact, this dimension distinguishes between “knowing about” and “observing” a friend having an out-group friend, a distinction downplayed in the current literature.

Harwood (2010) argues that not only is the contact experience different across the contact space, but that the mediators and moderators of contact vary across the space. For example, the mediating effects of perceived *norms* for intergroup contact are hypothesized to be stronger when the self’s involvement in contact is low—seeing other members of the in-group engaging in contact should enhance perceptions that contact is normative more than self engaging in contact; other people’s behavior is more central to norms. Harwood also attends to the variety of communicative experiences across the contact space. For instance, he notes that communication *about* contact will be particularly influential in situations where both richness and personal involvement are low. In such contexts, we rely on second-hand accounts of contact (the “knowing about” aspect of extended contact), and as such, what is said *about* contact deserves attention (see van Dijk, 1987). Stewart, Pitts, and Osborne (2011) elaborate on this notion, demonstrating the ways in which the media build group associations using language (e.g., “illegal immigrants” and “Latino immigrants”), and that such descriptions build expectations for negative intergroup contact experiences. More research is required to examine the validity of some of these claims; however, it is clear that contact can occur in many different ways, and that integrative frameworks for this area are required.

What Can Contact Change? Dependent Variables in Intergroup Contact Research

The general aim of contact interventions is to reduce prejudice and improve intergroup relations. Early work on intergroup contact focused primarily on cognitive (e.g., stereotypes) and affective aspects of prejudice, generally finding greater effects on affect than cognition (Tropp & Pettigrew, 2005b). Recent work goes beyond assessing prejudice per se, and examines the effects of contact on attitude strength, implicit associations with out-groups, attitudes toward out-groups not involved in the contact situation, physiological reactions to the out-group, and indices of intergroup reconciliation in settings of conflict.

Attitude Strength

Research shows that *strong* attitudes (attitudes that are held with greater certainty, are more important, more accessible in memory, less ambivalent) are more stable over time, more resistant to change, more likely to influence information processing, and more likely to guide behavior (Krosnick & Petty, 1995). Vonofakou, Hewstone, and Voci (2007) demonstrated that contact with out-group friends was associated with self-reported meta-attitudinally stronger out-group attitudes and more accessible out-group attitudes (derived from a computer-based response-latency procedure). The authors also showed that the effects of contact on attitude strength were mediated by reduced anxiety, showing the broad influence of intergroup anxiety in shaping out-group attitudes. Christ et al. (2010) confirmed, with longitudinal survey data, effects of both direct and extended contact on meta-attitudinal measures of attitude strength.

Implicit Associations

As noted above, studies have explored the effects of contact on implicit bias, resolving any doubts about contact research being overly reliant on self-report measures (Hewstone, Judd, & Sharp, 2011, also show that observer reports validate self-reports of direct contact). Turner, Hewstone, and Voci (2007) found that opportunities for contact with South Asians (e.g., living in mixed neighborhoods, going to mixed schools), but not the number of South Asian friends, predicted more positive implicit associations with the out-group among White British students. The fact that implicit bias was influenced by nonevaluative contact measures rather than evaluative measures, bypassing relevant mediating variables (e.g., anxiety, which predicted explicit attitudes), suggests that the effect on implicit measures may be explained by familiarity with the out-group (see Tam et al., 2006, reported above; but there is also some evidence for mediated effects of contact on implicit measures, see Prestwich, Kenworthy, Wilson, & Kwan-Tat, 2008). Moreover, Aberson and Haag (2007) found that

quantity and quality of contact interacted to predict implicit attitudes, indicating that the nature of the environmental associations matters; that is, whether associations or experiences are mostly positive or negative.

“Secondary Transfer Effects” of Intergroup Contact

The potential of contact would be even greater *if* it could be shown that contact effects generalize from experience with one out-group to attitudes toward *other* out-groups (e.g., positive contact between Catholics and Protestants in Northern Ireland generalizes to positive attitudes toward ethnic minorities; Tausch et al., 2010). Far-reaching, or wildly optimistic as this sounds, it is, in fact, the case. Pettigrew (1997, 2009) demonstrated that respondents with an out-group friend from one minority group were more accepting of other out-groups, even groups that were not present in their country (Galinsky & Moskowitz, 2000; Van Laar, Levin, Sinclair, & Sidanius, 2005). Tausch et al. (2010) reported the most extensive, including longitudinal evidence to date, for three phenomena: (a) that secondary-transfer effects occur via a process of attitude generalization (i.e., from attitude towards primary out-group to attitude toward secondary out-group), rather than change of in-group attitude; (b) that they occur while controlling for direct contact with the secondary out-groups; and (c) that they cannot be explained in terms of socially desirable responding. Harwood et al. (2011) demonstrated that secondary transfer effects can also emerge from an experimental manipulation of imagined contact. Their work demonstrates that secondary transfer is strongest to groups that are more similar to the target group.

Physiological Reactions to Out-Group Members

Recent research has explored the physiological responses and neural substrates involved in evaluations of, and responses to, out-groups as a function of contact. This work demonstrated that contact is associated with reduced automatic physiological threat responses to out-group members. For example, Blascovich, Mendes, Hunter, Lickel, and Kowai-Bell (2001) showed that participants with more interracial contact exhibited reduced physiological threat reactions (i.e., responses of the autonomic system like sweating and increased heart rate) during interracial interactions; and Page-Gould, Mendoza-Denton, and Tropp (2008) found that induced cross-group friendships between Latinos/Latinas and Whites led to decreases in cortisol reactivity during intergroup contact.

Findings also suggest that contact can moderate the neural processing of faces of other races. Measuring event-related potentials, Walker, Silvert, Hewstone, and Nobre (2008) showed that differences in Whites' processing of their own vs. other-race faces were reduced with increased self-reported out-group contact, demonstrating the malleability of internal neural responses through external social experiences such as intergroup contact.

Trust and Forgiveness

Research on conflict resolution has stressed the importance of intergroup trust and forgiveness as markers of intergroup reconciliation. Trust facilitates the achievement of mutually beneficial outcomes during negotiations, making it a key concept for research on peace building (Kramer & Carnevale, 2001). Forgiveness, on the other hand, is an emotional state that permits the relationship between the conflicting parties to move forward after a transgression (Cairns, Tam, Hewstone, & Niens, 2005). Studies show that intergroup contact is associated with greater trust and forgiveness, even among respondents who have personally been affected by intergroup violence (e.g., those deeply affected by years of ethnopolitical violence in Northern Ireland; Hewstone, Cairns, Voci, Hamberger, & Niens, 2006; Tam et al., 2007).

An Agenda for Communication Research on Intergroup Contact

The careful reader of our chapter, thus far, may be forgiven for thinking, “Well, these guys have learned a lot about how and when different forms of contact affect prejudice, but I don’t seem to have learned much about what happens when members of groups actually interact.” This is fair comment. Most social-psychological research, to date, focuses on cognition and affect, and we are all aware just how complex the study of ongoing social interaction can be. We believe that communication scholars can contribute massively to the next wave of contact research on face-to-face interactions between members of different groups. Social psychologists have laid down some markers at least and identified some processes that are likely to be very influential.

Much of our knowledge here comes from the impressive research of three scholars, Shelton, Richeson, and Vorauer (e.g., Shelton & Richeson, 2006; Shelton, Richeson, & Vorauer, 2006), whose approach is founded on taking a relational approach to cross-group social interaction, and to studying metaperceptions. From a relational perspective, researchers should not only ask participants to evaluate an out-group “target,” but also to think about “how the out-group ‘target’ is likely to evaluate them.” This way of studying interracial interactions focuses on the consequences that individuals’ beliefs have for their own and their partner’s experiences during the interaction.

In metaperception research the focus is, then, on individuals’ perceptions of, and feelings about, how others view them (e.g., Whites’ perceptions of Blacks’ beliefs about Whites: Vorauer & Kumhyr, 2001). Various theoretical approaches— including symbolic interaction theory, attachment theory, and self-verification theory—suggest that individuals do give considerable thought to understanding others’ reactions to them (Vorauer, in press). For example, Vorauer, Hunter, Main, and Roy (2000) found that when Whites imagined (Study 1) or anticipated (Study 2) having an interaction with a First Nations (Native American) person, these metastereotypes (i.e., prejudiced, selfish, closed-minded) were activated, as measured by a word fragment completion

task and a lexical decision-making task. Research on metaperceptions suggests that the context of an interracial interaction often activates concerns about being judged negatively in both Whites and ethnic minorities.

In the United States, Whites are often concerned with appearing prejudiced (e.g., Dunton & Fazio, 1997; Monin & Miller, 2001; Plant & Devine, 1998), while ethnic minorities are often concerned with being treated negatively because of prejudice during interracial interactions (Crocker, Major, & Steele, 1998; Major, Quinton, & McCoy, 2002; Miller & Myers, 1998). A key contribution of Richeson, Shelton, and Vorauer's research has been to explore how these metaperceptions influence individuals' choosing to avoid interacting with out-group members. Shelton and Richeson (2005, Study 1) showed that Whites and ethnic minorities believe they, as well as their in-group, are more interested in engaging in interracial contact than out-group members are. Both racial groups perceived that they wanted to have more out-group friends and interracial contact than the average out-group student. For example, Whites reported that they wanted to have more contact with Blacks, but that Blacks did not want to have more contact with them.

Shelton and Richeson (2005, Studies 3–5) also examined the extent to which Whites and Blacks make divergent attributions about their own and an out-group member's explanation for avoiding interracial interactions. They predicted that explanations for one's own failure to initiate interracial contact would be grounded in concerns of being rejected because of race, whereas explanations of out-group members' failure to initiate contact would be based in a lack of interest. Results showed that both racial groups believed different psychological states underpinned their own and the out-group members' motivations for not initiating interracial contact. Specifically, Whites and Blacks indicated that fear of rejection because of their race would be a more likely explanation for their own inaction than for the out-group members' inaction. Conversely, both Whites and Blacks indicated that lack of interest would be a more likely explanation for the out-group members' inaction than for their own.

Based on this relational approach, research is increasingly examining minorities' reactions to and impressions of members of majority groups, and vice versa, during intergroup interactions (e.g., Conley, Devine, Rabow, & Evett, 2002; Page-Gould et al., 2008; Pearson et al., 2008; Vorauer & Kumhyr, 2001). A recent review notes that, over the past decade, researchers have focused on physiological (e.g., Page-Gould et al., 2008), behavioral (e.g., Dovidio et al., 2002; Trawalter & Richeson, 2008), cognitive (e.g., Richeson & Trawalter, 2005), and affective (e.g., Pearson et al., 2008) dynamics of intergroup interactions (Richeson & Shelton, 2010). We cannot do justice, here, to the wealth of these researchers' programs, but let us focus on one aspect: the emphasis on affect and arousal (paralleling findings we have reported for anxiety).

Shelton and Richeson propose that affective reactions, such as anxiety, are particularly likely to "leak out" through nonverbal and paraverbal channels.

Consistent with this reasoning, majority-group or nonstigmatized individuals display more nonverbal signs of anxiety and discomfort (e.g., excessive blinking) during intergroup, compared with intragroup, interactions (Dovidio et al., 1997; Trawalter & Richeson, 2008). The display of fewer affiliative behaviors (e.g., nodding, direct eye gaze) during intergroup relative to intragroup interactions may be due to increased negative arousal, not negative attitudes. Specifically, Shelton and Richeson note that interracial interactions can trigger a state of physiological arousal that impedes the fluid behaviors that encourage positive conversation (Mendes, Blascovich, Hunter, Lickel, & Jost, 2007).

It is not easy to overcome these unwanted effects, least of all by trying to. In fact, trying to respond without prejudice can result in paradoxical behavioral outcomes. Richeson et al. (2003), using a sophisticated mix of psychological and neuroscience techniques, reported that Whites who interacted with a Black experimenter showed short-term resource depletion due to temporary negative effects on executive function. The effort required to control the expression of bias during intergroup interactions is cognitively demanding (Richeson & Trawalter, 2005), and, as a consequence, can make individuals behave in ways that are the opposite of how they intend to behave (Apfelbaum, Sommers, & Norton, 2008). For example, Shelton et al. (2006) studied interactions in which Whites discussed race-related topics with a Black partner, hence activating Whites' concerns about appearing prejudiced. In these circumstances, Whites with higher levels of implicit racial bias were rated more engaged (as judged by their interaction partners) than were Whites with lower levels of implicit racial bias. Likewise, avoiding mention of race in interaction (so as to appear nonprejudiced) can backfire and make Whites appear more prejudiced (Apfelbaum et al., 2008).

Building upon this impressive body of findings, we suggest that future work on communication and intergroup contact be organized around three primary themes: content, sequencing, and integrating work on different types of contact.

Content

Broadly, one prerequisite for effective contact is that it be positive. This is obviously an overly broad concept, but retaining it as a touchstone is important. In situations involving intergroup tensions, the *risks* involved in negative contact are substantial in both the short and long term. Many communication variables contribute to this—some already discussed include self-disclosure and accommodative behaviors. Others also deserve more detailed examination in both face-to-face contact and other forms (e.g., virtual contact, which has advantages concerning the storage of data and control of nontextual features of interaction). Using another person's name to address them directly, for example, is a simple communication phenomenon that reveals personal interest and a positive attitude (Li, 1997), but it has not (to our knowledge) been examined as a process variable in contact studies. More sophisticated means

exist for examining the content of language and could be used productively. For instance, text analysis software can tap such phenomena as expressions of positive or negative affect (including differentiating anger, sadness, and anxiety), as well as assessing relevant phenomena such as inclusive/exclusive language and use of first person plural pronouns (*we, us*; e.g., Pennebaker & Stone, 2003).

Nonverbal communication has not always received the attention it deserves in this arena. Beyond subtle leakage behaviors described earlier, more basic nonverbal immediacy behaviors offer routes to effective communication (e.g., smiling, forward lean, nodding, open body posture; Dovidio, Kawakami, & Gaertner, 2002). When examining face-to-face contact, such behaviors deserve more attention than they have received. Smiling, for instance, not only generates positive affect in the partner, but also may serve to improve the emotional state of the speaker via intrapersonal self-perception processes (Schnall & Laird, 2003). As part of a broad call to examine communication in contact, we suggest these as manageable and critical areas to provide insight into what goes on during contact.

The social cognitive theory perspective on vicarious contact initially presented by Ortiz and Harwood (2007) has interesting implications for the types of media portrayals that should be the focus of future research on media content and effects. If portrayals of intergroup relationships are important, then we should pay particular attention to such portrayals, examining (at least) the dyadic level of analysis—the majority of current work examining media portrayals focuses on individual characters as the unit of analysis. Research should also contrast intergroup and intragroup portrayals of relationships for characteristics such as intimacy, conflict management, and group salience. Given the extensive evidence that group salience is critical for generalization (Brown & Hewstone, 2005), examinations of media content should also examine how intergroup dyads in the media maintain positive relationships while also demonstrating group salience. For example, in the sitcom *Modern Family* (on the U.S. ABC network), Jay and Gloria are a married couple. Jay is Anglo and Gloria is Hispanic. Gloria's ethnicity is apparent from her marked Spanish accent and frequent plot devices centering on her Colombian heritage. This portrayal should facilitate greater attitude change about Hispanics among Anglo viewers than might be the case either with a less group-salient Hispanic portrayal, or with a character who lacked a close relationship with an Anglo character. A focus on group salience also raises challenges in terms of understanding the subtleties of portrayals, including negotiating the line between group salience and parody (e.g., Gloria's accent and mannerisms may cross the line into reinforcing stereotypes about Latinas).

Sequencing

In a seminal piece, Pettigrew (1998) outlines an ideal order for the development of constructive and positive intergroup relationships. He argues that such

relations need to be first personalized, and that later in the relationship elements of group salience and “deeper” issues can be introduced. We would argue that such sequencing notions can be effectively translated to the level of individual interactions. Initial exchanges in any interaction are likely to be influenced by some of the basic affective issues described above—maintaining a positive tone, establishing liking, and identification with the other person. Effective intergroup contact requires establishing this common ground on a microlevel in order to “proceed.” Once a positive “base” has been established, however, the most promising interactions will grow in group salience (with its attendant potential for generalization). As has been discussed elsewhere (Paolini et al., 2010), the challenge of balancing group salience and positivity in interaction is a critical one in fully capitalizing on the promise of contact. We suggest that translating Pettigrew’s ideas to the microinteractional level offers similar pathways to effective contact: first positivity, then salience. We know of no work that has examined the sequential pattern of intergroup encounters to understand whether the same elements in different order have differential effects. Examining such questions in the context of vicarious or imagined contact would probably be a useful first step in such investigations.

Integrating Work on Different Types of Contact

As described above, recent work on intergroup contact has massively expanded the types of contact being investigated. Most research continues to investigate these types of contact in isolation. Even researchers who look at different types of contact tend to do so in different studies: the primary exception to this rule is researchers in the area of virtual contact who do often compare (or pair) their manipulations with traditional face-to-face conditions. As this work develops, there is a pressing need to establish paradigms wherein types of contact can be compared within a single design. The challenges here are substantial, but such work is the best way to examine whether moderators and mediators differ in their efficacy across types of contact, whether certain types of contact are better suited to specific intergroup contexts, and the like (Harwood, 2010). The challenges are not insurmountable, and Ioannou, Hewstone, Al Ramiah, and Psaltis (2011) have already conducted a series of studies comparing direct, extended, and imagined contact within the same experimental paradigm. Likewise, it would be relatively straightforward to compare a specific media stimulus (e.g., a television show) against an “imagined” contact condition in which the instructions mirror the content of the television show.

There is also tremendous scope for work looking at interactions between various types of contact. Paluck (2010) provides a very interesting illustration of such work, showing how conversations stimulated by a radio talk-show influence attitudes in an extremely tense intergroup context (Democratic Republic of Congo). This work integrates ideas from contact theory with core communication theory (e.g., two-step flow models; Katz & Lazarsfeld, 1955). Similar integrative ideas are apparent in suggestions that specific (generally

indirect) forms of contact may serve as gateways or pathways for entry into more direct contact (e.g., Amichai-Hamburger & McKenna, 2006; Crisp & Turner, 2009; Harwood, 2010; Turner, Hewstone, Voci, Paolini, et al., 2007b).

Conclusion

The promise of intergroup contact theory has been fulfilled in many ways. The volume of work produced has demonstrated conclusively that contact works. However, numerous exciting challenges remain for the field. The story is far from told on how we maximize the possibilities for positive outcomes and minimize potential negative effects of contact. Clearly not all contact is positive, and being able to predict when and where contact effects might backfire merits attention. We are also only in the early stages of examining the massive array of *types* of contact, and both theory and data are required to make sense of what even “counts” as contact, how the contact experience differs across such diverse experiences, and how different types of contact can best be used in a temporal sequence. Finally, we are only just beginning to learn what occurs *during* intergroup contact. How do the microdynamics of a contact experience tie into the broader psychological and sociological phenomena that surround it and emerge from it? These are questions that communication scholars are uniquely equipped to answer, and that should be at the core of a subdiscipline of intergroup communication (Giles, Reid, & Harwood, 2010).

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