Intergroup Contact in Deliberative Contexts:  
Evidence From Three Deliberative Polls

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Literature on the contact hypothesis is likely to be one of the most extensive bodies of work in the social sciences. As a theory that grew out of changing historical conditions (e.g., Pettigrew, 1998), it spans more than half a century of systematic investigation into the effects of contact on prejudice (Allport, 1954; Brewer & Miller, 1984; Brophy, 1946; Cook, 1969, Deutsch & Collins, 1951; Hewstone & Brown, 1986; Pettigrew, 1971, 1997; Pettigrew & Tropp, 2006; Sigelman & Welch, 1993; van Dick et al., 2004; Williams, 1947).

The theory on intergroup contact puts forth a simple, testable proposition. In a foundational book on the subject, Allport (1954) postulated that contact between groups under optimal conditions would reduce intergroup prejudice. Allport (1954) specified four conditions: equal status within the situation, common goals and goal-oriented effort, intergroup cooperation (lack of competition), and institutional or normative support. Various studies lent empirical support for the hypothesis, some even in cases where the situational conditions were not fully present (e.g., Sigelman & Welch, 1993), and others after specifying further conditions that were thought to be crucial (e.g., Ben-Ari & Amir, 1986; Cook, 1978). Theoretical developments to the hypothesis have also been crucial (see Brown & Hewstone, 2005, for a review). Overall, the hypothesized effect has proven to be robust across a variety of contexts (e.g., schools, housing projects, work place, armed services, etc), a wide range of minority groups (e.g., racial minorities, disabled children, the homeless, etc), and different research methodologies (see Pettigrew & Tropp, 2006).

This paper contributes to the impressive collection of empirical research on intergroup contact in two ways. First, the effect of contact is assessed in a deliberative setting where the properties of the intergroup interaction are different. Research on intergroup contact effects has
mainly looked at situations that afforded friendship potential (Pettigrew, 1998). However, deliberation contexts, especially those that do not last for a long time (e.g., Deliberative Polls, juries), are somewhat limited in this respect. I tested the predictions of intergroup contact theory in these peculiar, short-term interaction opportunities across three Deliberative Polls in Australia, Bulgaria, and Northern Ireland. Second, responding to the call for clarifying the mechanisms of contact effects (Pettigrew, 2008), several mediators were examined, namely, knowledge about the outgroup, perspective taking, argument repertoire, and openness to difference. The implications for intergroup contact in deliberation settings are discussed in light of the three studies in this paper.

**The Effect of Intergroup Contact on Attitudes Toward the Outgroup**

In an extensive review article on intergroup contact theory, the authors wrote:

“All although some scholars highlighted inconsistent results, the failure to generalize, difficulties of fulfilling an increasingly long list of apparently necessary conditions, and the real-world impact of the Contact Hypothesis (see Forbes, 1997; Hewstone & Brown, 1986; Stephan, 1987), there is now little doubt that its core propositions have received substantial empirical support.” (Brown & Hewstone, 2005, p.259)

A recent meta-analysis confirmed this assessment. In an impressive meta-analysis of 526 published and unpublished papers from 38 different countries involving over 250,000 participants, Pettigrew and Tropp (2006) found an average effect size of $r = -.22$. They noted that 94% of the sample showed an effect in the hypothesized direction, and more rigorous studies yielded higher mean effect sizes.

Pettigrew and Tropp’s (2006) meta-analysis included studies based on various methodologies, but the main “prototype” was survey research that used retrospective reports of contact with the outgroup. The authors report that these studies constituted 71% of the studies compiled for the meta-analysis (Pettigrew & Tropp, 2006). Studies based on cross-sectional survey data inevitably run into problems of causal interpretation: does contact produce positive
assessments of the outgroup or do people with negative outgroup attitudes generally avoid contact with members of the group? Several methods have been used to get around the problem of causality (for a discussion of these methods see Brown & Hewstone, 2005; Pettigrew, 1998). These include sophisticated statistical modeling (e.g., nonrecursive structural equation modeling that compares both directions of causality), longitudinal designs (e.g., Levin, van Laar, & Sidanius, 2003) and focusing on situations in which participants have limited choice regarding contact (e.g, Deutsch & Collins, 1951). Studies that implemented these methods revealed that the causal path from contact to outgroup attitudes is reliably strong, and stronger than the path suggesting selection bias (e.g., Pettigrew, 1997; van Dick et al., 2004). Results from experimental studies (e.g., Brown, Vivian, & Hewstone, 1999, Study 1; Maras & Brown, 1996) and analysis on the subset of studies that limited selection potential (e.g., Pettigrew & Tropp, 2006) give further grounding for postulating an effect of contact on improved intergroup attitudes.

Based on extensive evidence of the effects of contact on intergroup attitudes, it was hypothesized that:

**H1**: Frequency of prior contact with the outgroup will be correlated with greater support for integrative policies.

**Contact in Deliberative Contexts: Challenges and Promises**

Contact effects have typically been examined in situations that allow for the development of affective ties. Pettigrew (1998) noted that intergroup contact requires time for friendships to develop, thus short-term intergroup contact is only minimally effective. The importance of friendship opportunities through contact has been reflected in the choice of measurement of contact as the independent variable. Studies that assessed contact effects through surveys, for instance, typically asked about contact with outgroup members as friends, coworkers, and
neighbors (e.g., Henry & Hardin, 2006; Levin et al., 2003; Paolini, Hewstone, Cirns, & Voci, 2004; Pettigrew, 1997).

But could contact produce positive outgroup outcomes in a short-term deliberative setting, such as zero-history discussion groups or juries? Though there are deliberative forums that invite long-term participation and interaction with fellow citizens, many others organize a random group of citizens for a relatively short period of time (e.g., Brunell, Dave, & Morgan, 2009). More importantly, deliberative forums are organized to carry out a particular task – to arrive at a verdict, to discuss issues of public concern, etc – and the dynamics of this situation may hamper the development of affective ties. To the extent that affective mechanisms are central to bringing about positive change (e.g., Pettigrew, 1997, 1998; Pettigrew & Tropp, 2008), it is uncertain whether deliberative contexts offer authentic opportunities for contact.

At the same time, the cognitively driven character of deliberation is what makes it distinctive and powerful compared to everyday conversations (e.g., Habermas, 1962/1989). The intuitive appeal of deliberation comes, arguably, from an emphasis on public reason and a concern for the common good, as they contrast sharply with views that atomize the public as individual persons with nonnegotiable interests (e.g., Schumpeter’s aggregative model). Conceptions of public reason differ to some degree but they can be generally described as a reason-giving requirement: “citizens and their representatives are expected to justify the laws they would impose on one another by giving reasons for their political claims and responding to others’ reasons in return” (Thompson, 2008). The process of justification requires citizens to go beyond self-interests and adopt a publically oriented mindset, creating a highly advantageous environment for intergroup contact.
Additional to the emphasis on reason-giving and public-mindedness, several structural properties of well-designed deliberation contexts are notable for intergroup contact. First, good deliberative forums strive to ensure equality among participants (Benhabib, 1996; Cohen, 1997). Deliberating parties need to be “fundamentally and substantively equal” in an ideal deliberation (Cohen, 1997), so they have an equal chance for influence. Second, the purpose of deliberation is to deal with problems of collective concern (Habermas, 1962/1989). The participants are asked to “think through the issues together” (Fishkin, 1995), to discuss matters that have important consequences. Third, deliberative interventions often occur under the auspices of formal organizations (e.g., the Courts, government, public agencies, etc), with great attention directed to the deliberating parties and their decisions. These prerequisites of good deliberation settings are remarkably similar to the optimal contact conditions specified in Allport’s (1954) original theory. Since contact effects are stronger when optimal conditions are met (Pettigrew & Tropp, 2006), I hypothesized that intergroup contact in deliberative settings (henceforth “deliberative contact”) would produce positive intergroup attitudes:

**H2**: Deliberative contact will increase support for integrative policies.

When contrasting contact in natural settings with deliberative contact, one question that follows is whether deliberative contact can overcome past negative experiences to produce positive outgroup attitudes. There are two reasons why deliberative contact effects might supersede past negative encounters. First, deliberative contact may be occurring under more favorable conditions as compared to contact in natural settings. As argued above, well-designed deliberative forums would explicitly embody optimal contact conditions such as institutional support specified in Allport’s (1954) theory. Those that had contact with outgroup members under less favorable conditions in the real world may benefit from the better-structured contact condition in a deliberative environment. Second, deliberative situations, like the ones examined
in this paper, can be seen as a “no choice” situation, which typically yields greater contact effects (Pettigrew & Tropp, 2006). “No choice” situations refer to contexts in which the potential for selection bias is minimal (Pettigrew, 1998). Surely, participants in the deliberative forums had “choice” in a general sense, but to the extent that decided to participate and assigned to a group that included outgroup members, they had limited choice to avoid the contact situation.

Therefore, it was posited that contact occurring in a deliberative setting could remedy negative contacts from the past:

**H3**: The effect of deliberative contact will be greater among those who previously had negative contact with the outgroup, than those who had positive prior contact.

**Mediators of Intergroup Contact Effects**

**Knowledge**

Several mediators have been proposed for contact effects, but few have received such sustained attention as knowledge (e.g., Allport, 1954, Stephan & Stephan, 1984; Pettigrew & Tropp, 2008). Even from early formulations of the theory, learning about the outgroup was thought to be the main mechanism through which contact reduced prejudice (Allport, 1954). Although some commentators have voiced concern over “conveniently” assigning the nature and cause of prejudice to individual ignorance rather looking at broader social processes and institutionalized structures (Brown & Turner, 1981), many researchers shared the view that segregation is the source of ignorance and “ignorance is the breeding ground for derogatory stereotypes and hostility” (Sigelman & Welch, 1993). This claim has been substantiated by empirical studies that showed increased knowledge about the outgroup leading to more positive

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1 A good illustration is the study on public housing projects (Deutsch & Collins, 1951). Assignment to segregated or desegregated projects was more or less random, and once people accepted living in their assigned projects, there was little choice in terms of interacting with their neighbors. As expected, White housewives in desegregated projects rated Blacks more favorably and expressed support for interracial housing.
attitudes (Stephan & Stephan, 1984; Weldon et al., 1975), and confirmed by a recent meta-
analysis that identified outgroup knowledge as one of the significant mediators (Pettigrew &
Tropp, 2008). Based on this evidence, it was hypothesized that outgroup knowledge would be a
mediator of contact effects in deliberative settings:

**H4**: The effect of deliberative contact will be mediated by knowledge about the
outgroup.

**Perspective Taking**

Another prominent mediator is empathy and perspective taking (Pettigrew & Tropp,
2008). Batson and colleagues (1997) theorized that adopting the perspective of a needy
individual leads to empathetic feelings for this individual and an increased valuing of his or her
welfare. To the extent that the needy person’s group identity is salient, increased valuing was
thought to generalize to the entire group (Batson et al., 1997). Experimental studies have lent
substantial support for each step of this process (Batson, Chang, Orr & Rowland, 2002; Batson et
al., 1997; Finlay & Stephan, 2000; Vescio, Sechrist, & Paolucci, 2003).

In the studies mentioned above, empathy was conceptualized as an other-oriented
emotional response (Batson, 1991, emphasis added). The fact that empathy is rooted in an
affective dimension is what makes it so powerful in the context of contact theory. Because
empathy works through a separate affective process, it has the potential to bypass any cognitive
barriers to produce positive attitudes (Pettigrew, 1997). For example, when empathetic feelings
were aroused about an individual homeless person, this generalized into positive attitudes
towards the homeless as a group, regardless of additional information about that individual’s
responsibility in bringing about his plight (Batson et al., 1997, Study 2). This contrasts with what
could happen in a cognitive processing model (say, one based on learning), in which
individuating information leads to “decategorization” of the target individual reducing
generalization of attitudes to the group (see Brewer, 1988).

The affective mechanism brought about by empathy is certainly an important mechanism
for contact effects, and was found to be a stronger mediator than learning about the outgroup
(Pettigrew & Tropp, 2008). But can perspective taking work independent of empathy to reduce
prejudice? In the experimental studies above, empathy was manipulated by what is commonly
referred to as “perspective taking instructions” (Batson et al., 1997; Batson et al., 2002; Finlay &
Stephan, 2000; Vescio et al., 2003). Subjects in the high-empathy condition are asked to imagine
how the person feels about his or her life situations and to feel the full impact of their
experiences, while those in the low-empathy condition are instructed to remain objective and
detached.\(^2\) Perspective taking and empathy are used more or less interchangeably in these
studies, although technically empathy is believed to arouse from taking an other-oriented
perspective (Batson et al., 1997). However, adopting the perspective of a disadvantaged person
may have an independent effect on reducing prejudice and promoting positive attitudes towards
the outgroup. For instance, perspective taking could motivate a greater overlap between self and
other, which can have positive implications for outgroup attitudes (Galinski & Moskowitz,
2000). Another study found that perspective taking has attributional consequences (i.e.,
attributing the plight of the outgroup to situational causes), which more effectively explained
prejudice reduction than empathy (Vescio et al., 2003). In the current study, we further tested the
role of perspective taking as a mediator of contact effects:

H5: The effect of deliberative contact will be mediated by perspective taking.

\(^2\) Some studies make a distinction between imagining how another person feels and
imagining how you would feel if you were in the target’s position, in comparison with the
objective control condition (e.g., Davis et al., 1996), but found little difference in the two
perspective-taking instruction types.
Argument Repertoire

Intergroup contact that occurs in deliberative contexts can be limited in some ways (e.g., friendship potential), but it also provides special opportunities for understanding different others. Deliberation is “cognitive process in which individuals form, alter, or reinforce their opinions as they weigh evidence and arguments from various points of view” (Lindeman, 2002). The key idea is that deliberation produces opinions based on reasons and information, in light of their discussions with fellow participants (Chambers, 2003). Therefore, participants will “improve their understanding of their own preference and be able to justify those preferences with better arguments” (Delli Carpini, Cook, & Jacobs, 2004; see also Gutmann & Thomson, 1996). If post-deliberation opinions can be better justified by reasons, it is plausible that the effect of deliberative contact can be explained by an expansion of reasons for holding their views. Using a measure that taps into the degree to which opinions are rooted in reasons (i.e., the argument repertoire, Cappella, Price, & Nir, 2002), the following hypothesis was tested:

H6: The effect of deliberative contact will be mediated by argument repertoire.

Openness to Difference

Finally, based on studies that report a significant association between “openness to experience” and interracial attitudes (e.g., Flynn, 2005), I tested whether contact led to greater openness to difference, resulting in greater support for the outgroup:

H7: The effect of deliberative contact will be mediated by openness towards difference.

Study 1: Bulgaria

The Sample

The sample consisted of 230 non-Roma Bulgarians who participated in the 2007 Bulgarian Deliberative Poll about Roma related policies (housing, education, crime). The sample
was polled across two time points, initially as part of a nationally representative sample of 1,344 respondents in face-to-face interviews conducted by Alpha research, and then immediately after the two-day deliberation in April 2007. Data from the 25 Roma participants were not included in the analysis. The non-Roma sample slightly overrepresented females (60.1%), and the average age was 46.2 years.

Bulgarian Deliberative Poll

The data for Study 1 were collected from the 2007 Bulgarian national Deliberative Poll regarding the policies towards the Roma (“gypsies”). Deliberative Polling is an alternative method of public opinion polling that has been used in many countries to consult the public on a variety of social and political issues (see http://cdd.stanford.edu). In a typical Deliberative Poll, a representative random sample of a population of interest is polled, first, in a manner similar to conventional polls. This initial random sample is then invited to attend a one to two day “deliberative poll event”. Briefing documents containing balanced information about the issue are sent to those who indicate interest in attending the event. The “deliberative polling event”, usually takes place over a weekend and during this time, participants alternate between “small group discussions”, where they discuss multiple aspects of the topic with other citizens attending the event, and “plenary sessions”, where all participants congregate and pose questions that emerged in the group discussions to a panel of experts composed of policy makers, advocates, and researchers. After this weekend of thinking and talking about the issue, participants are polled again in the end. The Bulgarian Deliberative Poll followed the procedures of a typical Deliberative Poll with little divergence.

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3 The project was organized by the Centre for Liberal Strategies partnered with Alpha Research, Bulgarian National Television, the Open Society Institute, Sophia, and the Center for Deliberative Democracy at Stanford University.
Measures

Support for government programs to help the Roma ghettos. Three questions probed the attitude towards proposed programs to help the impoverished Roma ghettos. These questions were: “The government should help people living in illegal housing to get and repay loans to build new houses”; “The government should build new housing to replace illegal housing” and “In the process of legalization of buildings the government should cover the legalization expenses for the disadvantaged people.” All three questions were asked on a 5-point scale ranging from “disagree strongly” (0) to “agree strongly” (1), and were combined into a single attitudinal index (Cronbach’s alpha = .71).

Deliberating with the Roma in small groups (‘Deliberative contact’). A dichotomous measure captured the presence of Roma in the participant’s small group. Though all participants were randomly assigned to small groups, some of the groups ended up without any Roma participants as group members. Individuals in these groups were coded as 0, while those in groups that had Roma members were coded as 1.

Frequency of prior contact with Roma. A single-item measure asked how often one “personally communicated with Roma in their everyday life.” Responses were recorded on a 4-point scale ranging from “never” (0) to “very often” (1).

Positivity of prior contact with Roma. Another single-item measure assessed the positivity of participants’ prior contacts with the Roma: “How would you describe most of your contacts with the Roma?” Responses ranged from “extremely negative” (0) to “extremely positive” on a 5-point scale.

Study 1 Results and Discussion
Prior contact frequency and deliberative contact both had a positive significant effect on post-deliberation attitudes towards helping the Roma ghettos (see Table 1). Even after controlling for pre-deliberation attitudes, prior contact frequency was a significant positive predictor of post-deliberation attitudes ($b = .14, p < .01$), as was deliberating with the Roma in the small groups ($b = .11, p < .05$). The interaction between the two was not significant ($b = -.19, n.s.$).

A separate model estimated the effect of prior contact positivity alongside deliberative contact (see Table 2). Prior contact positivity was a strong positive predictor of post-deliberation attitudes ($b = .54, p < .05$). Deliberative contact effects was strongest when prior contact positivity was at the lowest level (“extremely negative (0)”), and marginally decreased as prior contact positivity increased ($b = -.44, p < .10$). A test of the linear combination of deliberative contact effect for each level of contact positivity revealed that deliberative contact effects was only positive and significant for those who had negative experiences with the Roma in the past (see Figure 1). For those who have had relatively positive or extremely positive encounters with the Roma before the Deliberative Poll, showed no additional effect of contact during the small group discussions.

Study 1 showed that both prior contact frequency and deliberative contact had independent effects on post-deliberation attitudes towards policies that help the outgroup. Those who have had greater contact with the outgroup in general showed greater support for assistive policies. Also, those who have had a chance to intensively discuss the issue with the outgroup face-to-face were more likely to support the assistive policies. On the other hand, when considering the positivity of prior contact, it was found that deliberative contact effects was strongest among those who have had negative experiences with the outgroup in the past.
Study 2: Australia

The Sample

In the second study, data collected from 339 non-Aboriginal Australian participants across two waves were used (November 20-26, 2000 and February 16, 2001). For the first wave, an initial random sample of 1220 were interviewed and invited to participate in a national deliberation event to take place in February 2001. The participants were those who came to this all-expenses-paid weekend in Canberra to deliberate about the issue of Aboriginal reconciliation. Because of the focus of the study, I only used data from the non-Aboriginal Australians (N = 339) and excluded data from the 51 Aboriginal Australians.

Australian Deliberative Poll

The Australian National Deliberative Poll followed the procedures of a typical Deliberative Poll with little divergence (see Study 1 for descriptions of Deliberative Polling methodology). The only difference was that an experimental manipulation was introduced so that approximately half of the non-Aboriginal participants had a chance to interact with Aboriginals in the small groups (“treatment” condition), while the rest did not have any Aboriginals in their small groups (“control” condition). 15 of the 25 small groups were randomly selected to include one or more people from the Aboriginal population. This resulted in a dichotomous measure of Aboriginal contact in small groups at the individual level. The experimental manipulation in Study 2 was analogous to the “deliberative contact” measure in Study 1.

Measures

**Formal acknowledgement index.** This attitudinal index averaged four questions that ask whether there should be a formal acknowledgement of wrongdoing regarding the historical treatment of Aboriginals. The exact items were: “The nation should formally acknowledge that
Australia was occupied without the consent of Aboriginal people”; “The nation should formally acknowledge that Aboriginal people were the original owners of traditional lands and waters”; “Governments should apologize to Aboriginal people for what's happened in the past”; and “Everyone should stop talking about the way Aboriginal people were treated in the past, and just get on with the future” (reverse coded). All four questions were asked on a 5-point scale ranging from “strongly disagree” (0) to “strongly agree” (1). The Cronbach’s alpha for this index was 0.83.

**General knowledge.** Knowledge was assessed before and after deliberation by a series of quiz-style questions of political facts. The answers were coded 1 if correct and 0 otherwise, and we calculated the proportion of correct answers as a measure of political knowledge. The exact wording of these eleven questions and their answers can be found in Appendix A.

**Aboriginal knowledge.** An alternative knowledge measure was constructed as a subset of three knowledge questions out of the eleven in the general knowledge index (items are marked with asterisks in Appendix A). The three items were all specifically about Aboriginal history.

**Perspective taking.** Eleven items tapped into the respondents’ understanding about the living conditions and life prospects of the Aboriginal population. The first two questions asked to compare the Aboriginal people to other groups in the community on how much the respondents “[thought] of Aboriginal people as being disadvantaged, or not disadvantaged”, and also regarding living conditions, whether, “[the] Aboriginal people are better off, worse off or about the same as other Australians in terms of living conditions”. The first question was a dichotomous measure and the second was on a 5-point scale ranging from “a lot worse off” (0) to “a lot better off” (1). Another question asked, on a trichotomous scale, whether participants believed that “the Government provides too much, not enough, or about the right amount of
programs and assistance for Aboriginal people.” The responses were recoded to lie within a 0 (“too much”) to 1 (“not enough”) scale. Then a series of 8 questions asked about more specific aspects of Aboriginal peoples lives. On a 5-point scale, respondents rated how better or worse off they thought Aboriginals were compared to other Australians in these areas: the opportunity to get ahead in life, health, housing, opportunities for employment, education, life expectancy, jailing or imprisonment rates, and income. The response categories ranged from “a lot better” (0) to “a lot worse” (1). Cronbach’s alpha for these 11 items showed respectable reliability (Cronbach’s alpha = 0.91).

Openness towards difference. Two questions asked how much participants “agreed” (1) or “disagreed” (0) with the statements “people with very different views from yours often had very good reasons for their views” and “comments of other group members [were] useful”. The answers were captured on a 5-point scale (Cronbach’s alpha = 0.61).

Results and Discussion

Study 2 data supported the prediction put forth in the second hypothesis. Participants who had deliberative contact with Aboriginal Australians in their small groups (“treatment” condition) showed significantly greater support for formal acknowledgement after deliberation, compared to those who did not have any Aboriginals in their small groups (see Figure 2).

Four variables were separately examined for their potential mediating role of contact effects on the four attitude indices (see Figure 3 and Table 3). Among the potential mediators—general knowledge, knowledge about Aboriginal issues, perspective taking, and openness towards difference—only perspective taking and knowledge about Aboriginals were positively affected by deliberative contact (see Table 3). Compared to the participants in the control condition, participants in the contact condition showed greater capacity for perspective taking
(diff = .05, p < .01) and marginally higher levels of Aboriginal knowledge (diff = .04, p < .10) after deliberation.

Mediation analyses were performed with these two mediators (see Figure 4). Although knowledge about Aboriginals was positively affected by deliberative contact (b = .04, p < .10), this effect did not significantly mediate contact effects (Sobel z = 1.10, p = .14). On the other hand, perspective taking was found to be a significant positive mediator of contact effects (Sobel z = 2.48, p < .01). After accounting for the mediator, deliberative contact effects fell considerably (from b = .07, p < .01 to b = .04, p < .10).

Study 2 provided additional evidence for the second hypothesis: deliberating with disadvantaged racial minorities, the Aboriginals in this case, boosted support for ameliorative policies towards the minority group. This finding is especially impressive given the overall swooping trend towards pro-Aboriginal attitudes from T1 to T2. Regardless of the experimental treatment of Aboriginal contact, most participants moved towards greater support for Aboriginal rights (net increase of 15% across the sample, p < .001, N = 339). It is also possible that there was some “contamination” in the manipulation because those assigned to the “no Aboriginal contact” condition could have interacted with Aboriginals outside the group. Both factors would bias against finding a difference between the contact (“treatment”) and non-contact (“control”) conditions. Nonetheless, a sizable and significant positive effect was observed, supporting the predictions in Hypothesis 2.

Additional to the finding an effect of contact on attitudes, Study 2 deepened the understanding of how contact works by specifying a key mediator of this effect. The positive effect of contact came from an enhanced capacity for perspective taking – seeing the situation

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4 There were many opportunities for such in between sessions and during lunch and dinner hours.
through another person’s eyes. Those who had contact with the Aboriginals gained a better understanding of the disadvantages that the Aboriginals faced, which in turn, lead to greater support for pro-Aboriginal policies.

**Study 3: Northern Ireland**

**The Sample**

In Study 3, I used data collected from 79 Catholic parents from the Omagh district of Northern Ireland who attended the Omagh Deliberative Poll. The participants completed the questionnaire at two time-points, one before and one after the Omagh Deliberative Poll held on January 27, 2007. The sample was predominantly female (75.9%) and highly educated (20.5% degree level or higher education) compared to the population average, but this difference did not bias the attitudinal distribution of the sample (see Luskin, O’Flynn, Fishkin, & Russel, 2012). Other demographic characteristics were well in-line with population characteristics of Omagh parents of school age children (see Luskin et al., 2012)

**Omagh Deliberative Poll**

The Omagh Deliberative Poll followed the usual Deliberating Polling design. First, a random sample of Omagh parents were interviewed and invited to the Deliberative Polling event on policies regarding local schools. Those who showed interest in attending were sent briefing documents that contained relevant information and policy options. The people who attended the event alternated between small group discussion with other attendees and panel discussions with experts. At the end of the process, the attendees were interviewed again with the same questionnaire.

The Omagh Deliberative Poll focused on the issue of education. The education system of Northern Ireland has suffered from the historical conflict between Catholics and Protestants of
the region. In 2007, most students with a Protestant background attended state controlled schools, while most Catholic students attended Catholic-maintained schools, but with enrollments rates falling this separation was no longer practical (Luskin et al., 2012). The Omagh Deliberative Poll tackled this topic at the local community level and addressed issues about education quality, cost, and social engagement among students of differing backgrounds.

The long-standing conflict and self-segregation of Protestants and Catholics of Northern Ireland raised questions about whether it would be possible to get them together in the same room, let alone deliberate (Luskin et al., 2012). But once the parents of differing background gathered together in small groups to discuss education policies that affected them, it became an opportunity to test the effects of deliberative contact as in Studies 1 and 2. Furthermore, because there was a greater variation of the number of Protestants in the small groups, it was possible to assess whether deliberative contact effects linearly increased with minority size (Hypothesis 5). Also the Northern Ireland data afforded two new variables that hadn’t been tested in Studies 1 and 2 – group perception measures and argument repertoire (Cappella, Price, & Nir, 2002).

**Measures**

**School relations index.** A collection of five questions constituted the school relations index (Cronbach’s alpha = 0.76). Respondents were asked to place themselves on a 10-point scale ranging from “it is important for children to attend school only with other children of their own religion (0)” to “it is important for children to attend schools that have a balanced enrollment of Protestant and Catholic pupils (1)”. Also on a 10-point scale, respondents answered whether or not they supported “Children traveling to neighboring schools to be taught subjects unavailable at their own school.” Three additional questions probed whether respondents agreed or disagreed with the following statements (5-pt scales; 0=Strongly disagree,
1=Strongly agree): “Schools that are not mixed should be required to partner with a school with children of a different religion,” “Schools that need to partner to deliver the curriculum should be required to partner with their closest neighboring school, even if it is not of the same religious composition,” and “If schools of different religious composition enter partnerships, the children from both schools should at least sometimes be taught in the same classroom.” Higher index scores represented greater support for integrative schools.

**Proportion of Protestants in group.** Because the Northern Ireland poll randomly assigned all participants to small groups without any experimental manipulation, the groups naturally varied in the proportion of Protestants. Therefore, rather than employing a dichotomous measure, it made sense to calculate the proportion of those who were Protestant (or other religion) within one’s group. The range was from 0% to 67% ($M = .32, SD = .17$).

**Perceptions of Protestants index.** The Northern Ireland questionnaire contained several measures that tapped into one’s perception of Protestants as a group. Three of the following group perceptions items were combined: how “favorably or unfavorably” one felt about Protestants, how “trustworthy or untrustworthy” one would rate most Protestants, and whether they thought most Protestants were “open to reason or not open to reason” (Cronbach’s alpha = 0.72). All three items were asked on 10-point scale with higher scores representing positive perceptions of Protestants.

**Argument repertoire.** The argument repertoire measure was adapted from its original version to assess opinion quality (Cappella, Price, & Nir, 2002). Argument repertoire was measured by tallying the number of reasons one would list for supporting different opinion positions. Participants were asked four open-ended questions prompting them to think about reasons that the following groups of people would give for their positions: “people who think
that children should attend school only with other children of their own religion,” “people who think that children should attend schools with a balanced enrollment of Protestant and Catholic pupils,” “people who strongly agree that children from schools of different religious compositions that enter partnerships should be taught in the same classroom at least sometimes,” and “people who strongly disagree that children from schools of different religious compositions that enter partnerships should be taught in the same classroom at least sometimes.” A combined index was created to represent the size of argument repertoire (Cronbach’s alpha = .82).

**Learning about different others.** A single question asked, on a 5-point scale how much respondents agreed (1) or disagreed (0) with the statement “I learned a lot about people very different from me-about what they and their lives are like”.

**Results and Discussion**

As it was the case in Studies 1 and 2, the Catholics in Northern Ireland showed strong and significant effects of contact with those of differing religion (see Table 4). Compared to Catholics who were in small groups that did not have any Protestants, the Catholics in groups that were equally composed of Protestants and Catholics and Catholics in groups with a Protestant majority were marginally significantly more likely to support a greater integration of schools ($b = .19, p < .10$ and $b = .26, p < .10$, respectively). When examined dichotomously, Catholics in Protestant majority groups were marginally significantly more likely to support integrative policies than Catholics in Catholic majority groups (see Figure 5, $M = .79, SE = .05$ versus $M = .68, SE = .03, p < .10$).

In addition, deliberating with Protestants was found to affect post-deliberation opinion quality, but had no effect on the perceptions of Protestants as a group (see Table 4). Catholics that deliberated in groups with a greater number of Protestants came out of the discussion with a
larger argument repertoire. Compared to those in groups with no Protestants, Catholics in groups with some Protestants ($b = 6.30, p < .01$), half-split groups ($b = 4.25, p < .10$), and groups that were of Protestant majority ($b = 9.00, p < .01$) all had significantly greater argument repertoire after deliberation. However, the number of Protestants one encountered during the group discussions did not influence the perception of Protestants as a group.

To assess how these variables collectively predicted post-deliberation attitudes on school integration, I employed an OLS regression model (see Table 5). As expected, the proportion of Protestants in the group was found to be a positive, marginally significant predictor of policy attitudes ($b = .26, p < .10$). In addition, argument repertoire was also a positive significant predictor of post-deliberation policy attitudes ($b = .04, p < .05$). On the other hand, perceptions of Protestants as a group ($b = .14, n.s.$) and learning about different others ($b = .02, n.s.$) did not affect attitudes toward school integration.

**General Discussion**

The three studies collectively showed that intergroup contact that occurred in deliberative settings increased support for outgroup policies. Results from Study 1 additionally reveled that deliberative contact effects was especially large among those who have had negative experiences with the outgroup in the past. This finding is interesting in light of the recent emphasis on comparison between positive versus negative contact experiences (Pettigrew, 2008). Past studies found that negative experience with members of an outgroup tends to generalize into attitudes towards the group in general (e.g., Bekhuis, Ruiter, & Coenders, 2011; Stark, Flache, & Veenstra, 2013). This is particularly true since people tend to avoid people and situations that are expected to bring negative experiences (Brown & Hewstone, 2005). However, Study 1 showed that despite past negative experiences, attitude generalization could be prevented if people are
put in situations where they are encouraged to interact with those from the outgroup. The experience of the latter, deliberative contact, was found to overcome the effect of prior negative experience.

Moreover, the Studies 2 and 3 explicated the mechanisms of contact effects. The two most important mediators were perspective taking and argument repertoire. In the second study, perspective taking – seeing the situation through another person’s eyes – was measured as a composite of evaluative items, sometimes referred to as “empirical premises” (Fishkin, 2002; Luskin, Fishkin, & Jowell, 2002). The cognitive nature of this mediator points to the possibility of an attributional process at work. In other words, perspective taking might lead to a situational attribution of their plight (e.g., the historical mistreatments of the Aboriginals), which would provide a basis for supporting policies that help the outgroup (see also Vescio, Sechrist, & Paolucci, 2003). Mediation by argument repertoire also bolsters the notion of a cognitive process at work. Though these results seem to contradict the powerful role of affective mechanisms identified by past studies (e.g., Pettigrew & Tropp, 2008), they can be explained in part by the peculiarities of the deliberative context in comparison with other more “natural” settings that afford intergroup contact.

On the other hand, it is important to note that some of the other proposed mediators, knowledge about the outgroup and openness, failed to significantly account for contact effects. Although learning has been theorized, from the very beginning, as an important mediator of contact effects (e.g., Allport, 1954), it should be noted that “learning” can mean anything from acquiring something entirely new to correcting mistaken beliefs that already existed. The measurement of knowledge in this study was an adapted version of a conventional political knowledge measure (i.e., adding up pieces of information about the outgroup), but this may have
been limited in capturing the kind of knowledge that is essential for contact effects. For example, measuring knowledge in terms of what feminists scholars called “situated knowledge” (Young, 1997), the sort of learning that comes from taking the perspective of others (e.g., understanding their plight and disadvantages), may have been more effective. Whatever the case, the current study demonstrated that the effect of contact is established through this latter component, leading us to a new appreciation for empathetic understanding of others, as opposed to merely knowing more about them.

Openness to difference also failed to mediate contact effects. Although theoretically, openness (and related concepts such as tolerance) is a characteristic that is likely to be fostered by greater exposure to different others, in reality, it was found that openness did not follow from contact. This revealed that openness is a value than cannot be obtained over a weekend. It points to the tenacity of worldviews and deeply rooted thoughts about others and difference. Consistent and long-term contact may be more successful in bringing about change in openness. Furthermore, openness to difference might be more appropriate as a moderator than a mediator, with different levels of openness affecting the extent to which contact has an effect (e.g., Flynn, 2005). Because openness was only measured after contact in the studies reported in this paper, this possibility was not addressed.

**Limitations.** There are several limitations of this study that are worth noting. Three major points will be addressed. First, a greater variety of variables should be evaluated for their potential as mediators and moderators of the attitude change process. Although the three studies in this chapter tested various mechanisms of contact effects, affective measures, such as anxiety or empathy (Pettigrew, 1998), have not been evaluated at all. Identifying how affective mechanisms work in parallel to cognitive ones would be an interesting new direction for future
research. Also, it would be useful to learn about the individual dispositions or situational conditions that moderate contact effects.

Secondly, more complex causal paths should be tested. The current investigation fell short of this task as different studies contained different sets of variables, prohibiting comprehensive modeling of multiple influences at once. Future studies might benefit from a more comprehensive design to test for the possibility of mediation-moderation models or two-step mediation of contact effects.

Finally, there should be greater regard towards the differences between outgroups of interest. In the current investigation, I assumed that contact with the outgroup is more or less a comparable experience. However, the perceptions that the Australians hold for the Aboriginal population and the perceptions that Bulgarians hold of the Roma are qualitatively different and may have different implications for the mechanisms that produce positive change. For instance, Aboriginals comprise about 2.3% of the entire Australian population and usually live in remote communities (Australian Bureau of Statistics, 2006). This means that most Australians have very few opportunities to interact with true Aboriginals even during their entire lifetime. Australians feelings toward Aboriginals are not necessarily hostile to begin with, and any fear and prejudice they have is likely to be based on speculation. Compare this to the prevalent negative stereotypes and intense hostility towards the Roma in Bulgaria. The Roma are much more visible in Bulgarian society, compared with the Aboriginals of Australia, as they occupy parts of the city with illegal housing (known as the “ghettos”). Some Bulgarians have even proposed building a wall across these living quarters. The outgroup prejudice is not only more severe for the Roma, but it may be more impervious to change. Identifying different mechanisms of contact effects under such different conditions would add nuance to the robustness of the theory.
References


Table 1

Effects of Prior Contact Frequency and Deliberative Contact on Post-Deliberation Attitudes towards Helping the Roma Ghettos (Bulgaria)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b$</td>
<td>$SE$</td>
<td>$b$</td>
<td>$SE$</td>
</tr>
<tr>
<td>Pre-Deliberation Attitude towards Helping the Roma Ghettos</td>
<td>.31**</td>
<td>.06</td>
<td>.31**</td>
<td>.06</td>
</tr>
<tr>
<td>Frequency of Prior Contact</td>
<td>.14**</td>
<td>.05</td>
<td>.30*</td>
<td>.14</td>
</tr>
<tr>
<td>Deliberative Contact</td>
<td>.11*</td>
<td>.05</td>
<td>.20*</td>
<td>.09</td>
</tr>
<tr>
<td>Frequency X Deliberative Contact</td>
<td></td>
<td>-</td>
<td>-.19</td>
<td>.15</td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td></td>
<td>.132</td>
<td></td>
<td>.134</td>
</tr>
<tr>
<td>$F (p)$</td>
<td></td>
<td>12.06 (.000)</td>
<td></td>
<td>9.46 (.000)</td>
</tr>
<tr>
<td>$N$</td>
<td></td>
<td>219</td>
<td></td>
<td>219</td>
</tr>
</tbody>
</table>

**$p < .01$, *$p < .05$, †$p < .10$, ‡$p < .10$**
Table 2

*Effects of Prior Contact Positivity and Deliberative Contact on Post-Deliberation Attitudes towards Helping the Roma Ghettos (Bulgaria)*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>SE</td>
<td>b</td>
</tr>
<tr>
<td>Pre-Deliberation Attitude towards Helping the Roma Ghettos</td>
<td>.25** .07</td>
<td>.26** .07</td>
</tr>
<tr>
<td>Positivity of Prior Contact</td>
<td>.16† .09</td>
<td>.54* .24</td>
</tr>
<tr>
<td>Deliberative Contact</td>
<td>.05 .06</td>
<td>.31† .16</td>
</tr>
<tr>
<td>Positivity X Deliberative Contact</td>
<td>- -</td>
<td>-.44† .26</td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td>.084</td>
<td>.094</td>
</tr>
<tr>
<td>$F (p)$</td>
<td>6.38 (.000)</td>
<td>5.53 (.000)</td>
</tr>
<tr>
<td>N</td>
<td>176</td>
<td>176</td>
</tr>
</tbody>
</table>

**$p < .01$, *$p < .05$, †$p < .10$, ‡$p < .10$**
Table 3

*Deliberative Contact Effects on Potential Mediators (Australia)*

<table>
<thead>
<tr>
<th></th>
<th>No Contact</th>
<th>Contact</th>
<th>Difference</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Knowledge</td>
<td>.70</td>
<td>.71</td>
<td>.01</td>
<td>.338</td>
</tr>
<tr>
<td></td>
<td>(.02)</td>
<td>(.01)</td>
<td>(.02)</td>
<td></td>
</tr>
<tr>
<td>Aboriginal Knowledge</td>
<td>.74</td>
<td>.79</td>
<td>.04</td>
<td>.060</td>
</tr>
<tr>
<td></td>
<td>(.02)</td>
<td>(.02)</td>
<td>(.03)</td>
<td></td>
</tr>
<tr>
<td>Perspective Taking</td>
<td>.78</td>
<td>.83</td>
<td>.05</td>
<td>.006</td>
</tr>
<tr>
<td></td>
<td>(.02)</td>
<td>(.01)</td>
<td>(.02)</td>
<td></td>
</tr>
<tr>
<td>Openness Towards Difference</td>
<td>.67</td>
<td>.67</td>
<td>.00</td>
<td>.407</td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.02)</td>
<td></td>
</tr>
</tbody>
</table>

Note. Standard errors are in parentheses. One-tailed $p$-values are reported. $N = 339$
Table 4

*Effect of Contact on Post-Deliberation Policy Attitudes, Argument Repertoire, and Group Perception (Northern Ireland)*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Support for School Integration</th>
<th>Argument Repertoire</th>
<th>Perceptions of Protestants as a Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups with some Protestants (less than 50%)</td>
<td>.10</td>
<td>6.30**</td>
<td>.06</td>
</tr>
<tr>
<td>Split half groups (50%)</td>
<td>.19†</td>
<td>4.25†</td>
<td>-.02</td>
</tr>
<tr>
<td>Groups with a Protestant majority (more than 50%)</td>
<td>.26†</td>
<td>9.00**</td>
<td>.14</td>
</tr>
<tr>
<td>Constant</td>
<td>.59***</td>
<td>0.33</td>
<td>.66***</td>
</tr>
</tbody>
</table>

| Adj. $R^2$ | .022 | .114 | .000 |
| F ($p$)     | 1.58 (.201) | 4.34 (.007) | 0.88 (.455) |
| N           | 79   | 79   | 79   |

**$p < .01$, *$p < .05$, †$p < .10$**

Note. Baseline category was groups with no Protestants.
Table 5  
*Predicting Post-Deliberation Attitudes Towards School Integration (Northern Ireland)*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>$b$</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argument Repertoire</td>
<td>.038*</td>
<td>.019</td>
</tr>
<tr>
<td>Perceptions of Protestants</td>
<td>.139</td>
<td>.112</td>
</tr>
<tr>
<td>Learned about Different Others</td>
<td>.016</td>
<td>.094</td>
</tr>
<tr>
<td>% of Protestants in Group</td>
<td>.257†</td>
<td>.134</td>
</tr>
<tr>
<td>T1 Attitude</td>
<td>.374**</td>
<td>.123</td>
</tr>
<tr>
<td>Constant</td>
<td>.231†</td>
<td>.127</td>
</tr>
</tbody>
</table>

Adj. $R^2$  .219  
$F (p)$  5.21 (.000)  
$N$  76

**$p < .01$,  $*p < .05$,  $*p < .10$,  †$p < .10$**
Figure 1. Deliberative contact effect by prior contact positivity level (Bulgaria). The effect of “deliberative contact,” as indicated by the differently colored bars, was only significant for those who described their prior contact experience with the Roma as negative.
Figure 2. Deliberative contact effects on post-deliberation policy attitudes (Australia). Non-Aboriginal Australians were randomly assigned to either the contact (“treatment”) or no contact (“control”) condition. Significantly greater support for formal acknowledgement was observed from the contact condition.
Figure 3. Effect of deliberative contact on the potential mediators (Australia). Deliberative contact significantly affected perspective taking and marginally significantly affected knowledge about Aboriginals. General knowledge levels and openness towards difference were not influenced by deliberative contact with Aboriginals.
Figure 4. Mediation analysis of deliberative contact effects. The total effect of contact is significantly mediated by perspective taking. Other mediators were unaffected by deliberative contact or the effect was not strong enough for mediation.
**Figure 5.** Deliberative contact effects on post-deliberation policy attitudes (Northern Ireland). As compared to the Catholics in groups that did not have any Protestants, the Catholics that were in split-half groups or groups with a Protestant majority, indicated greater support for school integration after deliberating.
Appendix A.

2001 Australian National Deliberative Poll Political Knowledge Questions

1. To the best of your knowledge, when was it that Aboriginal people were first counted in the Census as part of the Australian population? Was it in…? [*]
   a. The 1850’s
   b. The 1920’s
   c. The 1960’s
   d. Or have Aboriginal people never been included in the Census as part of the Australian population
   e. Don’t know

2. As far as you know, when was it that the practice of removing Aboriginal children from their families is generally considered to have ceased? Was it …? [*]
   a. In the 1920’s
   b. Just after World War 2
   c. Or The 1960’s
   d. Don’t know

3. As far as you are aware, which one of the following best describes the result of the Mabo case? Was it that …? [*]
   a. Aboriginal people were given ownership of some land in western Australia
   b. The Mabo claim was rejected by the high court
   c. Or it resulted in native title claims being allowed under certain circumstances
   d. Don’t know

4. As far as you're aware, which one of the following people is the Minister for Aboriginal affairs? Is it…?
   a. Daryl Melham
   b. John Herron
   c. Aden Ridgeway
   d. Bob McMullan
   e. Don’t know

5. And which one of the following people is the current chair person for ATSIC?
   a. Gatjil Djerrkura
   b. Ray Robinson
   c. Evelyn Scott
   d. Geoff Clark
   e. Don’t know

Thinking just about ATSIC, as far as you know, please tell me if you think each of the following statements about ATSIC is true or false. Firstly …
6. ATSIC representatives are democratically elected by Aboriginal and Torres Strait Islander people (True)

7. ATSIC is responsible for expenditure of about half of all federal gov funding for indigenous programs (True)

8. ATSIC monitors performance of gov agencies providing services to Aboriginal people (True)

9. ATSIC oversees community health centres throughout Australia run by Aboriginal people (True)

10. Now a few questions on two people who you may have heard of. Firstly, Meg Lees. As far as you know, is Meg Lees…?
    a. President of the A.C.T.U
    b. Leader of the Australian Democrats
    c. A Justice of the high court
    d. A Labor member of the Federal Parliament
    e. Or is she none of these?
    f. Don’t know

11. And now Michael Wooldridge. As far as you know, is Michael Wooldridge…?
    a. A Justice of the high court
    b. A Labor Senator
    c. The Federal Minister for Health
    d. A spokesperson for the ATSIC
    e. Don’t know