Parochial and universal cooperation in intergroup conflicts
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To regulate intergroup conflicts, cooperation between the two conflicting parties is necessary. Individuals confronted with an intergroup conflict face a cooperation dilemma: Should they invest their resources to strengthen the group to which they belong, such that it may gain a competitive advantage in the conflict, or should they direct their cooperation efforts towards the collective of both parties combined, thereby facilitating conflict resolution? The current dissertation investigates when and why individuals show parochial and universal cooperation in intergroup conflicts. Insights into the factors determining individuals’ cooperation provide understanding of the dynamics of cooperation in an intergroup conflict. Knowledge about how interpersonal and situational factors may trigger each form of cooperation should offer suggestions on how the potentially dangerous parochial cooperation can be turned into the mutually beneficial form of universal cooperation.

This dissertation examined the effect of internal cues (individuals’ social value orientation), intra group cues (constituent members’ preference for cooperative or competitive strategies and their emotional approval) and intergroup cues (the degree to which parties’ interests are conflicting) on individuals’ cooperation in intergroup conflicts. Based on evolutionary as well as social psychological theories, we expected and found individuals to have a strong inclination towards parochial cooperation. However, each of the factors we investigated revealed circumstances under which parochial cooperation declined and made room for the more beneficial universal form of cooperation. We furthermore distinguished between two general forms in which the intergroup conflict was studied. Firstly, we used a negotiation paradigm, where the representative of a group can invest in parochial cooperation by defending the interests of his group and refusing to concede, or in universal cooperation by conceding on (less important) issues and striving for a mutually beneficial deal with the other party. Secondly, we used an experimental game paradigm to study individual decision making within the context of an intergroup conflict, where individual and group outcomes are dependent on individuals’ and (opposing) group members’ investments. The empirical chapters of this dissertation each answer one or more questions regarding how intrapersonal, intragroup and intergroup factors influence cooperation.

Overall, we find that individuals are influenced by intragroup factors, such that a majority of group members is needed to communicate a preference for cooperation with the other party to direct a representative towards a mutually
beneficial agreement with the other party in a dyadic negotiation (Chapter 2). We furthermore find that representatives will extend their cooperation towards the other party when their own group communicates happiness about a previous negotiation proposal (Chapter 3). This extended cooperation only occurs among pro-social representatives, indicating that the internal factor of individuals’ social value orientation plays a pivotal role in cooperation. We finally find that the intergroup factors or the level of competition between groups is important too, by demonstrating that especially pro-social representatives are willing to sacrifice their own interests to a large extent when this can benefit their own group, even and especially when this hurts the other group in a negotiation (Chapter 4). However, we subsequently qualify these findings by showing that the availability of a mutually beneficial option matters. Pro-socials are inclined towards parochial cooperation, but will shift their self-sacrificing contributions to mutual benefit when this option is available and parochial cooperation causes significant harm to the other group (Chapter 5).

Overall, these results suggest that individuals, and especially pro-socials, are inclined to show parochial cooperation. However, they are sensitive to situational factors such as constituencies’ preferences and approval, as well as to the accessibility of a mutually beneficial option that can redirect their cooperation efforts to mutually beneficial, potentially value creating outcomes.

Below, the findings of the studies that led to these conclusions will be discussed in more detail. Afterwards, I will discuss theoretical as well as practical implications of the findings in this dissertation and delineate suggestions for future research in this area.

Intragroup factors: Constituency cues

To regulate intergroup conflicts, representatives are often invoked to negotiate on behalf of their group. These representatives struggle with pressure from two sides: On the one hand they are representing a group and thus need to defend their wishes and interests, on the other hand they need to reach an agreement with the other party, and in order to do so concessions are inevitable (Druckman, 1977). As outlined in the introduction, negotiations can have a multi-issue structure where a mutually beneficial integrative outcome (universal cooperation) is possible by trading issues based on their relative importance for each party. However, negotiations can also have a distributive, zero-sum structure
where one party’s gains equal the other party’s losses: Such a win-lose outcome can be a reflection of parochial cooperation.

Chapter 2 and 3 investigated how different characteristics of the representative’s constituency influence his cooperation behavior in each type of negotiation. Specifically, the experiment in Chapter 2 shows how constituencies’ communication about preferred strategies impact joint outcomes. Representatives received messages from their constituency containing statements of their preferred negotiation strategies. A majority of these messages favored a cooperative approach, and only one (minority) constituent favored a competitive approach towards the counterpart. Only when the minority member had low status (allegedly based on his scores on a previous test) were high mutual outcomes reached in an integrative multi issue task. A minority within the constituency preferring a competitive strategy vis-à-vis the other party was enough to deteriorate integrative outcomes when this minority had high status. Thus, universal cooperation in an integrative negotiation task can be fostered by a cooperative majority of constituency members, yet hampered by even a minority of constituency members favoring a competitive approach as long as this minority has high status. Presumably, a competitive or hawkish minority automatically receives implicit high status and communicates a message that encourages loyal behavior towards the own group. This increases representative’s motivation to serve their interests and negotiate competitively, resulting in a disproportionate influence by a competitive minority over even a substantial cooperative majority. We identified minorities’ status as a factor undermining their influence, thereby leaving room for representatives to listen to the cooperative majority and engage in a fruitful negotiation exchange with good outcomes for both parties: Universal cooperation.

In Chapter 3, we again focused on constituencies’ influences on representative’s negotiation behavior and the direction of their cooperation. In Experiment 3.2 we investigated the effect of emotional cues (Keltner & Haidt, 1999; Van Kleef, 2009), signaling approval (happiness, Parrot, 1993; Van Kleef, De Dreu, & Manstead, 2004b) or disapproval (anger, Averill, 1982; Van Kleef, De Dreu, & Manstead, 2004b). Representatives received manipulated emotional feedback based on their offer as allocator in an Ultimatum Bargaining Task. This is a distributive negotiation task where valuable chips need to be divided: The allocator can make a personally favorable offer, but the recipient may decline a personally unfavorable offer, potentially leading to low outcomes for both parties. We investigated how generous or cooperative representatives’ offers would be, and
whether and how representatives would adjust their strategy based on constituencies’ emotional (dis)approval. Positive emotion feedback from the constituency led especially pro-social representatives to extend their initial generous offer with another generous offer towards the counterpart. Negative emotion feedback, however, led them to readjust their behavior by focusing on the needs of the own constituency to satisfy those first. We concluded that especially pro-social representatives are parochial cooperators: They will first and foremost defend and promote their groups’ interests, but when the group communicates approval they will extend their cooperative efforts to the other party, a sign of universal cooperation.

In sum, representatives in negotiation settings are sensitive to their constituencies’ preferences, explicitly communicated by clear strategy preferences or implicitly by emotion displays. Their priority, especially of pro-social representatives, seems to be defending and promoting the interests of their group (parochial cooperation), which can lead to suboptimal negotiation outcomes (Chapter 2) or less cooperation with the other party (Chapter 3). However, representatives will turn towards universal cooperation when the constituency clearly communicates a norm of cooperation that overrules any deviating voices within the group (Chapter 2) or when the constituency shows emotional approval of a generous strategy, suggesting that their needs are already met. Then, representatives will make cooperative gestures towards the other party (Chapter 3) and start an exchange of priorities resulting in better negotiated agreements for both parties (Chapter 2).

**Intergroup factors: Conflicting interests**

Although universal cooperation is an ideal form of cooperation, it is also idealistic in the sense that not all conflict situations allow for such an option. For example, in strongly competitive situations with a zero-sum approach, such as two parties fighting over a specific resource or territory (modeled by the Intergroup Prisoners’ Dilemma Game), there is no clear way to cooperate with both groups at the same time. Universal cooperation in such situations may actually consist of withholding any form of cooperation. Parochial cooperation in such situations however, helps to strengthen the own group and potentially win. This would come at the expense of the other group, thus increasing conflict between the groups.

Whether individuals are more or less likely to display parochial cooperation may thus depend on the perceived structure of the conflict between the two groups,
i.e., the extent to which their interests are incompatible. It may also depend on individuals’ willingness to harm the other party and the accessibility of a mutually beneficial cooperation option. These intergroup factors are examined in Chapter 4 and 5.

In Chapter 4, a representative negotiation paradigm is employed to investigate when individuals are willing to forego their self-interest and show parochial or universal cooperation. We conducted two experiments in which the interests of the representative were either aligned with or opposed to the interests of their constituency and adversary. Interests of the latter were also either aligned or opposed depending on condition. Results showed that especially pro-socials were willing to defend the interests of their group at the expense of their own (parochial cooperation), and also to fight for the benefit of both groups combined when the interests of their own group were aligned with those of the other group (universal cooperation). However, when the own and the other group’s interests opposed each other, pro-socials were more inclined to help their own group. They were even more likely to self-sacrifice if this would help their own group only, than if it would help both groups together. We conclude that pro-socials have a strong tendency towards parochial cooperation, and although they are willing to self-sacrifice for the benefit of both parties combined, they prefer to help their own group only, even when this comes at a cost to the other party.

In Chapter 5, we continued investigating parochial cooperation and the effect of competition between the two groups, as well as the accessibility of a universal cooperation option. Rather than a negotiation paradigm, we used an experimental intergroup game; a Nested Social Dilemma as well as a more competitive version where interests between the two groups were strongly at odds. Results showed that individuals, especially pro-socials, displayed parochial cooperation. However, the presence of competition between the two groups, such that benefits of the own group would come at the cost of the other group, sharply decreased investments: Pro-socials were reluctant to hurt the other party and preferred to serve their group through universal cooperation. A second study showed that pro-socials’ universal cooperation is deliberated: They did not exhibit universal cooperation under high cognitive load, in which case they kept their endowment to themselves. Based on these experiments we conclude that pro-socials’ parochial cooperation can be directed towards mutual benefit by emphasizing potential or real harm to the other party and providing an accessible option for universal cooperation. Finally, this chapter shows that collective
functioning increases with the number of pro-socials present. This suggests that groups in conflict are more able to resolve the conflict and generate high beneficial outcomes for both parties involved when there are more pro-socials present. We thus found support for the idea that universal cooperation has beneficial effects for the involved parties after the conflict (Rubin, Pruitt, & Kim, 1994; De Dreu, 2010a).

**Intrapersonal factors: Moderating role of social value orientation**

The intragroup and intergroup findings described above are often qualified by an apparently crucial moderator: Individuals’ social value orientation. Social value orientation, as described in the introduction, is an important predictor of cooperative behavior. Thus far, research has almost exclusively focused on social value orientation as predictor of cooperative behavior either towards one other individual or towards a large collective of people (See e.g. Balliet, Joireman, & Parks, 2009; Bogaert, Boone, & DeClerck, 2008; De Dreu & Van Lange, 1995). The cooperation dilemma in this dissertation therefore immediately raised the question of how pro-socials would behave – would they be inclined towards parochial or universal cooperation? In line with theory suggesting that parochial cooperation is a more primary response (Bowles & Gintis, 2011; Boyd & Richerson, 2009), we found support in Chapter 3, 4 and 5 that pro-socials are first and foremost concerned with satisfying their constituency and self-sacrificing for their benefit. However, we also found that when the constituency approved, or when there was an alternative option available that suited both parties, pro-socials would redirect their cooperation towards the collective of both parties combined. It seems that we have at least partially solved the conundrum regarding pro-socials’ cooperative efforts: Their parochialism has moral boundaries and they are willing to extend their generosity beyond their own group, as long as it will not come at a cost to the own group. While we conclude in Chapter 4 that pro-social representatives may have a dark side, resulting in conflict intensification, Chapter 5 elucidates that pro-socials are still the best choice as representatives or mediators given their focus on the welfare of both their own group as well as, if at all possible, the two parties together. Pro-selves receive much less attention in this dissertation for a simple reason: Their behavior is predictable and largely unaffected by situational factors. They will always choose the option that yields them personally the best outcomes (Chapter 3, 4 and 5) and occasionally also invest resources in their group when they believe this can be beneficial for themselves too (Chapter 5).
In sum, pro-socials are most inclined to cooperation in general, and parochial cooperation specifically. However, pro-socials are also more than pro-selfs sensitive to contextual factors that can influence and shift their cooperation. The current dissertation uncovered four of these factors, both on the intragroup and on the intergroup level, and thereby contributes to knowledge on the promotion of universal cooperation in intergroup conflicts.

**Integration of theories: The nature of parochial cooperation**

In the introduction, three theoretical perspectives were described, each with different assumptions about the nature of parochial cooperation and most notably, its relation to intergroup competition and conflict. These theories will now be briefly reviewed. Afterwards, we will describe how the data obtained in our empirical chapters fit with each of the theories.

The evolutionary psychology perspective (Group Selection Theory, henceforth GST) describes parochial cooperation as a tendency that has evolved to become a natural inclination. It states that intergroup conflicts (have) promote(d) parochial cooperation, and that parochial cooperation became institutionalized due to its functionality to secure groups’ welfare (especially in intergroup conflicts) (Bowles & Gintis, 2011).

The social psychological Group Heuristics Model (henceforth GHM) also has its roots in evolutionary theory and proceeds from the idea that cooperative interdependence is needed for human survival. Parochial cooperation, or conditional cooperation, is a form of cooperation that limits the risk of general or unreciprocated cooperation: Group members’ reputation can be tracked and will be maintained by group-bounded cooperation (indirect reciprocity). Neither a clear distinction between groups nor intergroup competition is considered to be a necessary precursor, nor consequence of bounded cooperation. However, this perspective acknowledges that intergroup competition can help to promote one’s reputation within the group and that parochial cooperation may be accompanied by harm to another group (Yamagishi & Mifune, 2008).

The Social Identity Approach (henceforth SIA) finally states that individuals’ derive self-esteem from being part of a group. Mere categorization causes group members to distinguish between their own and the other group and lead to in-group favoritism. Such in-group favoritism in turn may invite intergroup bias and be expressed in parochial cooperation and discrimination with intergroup conflict as a possible, but not necessary consequence (Ellemers & Haslam, 2012).
presence of an out-group is thus needed to cause categorization, in-group favoritism and parochial cooperation.

In sum, only GST states that parochial cooperation is caused by intergroup competition. When and why parochial cooperation in turn may fuel intergroup conflict, differs depending on the perspectives. Especially the latter two theories acknowledge that intergroup conflict may occur as a form of defensive aggression: Defending the own group (parochial cooperation) against a perceived threat from another party. Both theories agree that the tendency to promote the own group, rather than to harm another group, is the main basis for intergroup conflict, should this occur (see Balliet et al., 2014). The results of our empirical chapters reveal important circumstances under which parochial cooperation occurs. These findings are more or less in line with each of the three perspectives.

Firstly, parochial cooperation will take place when there is some kind of norm within the group reinforcing this behavior (direct communication about preferred strategies as in Chapter 2 or emotion displays suggesting (dis)approval, as in Chapter 3). That individuals are more likely to show parochial cooperation when their group members clearly expect them to do so, resonates with the GHM. This perspective conceives of parochial cooperation as bounded reciprocity: One cooperates with group members and expects them to do the same. Moreover, non-cooperation would indicate a loss of reputation. In the experiments of Chapter 2 and 3, the group membership of the participant (representative) making cooperation decisions is known to the other group members. Violating the expected norm of parochial cooperation could thus affect the participants' reputation with potential negative consequences for his group membership and/or outcomes. Results thus clearly fit the GHM. SIA and GST do not have specific assumptions about group members’ expectations and have thus not been tested with the experiments conducted in Chapter 2 and 3.

Secondly, we find that parochial cooperation will occur even when this causes harm to another party (Chapter 4). This finding is in line with especially the latter two perspectives. GST is silent on whether parochial cooperation, once institutionalized, is also maintained by continuing intergroup conflicts. SIA and GHM however agree that parochial cooperation is sometimes confounded with harm to the other party. The experiments of Chapter 4 indeed did not allow for parochial cooperation without harming the out-group.

Thirdly however, these results are qualified by our findings in Chapter 5. Individuals are reluctant to harm the other party when there is another way to
benefit their own group. These findings rule out GST, which states that intergroup competition (including out-group harm) should lead to increased parochial cooperation. In line with our findings, both SIA and GHM however would predict that individuals are not likely to display out-group harm if this is not necessary to benefit the own group. Additional findings in Chapter 5 show that expectations of other group members’ investment are strongly related to own investments, suggesting a form of indirect reciprocity in line with GHM. Furthermore, we find some support that group-level identification is positively associated with parochial cooperation, which is in line with the Social Identity Approach.

In sum, our findings support both the GHM and SIA, yet not GST. We show that individuals may engage in parochial cooperation, but that this does not necessarily lead to harm to another party and intergroup conflict as GST states. The factors we identify that may direct behavior away from initial parochial cooperation are beyond the scope of these theories, yet show that despite their inclination, individuals are able to change their cooperation strategies towards universal cooperation. A distinction between GHM and SIA is hard to make based on our results. SIA proceeds from the assumption that group identification is a key driver of cooperative behavior, and that mere categorization is enough to induce this identification. We have not applied mere categorization to create groups in either of our experiments: There was always some degree of outcome interdependence in addition to the categorization. We also have not consistently measured identification, although additional findings from Chapter 5 provide partial support for the relationship between identification with the own group and parochial cooperation. Given our findings regarding the effect of group members’ expectations and their fit with the GHM however, we cautiously conclude that the GHM seems most adequate in predicting and explaining our findings regarding parochial cooperation and factors amplifying or reducing its occurrence. More research is needed to identify the exact motivation underlying parochial cooperation and to distinguish between GHM and SIA in terms of their predictive power for parochial cooperation.

One thing we can firmly conclude that reaches beyond the scope of each theory, is that individuals differ in the extent to which they show parochial cooperation. None of the described theoretical perspectives mentions individual differences in the propensity to show parochial altruism, in-group favoritism or indirect reciprocity. Importantly, we show that especially pro-socials are parochial in their behavior, but also that pro-socials are most sensitive to contextual cues.
redirecting their cooperation towards mutual benefit. It thus seems plausible that these theories especially or even only apply to the pro-social half of the human population. Pro-socials may be more sensitive to categorization cues, and pro-socials will care the most about reputation concerns and expectations of group members. This suggestion requires future research.

Methodological strengths and limitations

The experiments reported in this dissertation have used various approaches to answer the question of when and why individuals show parochial and/or universal cooperation. As outlined previously, we used two general paradigms: Negotiation and social decision making via experimental games. Within these paradigms, we took different approaches to answer the research questions. With the negotiation paradigm we investigated both real interactive, multi issue negotiations as well as initial behavior in simulated interactions and single issue negotiations. With experimental games, we investigated individual decision making as well as overall outcomes for the collective in which the individuals participated. The diversity of these methods contributes to the robustness of our findings. However, they all have their strengths and weaknesses. For example, an interactive negotiation between two persons is more realistic than a simulated negotiation task and hence has the potential to provide outcomes close to what would be observed in the real world. The downside of such a ‘free’ paradigm however is that it incurs a lot of noise, making it harder to control for extraneous influences and to determine the exact causes of certain behaviors. Higher internal validity (yet lower generalizability) is reached by more controlled ways of investigating phenomena, for example simulated interactions (within negotiations) or individual decision making. We attempted to integrate both methods by including real interdependence without additional noise in the experiments of Chapter 5. Here, participants made individual decisions, yet they knew that their outcomes were dependent on others’ decisions. Indeed, we rewarded participants based on the performance of actual groups (formed based on participants’ entrance order). As such, the interdependence setting includes no deception, yet participants are not affected by the uncontrollable influence of communication and free interaction with others. In sum, our laboratory studies seek to balance internal and external validity: The experimental tasks mimic the features of the situation we want to investigate, and we try to include as much intergroup awareness, interdependence and interaction as possible without allowing too much noise.
One caveat in interpreting our results is the relatively small sample size of the experiments, especially regarding the not always equally distributed number of pro-socials and pro-selves across conditions. We believe that the consistency of our findings across experiments and paradigms regarding differences between pro-socials and pro-selves allows us to draw conclusions regarding the validity of the effects. However, future research with larger sample sizes would be good to corroborate our initial findings.

The samples we have used consisted mainly of undergraduate psychology students. One could argue that the data obtained are not very informative, because decision makers such as politicians or party representatives have more experience as well as stronger connections to the groups they represent than undergraduate students. Although we acknowledge that the sample we used is not representative for the population, we believe that our findings are still very meaningful. The fact that we consistently observe differences in behavior, even among these students who are not involved in real conflicts, suggests that such differences will, if anything, only be larger among individuals representing groups in real conflicts. Of course there are other factors that influence negotiations and decisions regarding conflicts beyond the factors described in this dissertation. However, this dissertation did not aim to provide an exhaustive account of all the situational (or personal) features potentially influencing intergroup conflicts. Rather, we narrowed our focus to a number of specific factors on the intrapersonal, intragroup and intergroup level to investigate their causal effects on specific aspects of behavior.

Overall, the choice of experiments, despite the variety of tasks we used, still limits the generalizability of our findings beyond the laboratory. Intergroup conflicts occur in a large system with many dynamics on different levels and many factors play a role in determining the course of the conflict, for example the economic situation, the power and status of each of the parties, the history parties have with each other, their reputation, the size of the constituency and the intensity of the conflict. In a laboratory experiment, not all of these factors can be taken into account, suggesting that the factors we discovered are not the only ones in an intergroup conflict and may have larger or smaller effects depending on other factors such as those mentioned above. Yet, experiments have an important value in that they allow for causal inferences and the investigation of specific phenomena in a controlled environment. The experimental paradigms we used adequately reflect important factors that influence intergroup conflicts and hence provide
valuable insights. It is hard to conceive of a naturalistic field study that could answer the same questions.

In that light however it would be interesting to complement our current data with archival analyses on (past) real world conflicts to a) support the relevance and importance of the factors considered in this dissertation in the context of real life conflicts and b) to identify other potentially important factors that can be investigated with lab experiments. The interplay between these types of research should generate the most accurate and applicable knowledge, on which recommendations could be based.

**General conclusion**

To regulate and resolve intergroup conflicts, individuals within the conflicting groups need to cooperate. Specifically, their cooperation efforts should be directed towards mutual benefit for both parties involved rather than towards strengthening the position of their own group, which may actually intensify the conflict. This dissertation invokes different theoretical perspectives on parochial cooperation and sheds light on a number of factors that influence individuals’ decisions toward parochial or universal cooperation. Knowledge of these factors can help to stimulate universal cooperation and, in turn, conflict resolution. The factors identified in this dissertation are on three different levels. On an intra-group level, we identified the importance of constituencies’ preferences for and approval of a universal cooperative choice to determine representatives’ behavior in a negotiation setting. Representatives opt for universal cooperation if their constituency favors a cooperative approach (Chapter 2) and shows emotional approval of an initially cooperative offer (Chapter 3) but opt for parochial cooperation if a high status minority within their constituency prefers a competitive approach (Chapter 2) and if the constituency shows emotional disapproval of an initially cooperative offer (Chapter 3). On in inter-group level, we show that individuals are willing to self-sacrifice for the benefit of both their own group and the collective, but especially for the own group (Chapter 4). We also show that especially pro-socials’ general tendency towards parochial cooperation can be shifted towards universal cooperation when parochial cooperation would come at the expense of the other party while a clear mutually beneficial option is available (Chapter 5). Finally, we conclude that individuals’ internal compass regarding cooperation, i.e., their social value orientation is an important qualifier of these effects: Pro-socials are more than pro-selves willing to cooperate in either function
and are also more influenced by contextual cues, consisting of both constituency cues and the structure of the conflict (Chapter 3, 4, 5). The effectiveness of universal cooperation in the long run is shown by enhanced collective efficiency with an increasing number of pro-socials within that collective (consisting of two originally competing groups; Chapter 5). In sum, these findings support especially the Group Heuristics Model, and to a slightly lesser extent the Social Identity Approach, showing that individuals are mainly motivated by benefitting their own group, and that intergroup competition does not necessarily precede parochial cooperation which in turn not necessarily leads to intergroup conflict. This dissertation provides useful knowledge on when individuals will show parochial versus universal cooperation, and which factors can increase the mutually beneficial form of universal cooperation that paves the way for conflict resolution.

**Implications for negotiations**

The findings of this dissertation provide important new insights into the dynamics of intergroup conflicts. Specifically, given the focus of the first three chapters on negotiation paradigms, our findings can contribute to the negotiation literature in a number of ways.

Firstly, although research into representative negotiations flourished in the 60’s and 70’s, this important topic and the inherent dilemma faced by a representative has been largely ignored over the past decades (for rare exceptions, see Saygılı, Greer, Van Kleef, & De Dreu, 2014; Steinel et al., 2009, 2010; Van Kleef et al., 2007, 2013). This is remarkable, given the fact that almost all intergroup negotiations are handled by representatives, and that not all work on interpersonal negotiations can directly be translated to a representative situation, because little attention is paid to the presence and influence of the represented constituency (De Dreu, 2010a; De Dreu, Aaldering, & Saygılı, 2014). The experiments in this dissertation, especially those in Chapter 2, 3 and 4, provide important insights on exactly this: How a constituency affects representatives’ negotiation behavior. Recent work in the area of representative negotiations has shown that representatives are easily lured into a competitive strategy towards the counterpart when only a minority of their constituents favors such a strategy (Steinel et al., 2009), presumably due to loyalty concerns towards the constituency and the wish to defend their position. It also showed that, in general, representatives’ behavior is guided by the norm their constituency communicates, whether competitive or cooperative (Steinel et al., 2010) and that representatives resort to competitive
strategies in absence of a clear norm (De Dreu et al., 2013; Van Kleef et al., 2007). The findings of this dissertation add to this literature by showing that the disproportionate influence of a competitive minority also applies in a dyadic multi issue negotiation, but that a low status status of this minority can enable a more cooperative approach with higher quality outcomes for both parties (Chapter 4). It furthermore shows that representatives rely on their own beliefs in absence of a clear norm from their constituency, but immediately revise their strategy when emotional disapproval is communicated (Chapter 3). On the bright side, this suggests that a cooperative strategy is chosen and continued when representatives expect their constituency to endorse such a strategy (and when this is confirmed by emotion signals from the constituency). This is generally the case for pro-social individuals. We furthermore show that representatives, again especially pro-socials, are willing to set aside their own interests and defend the wishes of the group they belong to, suggesting that pro-social representatives are the best choice when a conflict of interest is present between the representative and the constituency in a negotiation (Chapter 4). In sum, these factors shed more light on how representatives, and especially pro-socials, are influenced by the interests of their constituency; when they are willing to serve those interests, and how this can lead to universal cooperation and conflict resolution.

Implications for group decision making

Although three out of four chapters in this dissertation use a representative negotiation paradigm, many of these findings also bear important insights for the social decision making literature. As explained in the introduction, the multilevel social dilemma experienced by an individual facing an intergroup conflict, closely resembles the dilemma of a representative who experiences competing pressures from both the constituency and the opposing party to act in their interests. In our experiments, the representative was elected randomly and the groups were very minimal, although there was a certain degree of outcome interdependence. In that respect, a representative and his constituency are similar to an individual making a choice within a group, except that the representative is accountable for the group outcome. Furthermore, the experiments described in Chapter 3 and 4 use relatively simple negotiation paradigms that do not allow for interaction between the groups, thereby providing a context quite similar to that of an experimental game, such as the one used in Chapter 5. It therefore seems safe to conclude that the findings obtained in Chapter 3 and 4 are not limited to a representative negotiation
situation but may well extend beyond the negotiation boundaries to more general decision making – especially for individuals in an intergroup conflict. As such, we show what factors determine cooperation decisions in groups and point to the importance of the opinions of the other group members (what are their preferences regarding cooperation and do they approve of the strategy) as well as the willingness to self-sacrifice for the benefit of the own group among pro-social individuals. Chapter 5 specifically addresses a group decision making game by introducing a multi-level social dilemma. We show again how individuals make cooperation choices and how they are influenced by the structure of the intergroup relations as well as by their own values, which are strongly associated with their expectations of group members’ behavior. We furthermore show how expectations of group members’ preferences (Chapter 3, Experiment 3.1) and behavior (Chapter 5) can increase universal cooperation. We thus contribute to the literature on group decision making by demonstrating how other group members and expectations about them affect individuals’ cooperative behavior as well as how the intensity of the conflict and interest misalignment with another group influences individuals’ decisions regarding cooperation.

**Implications for social value orientation**

The findings in this dissertation, specifically those of Chapter 3, 4 and 5, also have theoretical implications for research on social value orientation and cooperation. Specifically, we uncovered how individuals’ social value orientation guides cooperation in an intergroup conflict, where cooperation can take a group-bound parochial, or a mutually beneficial universal form. In line with a large amount of research, we consistently find pro-socials to be more cooperative than pro-selves. We furthermore show under what circumstances pro-socials display parochial versus universal cooperation. As such, this dissertation gives a more nuanced picture of pro-socials’ pro-sociality: They are not unconditionally cooperative with as many people as possible, but will first and foremost defend their own group – although preferably not at the cost of another group. In Chapter 3, we highlight that pro-socials do make more generous first offers than pro-selves towards the other party, and similarly expect their constituency members to favor a more cooperative approach. In line with the false consensus effect that in absence of clear cues suggesting otherwise we expect others to have the same beliefs and interests as we do (Ross, Greene, & House, 1977) this finding suggests that pro-socials are indeed more generous and cooperative persons than pro-selves.
GENERAL DISCUSSION

However, we also find that they turn their generosity towards their constituents when these show emotional disapproval of their generosity, thereby indicating that the interests of the own group matter most to pro-socials. In addition, we show in Chapter 4 that pro-socials are even more willing to self-sacrifice for the benefit of the own group than for the benefit of both groups together, again suggesting a tendency towards parochialism. Finally, in Chapter 5 we conclude that pro-socials’ universal cooperation, although increasing when parochial cooperation is harmful to the other party, is quite deliberated. Under cognitive load, pro-socials quit this universal cooperation, suggesting that it is a calculated strategy to benefit the own group without harming the other party rather than an inherent tendency to cooperate with and contribute to as many people as possible. These findings integrate previous lines of research with inconsistent findings regarding the nature of pro-socials’ cooperation. Pro-socials are cooperative, more so than pro-selves, but if there is a division between members of their own group and another group they will direct their cooperation towards their own group. Only when this comes at a cost of the other group and there is an alternative available that also benefits the own group will they invest in such a mutually beneficial option. Also, once their own group is satisfied, they will extend their cooperation to the other party.

These findings are important because we delineate boundary conditions of pro-socials’ pro-sociality and suggest that, under certain circumstances, their behavior has the potential of escalating the conflict due to their willingness to sacrifice themselves for the benefit of their own group. Conversely, we show circumstances under which pro-socials’ parochialism is not harmful to intergroup relations or can be shifted towards universal cooperation.

Finally, in line with evolutionary theories suggesting that groups with a larger number of parochial cooperators should win over other groups and thereby spread and generate highest outcomes, we found that a collective functioned best when more pro-socials were present. This suggests that overall, pro-socials’ willingness to self-sacrifice pays off for the group(s) in which they invest, leading to a higher return for everyone, and hopefully conflict mitigation and better intergroup relations and prosperity.

**Implications for practice**

The experiments in this dissertation were conducted to test hypotheses about cooperation in intergroup conflict and to generate knowledge and understanding regarding the dynamics of important factors predicting cooperation.
The research questions were based on theory rather than on questions directly relevant for conflict resolution and negotiation practice. However, the results of the research in this dissertation have several implications for practice, especially for organizations and politicians who are often confronted with intergroup conflicts and need to find ways, for example through negotiations, to resolve these conflicts.

Findings can be relevant for representatives by informing them about important factors potentially influencing their behavior. More importantly however, our findings are relevant for the represented group or constituency, by providing information on how they can direct the strategy of their representative.

First of all, managers or constituency members should emphasize that the negotiation outcomes should be favorable to both parties, and thus that the representative should strive for a mutually beneficial agreement. Indeed, zero-sum perceptions by the negotiating parties can be overcome when conflicting parties or representatives understand that the agreement will only be successfully implemented if no party believes that they reached very unfavorable outcomes compared to the other side (Malhotra & Ginges, 2010). Training for representatives and decision makers should thus be directed towards identifying a cooperation strategy that can benefit both parties. The current dissertation reveals important insight on how to direct representatives and decision makers towards universal cooperation, but this can only occur if they perceive that such an option is available in the first place. It is therefore important that they are aware of the integrative potential often present in multi-issue negotiations and are familiar with tactics such as information exchange, logrolling and problem solving, that can lead to uncovering this integrative potential (Walton & McKersie, 1965; Thompson, 1991; De Dreu, Weingart, & Kwon, 2000).

Moreover, principals or constituents should consider the type of person they would like to negotiate or make decisions on their behalf. Our results indicate that pro-socials are more sensitive to contextual factors (within as well as between the parties) and also more likely to sacrifice their personal interests for the benefit of their own group or even for both conflicting parties. They should thus be less susceptible to the principal-agent problem where interests of the agent (representative) and the constituency or principal (s)he is supposed to serve are not aligned (Eisenhardt, 1989). However, we also demonstrated circumstances under which pro-socials may actually intensify the conflict by their strictly parochial behavior. It thus seems important to identify the goal of the negotiation and the extent to which interests of representative, constituency and other party are
(mis)aligned. With this knowledge it is clear what kind of behavior can be expected from a pro-social representative.

Furthermore, knowledge about the factors that may drive (especially pro-social) representatives towards parochial or universal cooperation can inform training and even specific advice to negotiators in conflict. For example, approval from the (divided) constituency strongly guides representatives’ subsequent strategies. Ideally, principals should make sure to encourage cooperative behavior towards the other party, which should lead to best outcomes. The results of this dissertation can however also be interpreted as guidelines on how to enhance *parochial* cooperation: When principals prefer to take a competitive stance and are really focused on winning a conflict, rather than reaching profitable outcomes for both parties, this dissertation gives clear directions on how to guide representatives in this effort.

**Future directions**

This dissertation aimed and managed to pinpoint important factors driving individual behavior in intergroup conflict to parochial and/or universal cooperation with a diversity of laboratory experiments, including replications to solidify the robustness of these effects. However, as is always the case with research, answers beget more questions and there are many left for future research. In the following, I outline a number of suggestions for new research into the area of parochial and universal cooperation, from different perspectives.

**Social Value Orientation**

One recurrent finding is the important role of social value orientation. Although it is important to understand how individual differences affect behavior, practical recommendations beyond selection of representatives are limited. More practically and potentially interesting would be to investigate whether social motives could be manipulated, thereby instigating a pro-social value orientation in an individual. Research into social motives suggests that this is possible (Beersma & De Dreu, 1999; De Dreu et al, 2000) and that the effects are similar to those of one’s inherent social value orientation. For example, Weingart and colleagues (1993) found groups negotiating with a pro-social motive induced by instruction to reach higher joint outcomes than pro-self instructed groups. In effect, when situational constraints are clear, these tend to override personality variables, thereby suggesting that even pro-self individuals could adopt a pro-social motive if they are instructed to do so (for a review, see Meyer, Dalal, & Hermida, 2010).
However, some research indicates that social value orientation may have a stronger effect than social motive manipulations (Gillespie, Brett, & Weingart, 2000; Tzafirir, Sanchez, & Tirosh-Unger, 2012). This suggests that the type of manipulation is important, and that not all instructions work equally well. For example, it seems safe to assume that pro-self representatives are unwilling to self-sacrifice even when they receive pro-social instructions, if they expect this to harm their self-interest in the long run. This creates a puzzle related to the principal-agent problem, suggesting that it is important to find a way to align preferences (or motives) of the representative with those of the represented principal or constituency. One suggestion to enhance pro-selves’ willingness to self-sacrifice and/or cooperate with their groups’ interests could be to enhance their identification with their group (goal transformation hypothesis; De Cremer & Van Dijk, 2002; De Cremer, Van Knippenberg, Van Dijk, & Van Leeuwen, 2008). Future research should investigate whether this would also be an efficient way to increase pro-selves’ pro-social motivation.

Parochial Cooperation

Our results point to the pervasiveness of parochial cooperation as a driving force behind human behavior, and, potentially, conflict intensification. Research already started to investigate the neurological correlates of parochial cooperation, supporting its biological basis (De Dreu et al., 2010; 2011). Similar work could investigate which regions in the brain are activated during acts of universal cooperation, and as such discover similarities and differences between parochial and universal cooperation on a neurobiological level.

Although we suggest that a shift towards universal cooperation can be obtained depending on the conflict structure and (implicit or explicit) group norm, it is still interesting to investigate how far parochial cooperation reaches. It may have negative influences on conflict resolution due to the strengthening of the own group which may fuel the intergroup conflict and vice versa, yet we also find evidence that at least pro-social individuals have an inherent harm aversion, showing reluctance to harm the other party. Future research should investigate how far individuals are willing to go in displaying their parochial cooperation, and how accessible a mutually beneficial option must be before it is used. Furthermore, research could test whether pro-socials’ universal cooperation is driven by harm aversion, or is actually a reflection of long-term parochialism. In an intergroup conflict (such as the IPD or NSD IPD, see Chapter 5) investment in the in-group ultimately results in a loss of resources. Universal cooperation can thus be
interpreted as a less costly form of parochial cooperation - where the benefit for the other group is a mere side effect rather than a reflection of care or harm aversion for this group.

Alternatively, individuals might be more willing to display parochial cooperation, even in intergroup competition, when this does not harm the other party - For example when the competition is about attaining a scarce resource. The conception of parochial cooperation as investing in the own group while incurring a loss on the other party versus preventing the other party from a gain may have different motivational underpinnings. More research is needed to distinguish between these and perhaps other types of parochial cooperation and factors predicting their occurrence.

Finally, it would be interesting to investigate the long term implications of either form of cooperation in terms of intergroup relations, communications and trade interactions. Furthermore, research should specifically test which theory is most accurate in describing and predicting parochial cooperation. Although this dissertation made a start in uncovering factors predicting each form of cooperation, this is just the beginning of a potentially long line of research. Much more work can and should be done to illuminate when and why which form of parochialism will occur and can be promoted, and, most notably, will be most beneficial – to one party specifically or, ideally, to the resolution of the conflict.

*Negotiations: Constituency influence, support for the agreement and intergroup relations*

With regard to negotiations, our findings also beget more research. Such research should focus more on the influences of a constituency on representatives’ negotiation behavior as well as on the generalizability of the current findings to multi-level integrative negotiations. In Chapter 3 and 4 we used relatively simple negotiation paradigms, restricting interaction with the constituency and the counterpart. Allowing for such interaction would reveal dynamic processes and take into account how communication between the representative and the constituency, rather than unidirectional communication from the constituency, would affect representatives’ behavior and negotiation outcomes.

On a different note, it would also be interesting to investigate what happens after an agreement has been reached. What are the long-term implications of such an agreement, and how does the quality of an agreement shape subsequent intergroup relations? Whereas our findings in Chapter 5 suggest that a larger number of pro-socials could improve collective functioning, little is known on how
certain types of agreements may affect the relationship between the previously conflicting parties as well as between the representative and his own party. Throughout this dissertation, I assume that universal cooperation should lead to subsequent positive relations and conflict regulation. Indeed, integrative agreements lead to satisfaction with the agreement as well as to enduring positive intergroup relations and economic prosperity (Rubin et al., 1994). More specifically, research has shown that positive contact between representatives of conflicting parties may increase positive perceptions of the groups (Kelman, 2006) and that the process of the negotiation, regardless of the outcome, influences perceptions of the other group (Saygı et al., 2014). However, more research should reveal how agreements are evaluated by the constituency and in turn affect intergroup relations.

In a similar vein, research on how representatives should sell their agreement to their constituency as well as to the other party is sparse. After all, an agreement can only lead to positive intergroup relations once it is implemented and thus approved by the constituency. Research suggests that an agreement is more likely to be supported when both parties feel that the other is just as (dis)satisfied (Malhotra & Ginges, 2010). It may thus sometimes be wise for representatives to sell their agreement as lose-lose, rather than win-lose, to gain support from both parties and more willingness to accept the terms of the agreement. More research should uncover the psychological mechanisms underlying agreement perceptions of the groups to which the terms pertain. Knowing this helps to make sure that good agreements are not only reached, but also implemented and sustained by a larger population than the representatives involved in the negotiation.

**Concluding thoughts**

This dissertation sheds light on factors influencing cooperation in intergroup conflict. We distinguish between two important functions of cooperation and their diverging potential effects on the course of the conflict and show which factors predict parochial and universal cooperation. We have highlighted the prevalence and the potential dark side of parochial cooperation and identified important predictors of each form of cooperation on the intrapersonal, intragroup, and intergroup level. Universal cooperation can be stimulated by a cooperative norm in the group or represented constituency, by a conflict structure where emphasis is put on a mutually beneficial option and by hiring pro-social representatives. This dissertation shows the importance of the interplay between
these factors, and how pro-social people are differently (and generally more strongly) affected by situational cooperation cues. Although pro-socials have a dark side in being more prone to potentially detrimental parochial cooperation, they are also reluctant to harm the other party when there is a mutually beneficial alternative available. This is hopeful information and indicates that, even in intergroup conflicts, pro-social individuals use their pro-sociality for a good cause: Despite some evidence to the contrary, the world might be just a little better off with more pro-social people.