

THE UNIVERSITY OF CHICAGO

THE IMPACT OF COMMUNICATION MEDIUM ON NEGOTIATION DURING CONFLICT

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TABLE OF CONTENTS

LIST OF FIGURES..... iii

LIST OF TABLES ..... iv

ACKNOWLEDGEMENTS ..... v

ABSTRACT..... vii

INTRODUCTION..... 1

STUDIES 1 – 2: COMMUNICATION MEDIUM ON CONFLICT DE-ESCALATION..... 14

STUDY 3: AFFECTIVE RESPONSE TO COMMUNICATION MEDIUM ON CONFLICT-  
RELEVANT INFORMATION..... 37

STUDY 4: PERCEIVED ACCENT ON CONFLICT DE-ESCALATION ..... 57

GENERAL DISCUSSION..... 82

REFERENCES..... 87

APPENDIX..... 97

## LIST OF FIGURES

Figure 1: The peacebuilding proposal in English and Hebrew (Studies 1 – 4).....	23
Figure 2: Mean ratings of the proposal by source and communication medium (Study 1) .....	27
Figure 3: Mediation analysis of source evaluations on proposal ratings by communication medium (Study 1).....	30
Figure 4: Mean ratings of the proposal by communication medium (Study 2) .....	34
Figure 5: Historical narrative in both English and Hebrew (Study 3) .....	44
Figure 6: Mean ratings by type of text and communication medium (Study 3) .....	48
Figure 7: Mediation analysis of positive and negative emotions on proposal ratings by communication medium (Study 3).....	50
Figure 8: Influence of communication medium on proposal evaluations across proficiency differences (Study 3) .....	53
Figure 9: Mean pro-Israeli index ratings of the proposal by accent (Study 4).....	70
Figure 10: Mean pro-Palestinian index ratings of the proposal by accent (Study 4).....	71
Figure 11: Mediation analysis of perceived status and warmth of the Palestinian representative on proposal ratings by accent (Study 4).....	77

## LIST OF TABLES

Table 1: Demographic characteristics of participants in Study 1.....	21
Table 2: Demographic characteristics of participants in Study 2.....	32
Table 3: Demographic characteristics of participants in Study 3.....	43
Table 4: Demographic characteristics of participants in Study 4.....	62
Table 5: Mean accent ratings and perceived age of the speaker (Study 4).....	65
Table A1: Items used in Study 1 .....	97
Table A2: Additional Items used in Study 2 .....	98
Table A3: Additional Items used in Study 3 .....	99
Table A4: Items minus Prototypicality Measure used in Study 4.....	100-102
Table A5: Prototypicality Measure used in Study 4 .....	103-104
Table A6: Descriptive statistics and tests comparing Mild versus Native-like and Heavy accents (Study 4) .....	105

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## ABSTRACT

Longstanding intergroup conflict is one of the most perilous issues on the global stage, leading to violence, displacement, and loss of life. Finding strategies to bring parties to the negotiation table is therefore of utmost importance to address the human suffering that comes along with protracted conflict. Here, I examine a common problem that arises when parties in intergroup conflict wish to work towards peace – namely, the lack of a shared, native language through which to communicate – and test how different methods of overcoming this linguistic barrier influence receptiveness to peacebuilding initiatives. To address this question, I conducted a series of studies in Israel on the Israeli-Palestinian conflict, which stands as a prominent instance of violent, protracted conflict that is still ongoing today.

In Chapter 1, I examined the consequences of offering Jewish-Israelis a peacebuilding initiative through different communication mediums – either in their native language (Hebrew) or a lingua franca (English) shared between parties. Here, the same peacebuilding proposal was judged as being worse for own's own side when offered through a lingua franca both when it was from an ingroup (Israeli) or outgroup (Palestinian) delegation. In Chapter 2, I explored the underlying reason for this communication medium effect and tested whether communication medium influences receptiveness to other forms of conflict-relevant information. I found that peacebuilding measures offered through the native language of the recipient elicited a more positive affective response which in turn improved proposal evaluations. However, the positive effects of sharing information through the native language of the recipient did not make people more open to historical narratives from the conflict offered by the other side. Finally, in Chapter 4, I examine how the perceived accent of a speaker influences receptiveness to peacebuilding initiatives by testing how Jewish-Israelis responded to a peacebuilding proposal offered by a

Palestinian delegate with varying degrees of Arabic-accented Hebrew. Jewish-Israelis evaluated the same peacebuilding proposal offered by a heavier Arabic-accented Hebrew delegate as being worse for their own side than when the same proposal was offered through more native-like Hebrew. Furthermore, when the delegate had a heavier Arabic-accented Hebrew accent he was judged more harshly in both perceived status and warmth, which in turn influenced proposal evaluations. Importantly though, this effect was only detected when the speaker was perceived as having heavier accent, as both the proposal and delegate himself were judged similarly to a more native-like speaker when he had a milder accent. Broadly, these findings indicate that the seemingly innocuous choice of how to communicate with the other side during conflict can have serious implications on peacebuilding efforts in conflict.



## INTRODUCTION

Violent conflict is a pernicious issue that continues to plague the modern world. Today, it is estimated that over 2 billion people live in conflict-affected areas, amongst whom 274 million need humanitarian aid and 84 million have been displaced (UN News, 2022). While the root cause of these conflicts varies from some combination of dispute over resources, territory, power, or ideology, once ignited they often persist even when viable options to work towards peace are available (Staub & Bar-Tal, 2003). However, while extensive work has examined the sociopsychological factors that underlie the continuation of violent conflict, one undiscussed issue is how parties in conflict choose to communicate once they have made it to the negotiation table. This is a significant issue, as parties in cross-national conflict often lack a shared native language through which to communicate. Hence, before they can begin negotiating for peace, they must first negotiate some means of communicating with each other. This leaves them with two main options: either opting to use a lingua franca or alternatively communicating in their native language through some form of translation.

A lingua franca, or a shared language between groups who do not share a native tongue, has historically been a commonly used solution to transcend communication barriers. While various languages throughout history have served this role – such as Aramaic and Acadian in ancient times, Swahili, German, and French in Africa, and Russian in Asian and Eastern Europe – in recent history English has become the dominant lingua franca of international business and diplomacy (Crystal, 2003). This trend towards English as the lingua franca has been seen both in the increasing adoption of English as the official corporate language of major, multinational companies such as Nokia, Samsung, and Microsoft (Neeley, 2012), as well as the frequent use of English as one of the official languages of major international entities such as the United

Nations, Commonwealth of Nations, World Trade Organization, and the International Criminal Court (Zhang, Wu, Xie, 2020)

However, while lingua franca use has been and continues to be a popular method of communication, parties may instead opt to communicate through translation or interpretation services. While this method of communication requires that parties communicate through a third-party service, translation is still a widely used method of cross-national communication that allows for all parties to continue using their native language throughout the exchange. For instance, the European Union is well known for having a full multilingual language policy, in which all languages within the European Union are recognized as having equal status within the organization. As a result, all members can communicate in their native language with the knowledge that what they are sharing will then be translated into each of the respective languages of all the other member states (Zhang, Wu, Xie, 2020).

In sum, both communication methods are widely used in cross-national communication, allowing parties to bridge linguistic divides so that they may work towards common goals. However, as previously illustrated, while different entities employ various language policies, ranging from maintaining a single, official lingua franca (such as the Commonwealth of Nations) to fully utilizing interpretation services to maintain an equal language policy (such as the European Union), often the choice in communication method comes down to the preferences or policies of an institution rather than by which communication method may be most effective in reaching favorable joint outcomes (Zhang, Ke, Liu, 2022). Therefore, the focus of this work is to systematically examine the consequences of communicating either using a lingua franca or the native language of the recipient on how parties think about and respond to peacebuilding efforts during cross-national conflict. First, I will first summarize the psychology of violent conflict,

which broadly examines how ongoing conflict influences how individuals think and feel during the conflict. I will then introduce existing work on how different communication methods shape cognition during conflict prior to introducing the current research.

## **Psychology of Violent Conflict**

Fundamentally, violent conflict is rooted in one or more disputed issues between parties.

However, once ignited, a variety of psychological biases develop which skew how the parties process conflict-relevant information. While these biases serve an adaptive function, as within a group they unify members towards a shared goal and justify the continuation of conflict, these same biases also serve as significant barriers to the resolution of conflict. Here, I will discuss the cognitive and emotional barriers that fuel the continuation of conflict even when viable pathways to peace are available. This discussion will focus more on barriers at the individual level as opposed to the institutional level (such as the extent to which institutions within society punish dissident views or selectively control the flow of information to the public), however for a full overview see the socio-psychological barriers to peaceful conflict resolution (Bar-Tal & Halperin, 2011).

### *Cognitive Barriers*

While violent conflict erupts, how each side views themselves, their opponents, and the conflict morphs as the conflict progresses. Perhaps most perniciously, while in the face of continued violence one may think parties would be more willing to negotiate peace, as conflict progresses both sides often find themselves more ingrained in their original goals than they were at the start of the conflict. This is because during active conflict, both sides continuously justify the importance of their own goals in the conflict amongst its members. Over time, this

continuous reinforcement further builds up the importance of these goals, and hence society members start to frame any failure to achieve these goals as an existential threat to society (Bar-Tal, 2007; Sheikh, Ginges, & Atran, 2013).

While the continued reinforcement of goals serves as important function during conflict, namely by providing members a rationale for enduring the hardships that come along with ongoing war, when faced with the possibility of deescalating conflict this same tendency can make it difficult for parties to reach any sort of compromise. This is because once they have reached the negotiation table, each side has become so solidified in the justness of their own position to the point in which it can be seen as uncompromisable (Atran & Ginges, 2012; Ginges & Atran, 2013). And even for the remaining issues for which there is a perceived room for compromise, parties often struggle to reach any form of negotiated agreement even when there is integrative potential. This is because conflict often exacerbates the extent to which parties view issues for which there is room for compromise as zero-sum, meaning that any gains for one side is automatically perceived as a symmetrical loss for the other (Kelman, 1987).

Beyond how they view their own goals, society members also develop a biased view of themselves and the opposing side, making any meaningful cooperation difficult. For themselves, society members often reinforce a positive self-image for its collective and individual members within the conflict, and thus tend to attribute positive traits, values, and behaviors to their own side (Bar-Tal, 2007). This results in society members often viewing themselves as the victim in the conflict, and thus any action taken against the opposing side is framed as an act of self-protection rather than as an act of aggression. This tendency towards victimization also leads both sides to asymmetrically focus on the unjust actions perpetrated by the other side, while

minimizing or overlooking any unjust actions they themselves had committed to the other side (Bar-Tal, Chernyak-Hai, Schori, & Gundar, 2009).

On the other hand, when considering the motives, actions, and character of the opponent, both sides tend to delegitimize the opposing side (Oren & Bar-Tal, 2007). This takes multiple forms, including minimizing or failing to acknowledge that the opponent has their own justifiable motives or goals (Bar-Tal, 1990), as well as viewing or discussing the opponent in a dehumanizing manner (Bruneau & Kteily, 2017; Kteily & Bruneau, 2017). For example, in a qualitative study of social media posts on leftist members of the Israeli state, Harel, Jameson, & Maoz (2020) found evidence for a wide range of delegitimization tactics, including framing the opponent as a threat (“May God take all the leftists, all the troubles in this country come from them. They give terrorists free reign.”), separation or distancing oneself from the opponent (“Leftists, come on . . .when will you understand that leftists aren’t Jews?”), and outright dehumanization (“A bunch of dogs all the leftists are traitors”). This dehumanization combined with the positive regard that each side holds itself in results in a situation where each side perceived themselves as righteous victims of conflict, perpetrated by an unjust opponent who has far less vital or valid goals than themselves. Hence, when faced with possible de-escalation, this continued villainization and delegitimization makes cooperation difficult, as ceding on any issue entails giving ground to an opponent of low moral character with little valid reason for holding their own goals in the conflict (Bar-Tal, 2007).

Overall, these core biases in how society members view themselves and their goals both help people endure the hardships of conflict but hinder them when options for ending it are on the table. Furthermore, this broader set of beliefs about how members view themselves, the other side, and their own goals are often held with a high degree of confidence by society members

and can be difficult to change (Bar-Tal & Halperin, 2011). This is in part because, even when presented with new information that may change their beliefs, society members often engage with new information in a biased manner. For instance, Porat, Halperin, & Bar-Tal (2015) found that Jewish-Israelis with strongly held beliefs regarding the conflict were less likely to search for new, conflict-relevant information before making a judgement about a possible peace proposal, and when they did choose to look for new information they explored fewer new topics and spent less time engaging with alternative information than those with more weakly held beliefs. Additionally, when provided with new information that depicts each side in a mixed light, members of each group selectively recall the positive details while leaving out negative ones about their own side while recalling the inverse for their rival (Klar & Baram, 2016). This biased information processing, supported by the fact that society members are often motivated to maintain beliefs that reinforce their own positive self-identity and justness in the conflict (Bar-Tal, 2000), results in these beliefs being firmly held even when challenging them could lead to possible conflict resolution.

### *Emotional Barriers*

While the cognitive biases that society members exhibit during conflict serve as significant barriers to its resolution, equally important are the emotions that develop over the course of conflict. Specifically, how people emotionally respond to conflict-relevant information plays a central role in whether they will be willing to make meaningful steps towards conflict resolution. Here, a few key emotions have been shown to be central to conflict de-escalation are hatred, fear, anger, hope, and empathy, whose roles I will detail further below (though for a full review and a discussion of more secondary emotions in conflict such as disgust and guilt, see Halperin, 2016).

Of all the emotional barriers, hatred against the opponent is the most destructive affective barrier to conflict resolution. Because hatred stems from a view that the opponent is an unchangeably and inherently evil group who continuously commits intentional harms against your side, feelings of hatred can make working with the other side not just unappealing but morally impermissible (Fischer, Halperin, Canetti, & Jasini, 2018). And beyond acting as a barrier to conflict resolution, feelings of hatred fuel continued aggression and support for violence against the other side. For example, Halperin (2008) found that Jewish-Israelis with high levels of hatred were more likely to hold violent goals against the other side such as harming or outright eliminating the outgroup. Furthermore, high levels of hatred can lead to an unwillingness to accept any positive characterization of the opponent and reject all forms of compromise or reconciliation (Halperin, 2011).

Fear also serves as a potent negative affective barrier in conflict resolution. Unlike hatred, which is fueled by a deeply negative appraisal of the character of the outgroup, fear stems from a desire for security that you do not have the power to attain. Hence, fear is often most predominantly associated with a 'flight' response, making people avoid taking any action, helpful or otherwise, in changing the status of the conflict (Halperin & Tagar, 2017). For instance, in a longitudinal study of Jewish Israelis, those who reported higher levels of fear regarding the conflict were biased to look for reasons not to work towards peace when given the opportunity (Cohen-Chen, Halperin, Porat, & Bar-Tal, 2014). However, while fear is often associated with more avoidant behaviors than hatred, more recent work has also found fear can fuel violence as well. This is because heightened fear generally increases the perception of outgroup threat (Skitka, Bauman, & Mullen, 2004; Spanovic, Lickel, Denson, & Petrovic, 2010), which can increase support for aggressive action against the other side such as deportation

(Skitka, Bauman, Aramovich, & Morgan, 2006) or further military action and economic sanctions (Spanovic et al., 2010).

Finally, of the negative emotions anger has the most mixed effect, serving as both a barrier and motivator for cooperation depending on the circumstances. While anger often is described as the ‘fight’ response emotion in conflict, anger often arises in situations in which you appraise the outgroup members as unjust but your ingroup as strong (Halperin & Tagar, 2017). As a result, while anger can boost willingness to exert violence against the opponent (Skitka et al., 2006; Staub, 2000) while dampening willingness for cooperation (Maoz & McCauley, 2005), it can also lead to increase support for cooperation in situations in which the character of the other side is judged as not being entirely immoral. For instance, in a series of studies with Jewish-Israelis, Halperin, Russell, Dweck, and Gross (2011) found that if Jewish-Israelis did not hold high levels of hatred towards Palestinians, experimentally instilling anger in participants increased support for compromise compared to those who were not experimentally manipulated to feel anger.

Turning to positive emotions, hope and empathy are both essential for reconciliation, but their absence (hopelessness and lack of empathy) can serve as major barriers in conflict resolution. Hope, or specifically an expectation of future positive outcomes, is an essential emotion particularly in protracted conflict. If people have no hope that any proposed measures will positively impact the course of conflict then they will be unwilling to engage in peacebuilding efforts (Bar-Tal, 2000). For instance, Rosler, Cohen-Chen, & Halperin (2017) found that hope was most strongly predictive of support for conciliatory action during conflict even during times of violence. Hence, peacebuilding initiatives must either be received by people with some degree of existing hope for a positive outcome or instead must inspire hope in its



audience. Without hope, even the most elegant solution to cease ongoing conflict will likely not be favorably received by either side.

Lastly, empathy, or sharing the emotional state of the other side, has been both found to predict support for compromise (Maoz & McCauley, 2005; Nadler & Liviatan, 2006) as well as reduces support for escalating aggressive action against the opponent (Rosler, Cohen-Chen, & Halperin, 2017; Shechtman & Basheer, 2005). In a particularly striking study by Malhotra and Liyanage (2005), the researchers found that participation in a four-day peace workshop aimed at mitigating tensions between Sinhalese and Tamils in Sri Lanka resulted in significantly increased empathy for the other group even one year after participating in the workshop, which in turn mediated differences in donation rates to a charity that helped poor children of the other side compared to a control group who did not participate in the workshop. Furthermore, in studies conducted in the post-conflict period in Northern Ireland, empathy was found to serve an essential role in fostering forgiveness between sides, and hence serves a crucial role in the reconciliation process as well (Cehajic, Brown, & Castano, 2008; Moeschberger, Dixon, Niens, & Cairns, 2005).

In sum, along with the cognitive barriers in conflict, how individuals emotionally respond to conflict relevant information can shape their willingness to work with the other side. Hence initiatives that can reduce the extent people feel negative emotions such as hatred and fear while promoting positive emotions like empathy and hope when faced with possible solutions to deescalate or resolve conflict can serve a vital role in promoting peacebuilding between sides.

## **Communication in Conflict**

While these cognitive and emotional barriers may seem insurmountable, existing work has shown that different communication tactics can boost willingness for compromise even in the face of intractable conflict. While these methods vary, each share in using language strategically in some form as a way of bridging divides between sides in the hopes of fostering a climate more open to peace.

Beginning first with dialogue-based peace building projects, this broader area of work focuses on sharing narratives of stories between sides as a means of reducing moral exclusion and dehumanization (Maoz, 2011; 2018; Ron & Maoz, 2013; Zigenlaub & Sagy, 2020). This narrative model of reconciliation-aimed encounters brings participants from both groups to engage in storytelling by sharing their personal and collective narratives, experiences, and suffering in the conflict. Encountering the experiences of the other through storytelling is thought to enable conflicting groups to create intergroup trust and compassion by humanizing the other side, and hence increasing recognition of and empathy towards the shared pain and suffering that come along with conflict (Bar-On & Kassem, 2004). In one such demonstration, Bruneau, Casas, Hameiri, & Kteily (2022) found that sharing videos to Colombians of five-minute dialogues between FARC ex-combatants and non-FARC Colombians humanized the ex-FARC combatants and increased support for peace and reintegration of ex-combatants three months after the initial video exposure.

Additionally, interventions more geared at explicitly exposing the hypocrisy of how members of each side view and assign collective traits to the members of the other side have been proven to be effective in reducing animosity and increasing support for conciliatory action (Hameiri, Porat, Bar-Tal, & Halperin, 2014). Two such related interventions – the collective

blame hypocrisy and collective praise interventions – aim at reducing hostilities by pointing out the tendency for people to assign positive traits (e.g., praise) collectively to their entire ingroup but assign negative traits (e.g., blame) collectively to the outgroup (Bruneau, Kteily, & Falk, 2018; Bruneau, Kteily, & Urbiola, 2020; Gallardo, Hameiri, Moore-Berg, & Bruneau, 2022). For example, Bruneau, Kteily, & Falk (2018) presented Americans with a video in which a Muslim-American woman discussed the hypocrisy of collectively blaming all Muslims for terror attacks but not blaming all Christians for extremism committed by individual Christians. This intervention led to decreased support for punitive policies against Muslims in the United States (e.g., decreased support for bans on Muslim women wearing veils).

However, even more subtle language interventions have been found to be effective. For instance, Kteily, Saguy, Sidanius, & Taylor (2013) found that the order in which an initial proposal is offered matters when trying to encourage groups in conflict with asymmetrical power to come to the negotiation table. Specifically, for high power groups, offering less consequential issues first followed by higher consequential issues promotes willingness to negotiate because it is seen as less of a threat to their high-status position, whereas offering highly consequential issues first followed by less consequential issues is preferred for low power groups as this is viewed as the higher power group being more willing to change the status quo. Idan, Halperin, Hameiri, and Reifen Tagar (2018) also found that phrasing policies regarding the ongoing Israeli-Palestinian conflict in the noun form as compared to the verb form (e.g. “I am for [returning/the return] to the 67' borders”) decreased the extent to which these policies triggered anger against both the government and Palestinians, and in turn increased support for these policies. And lastly, inspired by prospect theory, Gayer, Landman, Halperin, Bar-Tal (2009) found that highlighting future losses as compared to future gains is most effective in encouraging

people to reevaluate their attitudes around possible conflict resolution and consider options to work towards peace.

## **Current Studies**

In this dissertation, I will further this literature on the influence of different communication methods by examining whether the medium through which we communicate influences willingness for cooperation during violent conflict. I aim to examine the influence of presenting peacebuilding information in the native language of the recipient or in a shared, lingua franca influences the effectiveness of peacebuilding initiatives in conflict. This serves as an important and novel step forward, as both methods of communication are frequently used in international discourse yet work to date has not systematically examined the influence of presenting the exact same information through different languages modes. In the studies I will be presenting, I will be focusing on the effectiveness of different peacebuilding initiatives in the context of the Israeli-Palestinian Conflict, as this serves as one of the longest, ongoing examples of cross-national conflict still occurring today.

To assess this question, I will begin by examining how peacebuilding initiatives are received when communicated through either the native language of the recipient or a shared, lingua franca (Studies 1-3). In these studies, I will assess the influence of communication method both when a peacebuilding initiative is from an ingroup or outgroup source (Study 1), and then replicate these findings with a new sample of participants (Study 2). Next, I will examine what factors explain differences in the effectiveness of different communication methods as well as test whether these effects are specific to peacebuilding initiatives or extend more broadly to conflict-relevant information (Study 3). Finally, I will examine how the degree of perceived, non-native accent when communicating in the native language of the other side influences how

peacebuilding initiatives are judged by the receiving party. Specifically, I will examine how Jewish-Israelis who speak Hebrew as their native language evaluate peace building measures spoken by a Palestinian who speaks with heavy, mild, or near native-like Arabic-accented Hebrew (Study 4).

## STUDIES 1 – 2: COMMUNICATION MEDIUM ON CONFLICT DE-ESCALATION

In these first two studies, I examine whether offering a peacebuilding proposal through a shared, but foreign, lingua franca helps or hinders the negotiation process compared to offering the same proposal through the native language of the recipient. While one may predict that as long as the content remains the same the language through which it is communicated will not impact how people judge the information, there is good reason to believe that changing the language may inadvertently impact openness to peacebuilding efforts in conflict. Here, I will be contrasting two theories of how language may influence openness to peacebuilding efforts – a ‘foreign language effect’ account and a ‘communication accommodation’ account.

Beginning with foreign language effect account, work under this theory has revealed that bilinguals make systematically different choices when using their foreign as compared to native tongue. In the seminal paper by Keysar, Hayakawa, & An (2012), the researchers found that bilinguals were less likely to make deontological (or ‘rule-based’ choices) in their foreign language, which as a result lead them to instead default onto more utilitarian (or greater good) decisions. Specifically, using the well-known trolley dilemma (Foot, 1967), they found that when given the option to save five people by sacrificing one person, bilinguals were systematically more likely to elect to sacrifice the one person when using their foreign as compared to native tongue. By making this choice, they demonstrated they were more willing to violate the moral norm of ‘do no harm’ when given a more utilitarian option of saving more lives (for a meta-analysis of the ‘moral foreign language effect’, see Stankovic, Biedermann, & Hamamura, 2022).

Building off this early work on moral choice, later research has extended the foreign language effect into other domains. For example, bilingual consumers have been found to be

more willing to make more sustainable, but aversive, choices such as consuming recycled wastewater (Geipel, Hadjichristidis, & Kleese, 2018) and voice greater support for beneficial but risky technologies such as nanotechnology and pesticides when using their foreign language (Hadjichristidis, Geipel, & Savadori, 2015). Within the health domain, foreign language use has been found to distance bilinguals from culturally engrained values which pose a barrier to endorsing mental health treatment (Heller, Grant, Yasui, & Keysar, 2023), increase compliance with public health initiatives (Saile, Munz, & Hüttl-Maack, 2022), and increase willingness to get vaccinated when trust in the vaccine is low (Geipel, Grant, & Keysar, 2022). Lastly, these effects have even extended into memory biases, such that bilinguals using their foreign language are less likely to fall for repetition-based truth effects (Nadarevic, Plier, Thielmann, & Darancó, 2018) or false information (Grant et al., 2023) compared to when they are using their native tongue.

Overall, these findings suggest that decisions made based on information communicated in a foreign language can result in less biased decision making (for a review, see Hadjichristidis, Geipel, Keysar, 2019 or Hayakawa, Costa, Foucart, & Keysar, 2016). Cognitively, these effects have largely been explained through a dual process theory of reasoning (Evans & Stanovich, 2013; Sloman, 1996). Under this model, individuals have two distinct reasoning processes, one which leads to quick, intuitive, and emotionally driven judgments (System 1) and another process that leads to slower but more deliberative outcomes (System 2). Individuals tend to default to the quicker judgments of the intuitive System 1 unless overridden by a salient, alternate System 2 response. Using a foreign language is theorized to reduce the salience of the more emotionally driven, intuitive judgments of System 1, leading to better decisions when one's intuition may lead them astray (Hayakawa et al., 2017; Hadjichristidis, Geipel, & Surian, 2017).

Hence, if people are less likely to default onto biased decision-making heuristics and make rash, emotional decisions in their foreign as compared to native language, this may grant recipients of a peacebuilding measure the “cooler heads” they need to see the benefits in the proposed measures. This could be beneficial for two reasons. First, processing information through a foreign language may distance people from the biased beliefs tied to the ‘culture of conflict’ that arise over the course of violent conflict, which can make them more open to cooperating in the hopes of deescalating conflict. Second, it may also dampen negative affective responses that can make people less open to any proposed action to work towards conflict de-escalation.

However, under the communication accommodation account, utilizing the native language of the recipients may instead be more beneficial than using a shared, but foreign language when communicating with the other side during cross-national conflict. According to communication accommodation theory, speakers converge, diverge, or maintain their communicative style depending on the goals of the speaker. Typically, in cases in which the speaker converges onto the speech style of the recipient, this tends to result in more favorable evaluations of the speaker by the recipient (for a review, see Gallois, Ogay, & Giles, 2005 or Giles & Ogay, 2007). For instance, in a pertinent study on speech accommodation amongst bilinguals, Simard, Taylor, & Giles (1976) found that when native English speakers who knew French decided to use French with their native French interlocutors, they were perceived more favorably than when they elected to continue using their native English. Specifically, the choice to use French boosted perceptions of their competence in their foreign French, the effort they were putting forth in the conversation, as well as led to a perception that the native English speakers were more willing to bridge cultural barriers to boost the effectiveness of the



conversation. Importantly, this only occurred when the recipient was under the impression the speaker had elected to use their native tongue rather than when they were forced to use French, demonstrating that speaker intent in accommodating to the listener influences how favorably modifying one's speech is received.

Extensive work has shown that this convergence in language style – be it through accent (Willemyns, Gallois, Callan, & Pittam, 1997), speech rate (Buller, LePoire, Aune, & Eloy, 1992), or pitch (Gregory & Webster, 1996) – boost positive evaluations of the speaker. Specifically, speakers who converge are often rated as being warmer, friendlier, more attractive, and higher in solidarity, as well as are perceived as communicating more effectively and being generally more cooperative than those who either diverge or maintain their communication style (Giles & Ogay, 2007). Furthermore, convergence has been found to translate into greater rapport building (Crook & Booth, 1997) and cooperation (Manson, Bryant, Gervais, & Kline, 2013) between interlocutors.

According to Gallois, Ogay, and Giles (2005), convergence can be motivated by several conscious and unconscious factors. First, convergence can be motivated by a desire to gain approval by the other party in the conversation. Sometimes the speaker knows that converging their speech style – such as by adopting a higher prestige accent in an academic or professional setting – will benefit them, and hence will consciously adopt the communication style of those around them. Second, convergence can be done to close the perceived social distance between parties, allowing the speaker to achieve a stronger sense of similarity and solidarity. Third, as previously illustrated, convergence can occur as a goodwill gesture, as it shows you are willing to take measures to accommodate to the communication style of others. And lastly, convergence can be done with the aim of improving communication efficacy, as adopting a style of

communication that is like the recipient may improve comprehension and facilitate a smoother flow of conversation.

Importantly, though, convergence is not always positively received. For instance, in situations in which divergence is expected - such as an instructor of a class exhibiting a divergent communication style to that of their students - failure to converge is seen as more acceptable and hence is more positively received (Grush, Clore, & Costin, 1975). Also, convergence can come at a cost, as speakers can face negative consequences such as a loss of their own identity or backlash from their own ingroup because of convergence (Hogg, D'Agata, & Abrams, 1989). However, generally convergence has positive outcomes for the speaker. Hence, if choosing to communicate in the native language of the recipient improves how favorably the sender is generally perceived and boosts willingness to cooperate with them, it may be beneficial to communicate using the native language of the recipient as compared to a shared lingua franca when attempting to deescalate conflict.

In sum, communicating with the other side using a shared, but foreign, lingua franca in conflict may either help or hinder the negotiation process, depending on whether it distances people from some of their more destructive, negative emotions and beliefs associated with the conflict (the foreign language effect account) or instead lacks the positive social evaluations and subsequent boost in willingness to cooperate that often arise from converging onto the native language of the recipient (the communication accommodation account).

### **Study 1**

In Study 1, I assessed whether communication medium – using the native language of the recipient or a shared, lingua franca – influenced how Jewish-Israelis respond to a peacebuilding

proposal in conflict. To do so, I randomly assigned native Hebrew, Jewish-Israelis to read and assess a trustbuilding and security proposal written either in their native Hebrew or in English as a shared, lingua franca.

Additionally, I also varied whether the proposal was presented by an ingroup (Israeli delegation) or outgroup (Palestinian delegation) source. By varying the source of the proposal, I could test two possibilities. First, I could examine whether the effect of communication medium depends on the source of the proposal. One possibility is that the signal value of communicating in the native language of the recipient may vary depending on whether the source is an ingroup member in which native language use is assumed or an outgroup member where native language use may be marked. This is particularly pertinent to the communication accommodation account, in which native language use may boost source evaluations and improve the perceived cooperative intent of the sender if their choice in language is seen as a cooperative, goodwill gesture. While it may be the case that people will still prefer an ingroup source who continue to use their shared, native tongue to communicate as ingroup members sometimes penalize other ingroup members who change their speech style (e.g. Hogg, D'Agata, & Abrams, 1989), native language use lacks the possibility of being a goodwill gesture when coming from a ingroup member as it does not reflect changing one's speech to accommodate the recipient.

Second, by varying the source of the proposal, I could examine whether tendencies to reactively devalue a proposal when it comes from the outgroup source depends on the communication medium used when presenting the proposal. Prior research has found that when people judge a proposal during conflict, they tend to automatically judge it less favorably when it comes from the other side (Maoz, Ward, Katz, & Ross, 2002; Ross & Ward, 1995). This reactive devaluation effect occurs when people with strong views regarding the issues in question tend to

construe ambiguous details as being more favorable to the side who offered the proposal. For instance, in a series of studies on the Israeli-Palestinian conflict in which a peace-building proposal was offered from a Palestinian or Israeli delegation, Maoz, Ward, Katz, and Ross (2002) found that details such as instituting a “permanent settlement” for Palestinians was interpreted as meaning something closer to Palestinians having a place to reside with restricted autonomy when offered from an Israeli delegation or instead meant something closer to full independence in the form of an independent Palestinian state when offered from a Palestinian delegation. Neutral, third-party people, on the other hand, did not construe these details differently depending on the source that offered the proposal. Hence, by offering the proposal from an Israeli or Palestinian delegation in either their native Hebrew or foreign English, I can examine whether people are more objective – or put otherwise, less biased to view the same proposal more favorably depending on the source – depending on the language through which it is communicated.

Study 1 was preregistered on Open Science Framework (<https://osf.io/2evfz>) and the study data and analysis script can be found here (<https://osf.io/9cxhu/>).

## **Method**

### *Participants*

310 Jewish-Israeli native Hebrew speakers who know English as a foreign language participated in an online survey through the survey panel Midgam (<https://www.midgampanel.com/>). All participants were prescreened to ensure they were native Hebrew speakers with at least an intermediate proficiency in English and were 18 years or older. Of those who participated, 3 (1.0%) reported a higher proficiency in English than in their native Hebrew and were excluded

from analyses. This left a final sample of 307 participants (see Table 1 for demographic information).

Participants were randomly assigned to review the trust building proposal in one of four conditions: a proposal in their native Hebrew from either a Palestinian delegation ( $n = 84$ ) or Israeli delegation ( $n = 77$ ), or alternatively a proposal in a lingua franca from either a Palestinian delegation ( $n = 75$ ) or Israeli delegation ( $n = 71$ ). To ensure randomization was effective, I examined whether overall English proficiency was similar across communication mediums. Participants assigned to a lingua franca of English had a comparable proficiency in English ( $M=5.56$ ,  $SD=0.99$ ) as those assigned to their native Hebrew ( $M=5.61$ ,  $SD=0.90$ ; 95% CI [-0.27, 0.16],  $t(288.77)=0.47$ ,  $p=0.64$ ,  $d=0.05$ ).

**Table 1.** Demographic characteristics of participants in Study 1.

<b>Age</b>	<b>Gender</b>	<b>Education</b>	<b>Religious Identification</b>	<b>Political Ideology</b>
42.30 (15.43)	50.16% Female	38.44% Undergraduate degree or higher	1.30% Ultra-Orthodox 9.45% Religious 22.48% Traditional 66.78% Secular	38.11% Right-wing 31.92% Centrist 29.97% Left-wing

### *Materials*

An Israeli-Palestinian peacebuilding proposal was developed focusing on five major issues currently relevant to the ongoing Israeli-Palestinian conflict. The overarching goal of the proposal was to build trust between Israelis and Palestinians, through ending any overt acts of violence against each other as well as working together to rebuild a coordinated security effort. The proposal was first piloted with students at Hebrew University to ensure that it was perceived

as realistic in the existing political climate and that the proposal could plausibly be offered by either an Israeli or Palestinian delegation.

All research materials were initially written in English, then translated to Hebrew by two coauthors on the project who are fluent Hebrew-English bilinguals, and then backtranslated to English by two separate, fluent Hebrew-English bilinguals (Brislin, 1970). Once translated and backtranslated, the materials were reviewed and edited once more by the Hebrew-English bilingual coauthors and finalized. Figure 1 presents the proposal in both English and Hebrew.

<p><b>A PROPOSAL FOR TRUST BUILDING AND SECURITY COOPERATION THAT WAS PRESENTED BY THE PALESTINIAN DELEGATION TO THE NEGOTIATIONS</b></p> <ul style="list-style-type: none"> <li>• Palestinians and Israelis will resume security cooperation to end violence.</li> <li>• Palestinians will work towards the cessation of violent actions against Israelis. Stopping the violence will be accompanied by supportive measures provided by Israel and by the re-building of effective Palestinian security services.</li> <li>• The rebuilt and refocused Palestinian Authority security forces will begin sustained, targeted, and effective operations against all those engaged in terror. This activity will include confiscation of illegal weapons and the consolidation of Palestinian security forces that are free of connection with terror.</li> <li>• The government of Israel will take no actions that undermine trust, including the following: It will not deport Palestinians, it will not conduct attacks on Palestinian civilians, not confiscate property or demolish Palestinian homes as punishment measures and it will not destroy Palestinian institutions or infrastructure to facilitate Israeli construction.</li> <li>• The rebuilt Palestinian security forces will gradually resume cooperation with the Israeli security forces including regular meetings of senior Israeli and Palestinian officials, with the participation of U.S. and U.N senior officials.</li> </ul>	<p><b>הצעה לבניית אמון ושיתוף פעולה בטחוני שהוצגה על ידי המשלחת הפלסטינית למשא ומתן</b></p> <ul style="list-style-type: none"> <li>• הפלסטינים והישראלים יחדשו את שיתוף הפעולה הביטחוני ביניהם לסיום האלימות.</li> <li>• הפלסטינים יפעלו להפסקת פעולות אלימות נגד ישראלים. הפסקת האלימות תלווה באמצעים תומכים שיינתנו על ידי ישראל ובבנייה מחדש של שירותי בטחון פלסטינים אפקטיביים.</li> <li>• גוף הביטחון הפלסטיני שייבנה מחדש יתחיל בפעילות ממושכת, ממוקדת ואפקטיבית נגד כל העוסקים בטרור. פעילות זאת תכלול החרמת נשק לא חוקי וגיבוש של שירותי ביטחון פלסטינים שיהיו חופשיים מקשר לטרור.</li> <li>• הממשלה הישראלית לא תנקוט בפעולות הפוגעות באמון, כולל: גירוש של פלסטינים, תקיפה של אזרחים פלסטינים, החרמה של רכוש או הריסה של בתים פלסטינים כאמצעי ענישה ולא תנקוט בהרס של מוסדות או תשתיות פלסטינים כדי להקל על בנייה ישראלית.</li> <li>• כוחות הביטחון הפלסטינים שייבנו מחדש יחזרו בהדרגה לשיתוף פעולה עם כוחות הביטחון הישראליים כולל מפגשים סדירים בין בכירים ישראלים ופלסטינים בהשתתפות נציגים בכירים מארצות הברית והאו"ם.</li> </ul>
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**Figure 1:** The peacebuilding proposal in English (left) and Hebrew (right). In Study 1, for half of participants, the proposal included in the title “by the Israeli” delegation instead of “by the Palestinian” delegation.

### *Procedure*

Prior to the start of the study, all participants were prescreened to ensure they were native Hebrew, Jewish-Israelis that knew English as a foreign language, and that they were born and raised in Israel. Participants who passed these requirements were then automatically redirected into the main study, and randomly assigned to either the native (Hebrew) or lingua franca (English) communication medium. From this point forward, all study materials including instructions, questionnaires, and the proposal itself was presented in the assigned language to ensure that participants were fully immersed in the language.

Upon entering the study and consenting to participate, participants were first presented with the peacebuilding proposal. While they could spend as long as they needed to review the proposal, participants could not advance to the next page for 30 seconds to prevent intentional or unintentional skipping of the proposal. In order to make sure that participants understood the key points, while the proposal was still displayed on the screen participants answered two multiple-choice comprehension questions in which they indicated the topic (“What is the topic of the proposal?”: “The final peace agreement” or “Trust building and security cooperation”) and source (“Who made this proposal?”: “The Israelis”, “The Palestinians”, “The USA”, or “The UN”) of the proposal. Subjects who failed this check were removed from the study ( $n = 12$ ).

Participants then completed a series of measures reporting how favorably they judged the proposal as being for each side. Specifically, to examine how favorable they perceived the proposal for Israel, participants were asked to report the extent to which they perceived the proposal as pro-Israeli, fair to Israelis, as well as the extent to which they agreed with the proposal. To examine how favorable they perceived the proposal as being for Palestinians, they reported the extent to which they perceived the proposal as pro-Palestinian. These evaluation



measures were immediately followed by a series of questions in which participants reported how they felt about the delegation that offered the proposal. These source evaluation questions asked participants to rate the delegation on the extent that they perceived the delegation offering the proposal as trustworthy, honest, reliable, warm, threatening, and considerate. Participants indicated their response for all measures on a scale from 1 (*not at all*) to 9 (*to a very high extent*). See Table A1 in the Appendix for study items in English and Hebrew.

At the end of the study, participants responded to a series of demographic questions. These questions collected information on their language background, religious background, and political attitudes of the participants. For language background, participants reported when they first began learning English (age of acquisition) and their own estimate of their proficiency in reading, writing, speaking, and listening in both Hebrew and English. For the proficiency measures, self-reported proficiency was rated on a scale of 1 (*low*) to 7 (*high*). For religious identification, participants were asked whether they identified as secular, traditional, religious, or ultra-orthodox, as these are categories commonly used for religious identification amongst Jewish-Israelis in Israel. Lastly, for political attitudes, we included a measure to capture their general political views regarding the Israeli-Palestinian conflict. For this measure, participants were asked to indicate their political identification on a scale from 1 (*left-wing (dovish) attitudes*) to 7 (*right-wing (hawkish) attitudes*) with the center point of 4 representing centrist attitudes in Israeli-Arab relations.

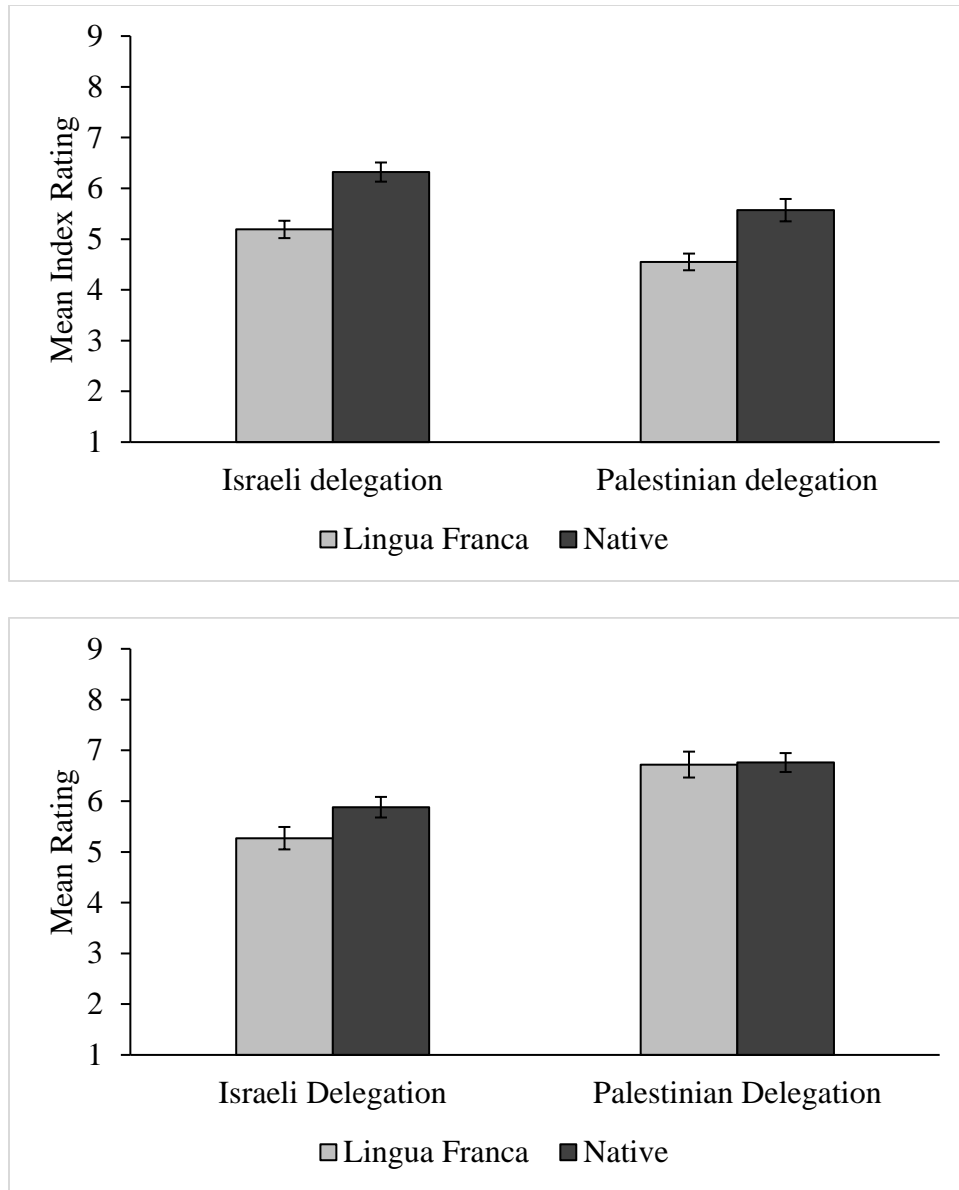
## **Results**

All analyses were conducted using a two-way ANOVA examining the main effects and interaction between Communication Medium (Native | Lingua Franca) and Source (Israeli Delegation | Palestinian Delegation). Because political attitudes are highly

influential in how individuals respond to conflict-relevant information, I initially included the main effect and interaction of political attitudes to determine whether preexisting political attitudes moderated the effect of language on proposal evaluations. However, because political attitudes did not interact with either the language or source in how the proposal was evaluated ( $F_s < 1$ ), subsequent models were simplified to control for political attitudes as a covariate. Importantly, the results reported below hold even when political attitudes are removed from the model.

### *Proposal Evaluation*

I created a Pro-Israeli index by collapsing responses to the pro-Israeli, fair to Israelis, and agreement with the proposal measures (Cronbach's  $\alpha = 0.92$ ) to examine if language influences the extent to which the proposal is viewed as beneficial for Israel. As Figure 2 (Top Panel) shows, participants viewed the proposal as less favorable for Israel when it was in a lingua franca ( $M=4.86, SD=1.97$ ) than when it was in their native Hebrew ( $M=5.93, SD=2.01; F(1,304)=25.51, p<0.001, \eta_p^2=0.07$ ). This was the case when the proposal was from a Palestinian source (Lingua Franca:  $M=4.55, SD=2.01$ ; Native:  $M=5.57, SD=2.09; F(1,157)=9.90, p<0.01, \eta_p^2=0.06$ ) and from an Israeli source (Lingua Franca:  $M=5.19, SD=1.88$ ; Native:  $M=6.32, SD=1.86; F(1,146)=13.53, p<0.01, \eta_p^2=0.09$ ). Additionally, I replicated the reactive devaluation effect (Maoz et al., 2002; Ross & Ward, 1995), as the proposal was viewed as worse for Israelis when made by the other side. Specifically, the proposal was viewed as less favorable for Israelis when it was offered by a Palestinian source ( $M=5.09, SD=2.11$ ) than by an Israeli source ( $M=5.78, SD=1.95; F(1,304)=10.71, p<0.001, \eta_p^2=0.03$ ], but communication medium and source did not interact ( $F < 1$ ).



**Figure 2:** Top Panel. Mean index rating of the extent to which the proposal was perceived as pro-Israeli as a function of the source of the proposal and its language (Study 1). Bottom Panel. Mean index rating of the extent to which the proposal was perceived as pro-Palestinian as a function of the source of the proposal and its language (Study 1).

This effect of communication medium on the perception of how favorable the proposal is viewed as being for your own side could be interpreted in two ways. It could suggest that a proposal in a lingua franca is perceived less positively for just your own side or that it is

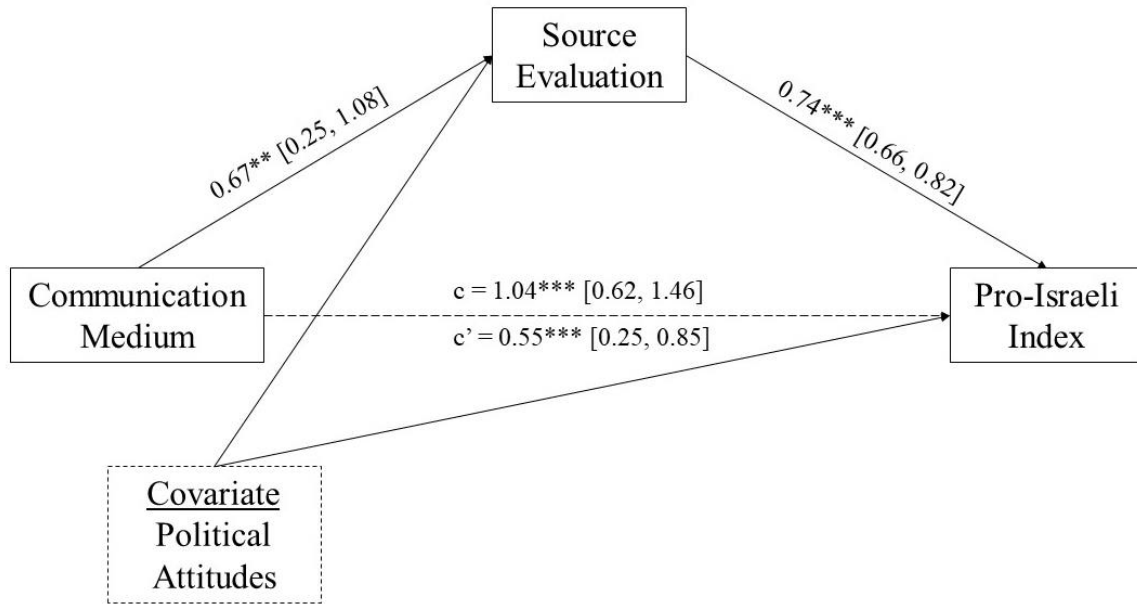
perceived more negatively in general. If a lingua franca makes a proposal seem more negative in general, then it should also be seen as more negative for the Palestinians. If, however, the use of a lingua franca renders the proposal more negative specifically for your side, then it should not affect how it is perceived for the Palestinian side. Therefore, to test this I examined the effect of language and source on the extent to which the proposal was evaluated as pro-Palestinian. Figure 2 (Bottom Panel) shows that the proposal was perceived as equally favorable for Palestinians when written using a lingua franca ( $M=6.01$ ,  $SD=1.96$ ) or in their native Hebrew ( $M=6.34$ ,  $SD=2.01$ ;  $F(1,304)=2.35$ ,  $p=0.13$ ,  $\eta_p^2 = 0.01$ ). This was true both when the source was the Israeli delegation (Lingua Franca:  $M=5.27$ ,  $SD=1.86$ ; Native:  $M=5.88$ ,  $SD=2.21$ ) and when it was the Palestinian delegation (Lingua Franca:  $M=6.72$ ,  $SD=1.78$ ; Native:  $M=6.76$ ,  $SD=1.71$ ), hence communication medium and source did not interact ( $F(1,303)=1.86$ ,  $p=0.17$ ,  $\eta_p^2 = 0.01$ ). Once again, consistent with the reactive devaluation effect, I found a main effect of source on the evaluation of the proposal, with participants viewing the proposal as more favorable to the Palestinians when it was offered by a Palestinian delegation ( $M=6.74$ ,  $SD=1.74$ ) than by an Israeli delegation ( $M=5.59$ ,  $SD=2.06$ ;  $F(1,304)=29.02$ ,  $p<0.001$ ,  $\eta_p^2 = 0.09$ ).

### *Source Evaluation*

Under the communication accommodation account, one possible reason that communication medium may impact proposal evaluations is that language may impact how the source is evaluated. For instance, and specifically relevant to this study, Jewish-Israeli respondents may perceive a Palestinian delegation that offers a proposal in Hebrew - their own in-group language - more favorably than a delegation that offers the proposal in a lingua franca of English. To examine this, I collapsed the measures of perceived trustworthiness, honesty, reliability, warmth, consideration, and threat (reverse coded) for each delegation into a Source Evaluation Index

(Cronbach's  $\alpha = 0.91$ ). Overall, respondents perceived each delegation more favorably when they made the proposal in their native Hebrew than in a lingua franca. This was the case for both the Israeli delegation (Lingua Franca:  $M = 5.83$ ,  $SD = 1.53$ ; Native:  $M = 6.65$ ,  $SD = 1.47$ ) and the Palestinian delegation (Lingua Franca:  $M = 4.18$ ,  $SD = 1.69$ ; Native:  $M = 4.78$ ,  $SD = 1.97$ ). Hence, our findings indicate a main effect of communication medium ( $F(1,304) = 13.67$ ,  $p < 0.001$ ,  $\eta_p^2 = 0.04$ ) and source ( $F(1,304) = 89.15$ ,  $p < 0.001$ ,  $\eta_p^2 = 0.23$ ) on the evaluation of the delegation with no significant interaction between the two ( $F < 1$ ).

Because there was a significant effect of communication medium on the evaluation of the proposal as beneficial for Israelis and on the extent to which the delegation offering the proposal was viewed favorably, I examined whether the more favorable evaluations of the delegation mediated the effect of communication medium on proposal favorability. To do so, I conducted a mediation analysis using the bootstrapping method with 10,000 simulations to assess the indirect effect of source evaluations on the ratings of the proposal as being beneficial for Israelis across communication mediums. Like with the prior analyses, political attitudes were included as a covariate. Here, the effect of language on the evaluation of the proposal favorability was reduced, but still significant when controlling evaluations of the source of the proposal (from  $b = 1.04$ , 95% CI [0.62, 1.46] to  $b = 0.55$ , 95% CI [0.25, 0.85]), consistent with a partial mediation. Furthermore, the source evaluation of the delegation had an estimated indirect effect of 0.49 [0.19, 0.80]. These findings suggest that when participants read the proposal in their native Hebrew as compared to a lingua franca, they viewed the delegation offering the proposal more favorably, which in turn was associated with an increase in how favorably the proposal was evaluated as being for Israelis (see Figure 3 for more details).



**Figure 3.** Mediation analysis of the indirect effect of source evaluations on the direct effect of communication medium on pro-Israeli index scores (with political attitudes as a covariate) for Study 1. Mediation coefficients above refer to unstandardized coefficients.

*Note.* \*  $p < 0.05$  \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

### Discussion

In Study 1, participants perceived the proposal less favorably to themselves and their fellow Israelis when it was presented in a lingua franca as compared to when it was presented in their native Hebrew. This occurred both when the proposal was presented from an ingroup (Israeli delegation) and outgroup (Palestinian delegation), although consistent with the reactive devaluation effect participants perceived the proposal as more favorable for themselves when it was presented from an ingroup party. These findings are inconsistent with the idea that a shared, lingua franca is beneficial for fostering cooperation during conflict, and hence do not provide evidence for the ‘foreign language effect’ account.

However, these findings do provide some tentative evidence for the communication accommodation theory account, as Jewish-Israelis evaluated the source of the proposal more favorably when it was communicated in their native Hebrew, which in turn improved proposal evaluations. Though important to note, this applied both when the source of the proposal was an Israeli and Palestinian delegation. While this is not inconsistent with the communication accommodation theory, as maintaining native language use may have resulted in the Israeli delegation being more favorably perceived than when they choose to diverge their communication style to using English as a lingua franca, it is inconsistent with the idea that source evaluations are being improved just through the goodwill gesture ascribed to choosing to communicate in the native language of the recipient alone.

Building on these findings, the main goal of Study 2 was to replicate the results of Study 1 while examining what underlying factors may explain this effect more closely.

## **Study 2**

In Study 2 my primary goal was to replicate the findings from Study 1, namely that people perceive a peacebuilding proposal more favorably for their own side when it is made in their native tongue, and that this effect is explained by the choice in communication medium improving how the source is perceived which in turn boosted proposal evaluations. The only major change made between Studies 1 and 2 is that I simplified the design and included only the outgroup, Palestinian delegation source. I had two reasons for making this change. First, communication medium and source consistently did not interact in Study 1. Second, evaluating peacebuilding measures presented by an opponent in conflict is far more important in the context of international peace negotiations, particularly since individuals are more likely to favorably view a peacebuilding proposal from their own side as Study 1 demonstrated.

This study was preregistered on Open Science Framework (<https://osf.io/7amkd>), and the full data and analysis script can be found here (<https://osf.io/9cxhu/>).

## Method

### *Participants*

419 Jewish-Israeli native Hebrew speakers were recruited and prescreened using the same criteria as Study 1. Eight participants (1.9%) reported a higher proficiency in English than in Hebrew and were therefore excluded from the analyses, leaving a final sample of 411 participants (see Table 2 for demographic information).

Participants were randomly assigned to review the proposal in either their native Hebrew ( $n = 215$ ) or in a lingua franca ( $n = 196$ ). Like Study 1, participants assigned to a lingua franca had a comparable proficiency in English as those assigned to their native Hebrew (Lingua Franca:  $M=5.76$ ,  $SD=0.98$ ; Native:  $M=5.62$ ,  $SD=0.98$ ; 95% CI [-0.05, 0.34],  $t(405.28)=1.50$ ,  $p=0.14$ ,  $d=0.15$ ).

**Table 2.** Demographic characteristics of participants in Study 2.

Age	Gender	Education	Religious Identification	Political Ideology
41.50(15.45)	50.61%	31.14%	0.72% Ultra-Orthodox	42.34% Right-wing
	Female	Undergraduate	10.46% Religious	32.36% Centrist
		degree or higher	25.30% Traditional	22.87% Left-wing
			63.50% Secular	

### *Materials*

Study 2 used the same proposal materials as Study 1.



## *Procedure*

The procedure used in Study 2 was the same as Study 1, barring two small changes. Study 2 included an additional question to capture how favorably individuals viewed the Palestinian proposal as being for each side, specifically asking how fair the proposal is to both Israelis and Palestinians. Additionally, two new items assessed whether participants thought the source was offering the proposal out of their own self-interest or out of the shared interest of the two parties. All additional questions were reported on a scale of 1 (*not at all*) to 9 (*to a very high extent*). See Table A2 in Appendix for additional study items in English and Hebrew.

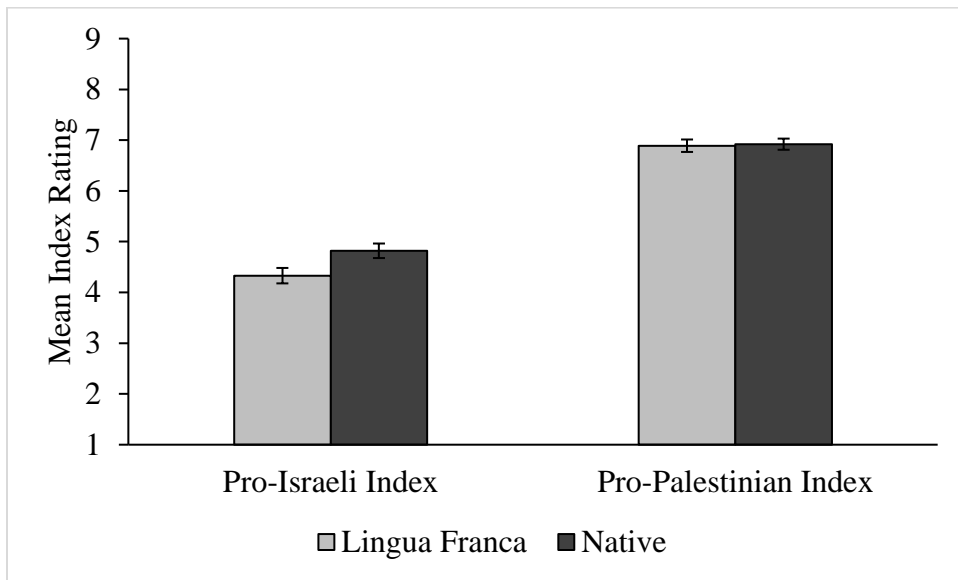
## **Results**

Analyses were conducted using an ANOVA examining the main effect of Communication Medium (Native | Lingua Franca) with prior political attitudes as a covariate.

### *Proposal Evaluation*

I created a Pro-Israeli index (Cronbach's  $\alpha = 0.90$ ) like Study 1 to examine the extent to which communication medium impacts the perceived favorability of the proposal for the participants' own side. As Figure 4 shows, participants viewed the proposal as less favorable to Israelis when it was presented in a lingua franca ( $M=4.33$ ,  $SD=2.13$ ) than in their native Hebrew ( $M=4.82$ ,  $SD=2.10$ ;  $F(1,408)= 8.25$ ,  $p<0.001$ ,  $\eta_p^2 = 0.03$ ). Then, to examine the extent to which the proposal was seen as favorable to Palestinians, I created a Pro-Palestinian index by collapsing the pro-Palestinian and fair to Palestinians measures (Cronbach's  $\alpha = 0.78$ ). Results from this index showed that the use of a lingua franca once again did not impact the perceived favorability of the proposal for the other

side. Specifically, the proposal was rated just as favorable for Palestinians when communicated using a lingua franca ( $M=6.89$ ,  $SD=1.72$ ) or the recipient's native Hebrew ( $M=6.92$ ,  $SD=1.61$ ;  $F<1$ ). These results replicate the findings from Study 1, showing that a lingua franca reduces the perceived favorability of the proposal for one's own side but not for the other side.



**Figure 4:** Mean index rating of the extent to which the proposal is perceived as pro-Israeli (left) and the extent to which the proposal is perceived as pro-Palestinian (right) as a function of the communication medium used to present the proposal.

#### *Source Evaluation*

To assess the impact of communication medium on how the source was perceived, I created a Source Evaluation index by collapsing across the same six source evaluation items from Study 1 (Cronbach's  $\alpha=0.91$ ). However, unlike Study 1, communication medium did not impact how members of the Palestinian delegation that offered the proposal were perceived (Lingua Franca:  $M=4.24$ ,  $SD=1.74$ ; Native:  $M=4.26$ ,  $SD=1.97$ ;

$F < 1$ ). Because there was no main effect of communication medium on source evaluations, no mediation analysis was conducted (Baron & Kelly, 1986).

Additionally, participants also evaluated the degree to which the members of the Palestinian delegation were acting in the shared interest of Israelis and Palestinians and the degree to which they were acting in their own self-interest. Here, communication medium had no effect on ratings of the delegation acting in the shared Israeli and Palestinian interests (Lingua Franca:  $M=4.30$ ,  $SD=2.22$ ; Native:  $M=4.48$ ,  $SD=2.30$ ;  $F < 1$ ). However, participants rated the Palestinian delegation as acting less in their own self-interest when receiving the proposal in a lingua franca ( $M=5.87$ ,  $SD=2.44$ ) than in their native Hebrew ( $M=6.46$ ,  $SD=2.16$ ;  $F(1,408)=8.40$ ,  $p < 0.001$ ,  $\eta_p^2=0.02$ ).

## **Discussion**

Study 2 replicated the main phenomenon demonstrated in Study 1. Participants perceived the proposal as less favorable for Israel when it was presented in a lingua franca than in their native Hebrew. Again, communication medium did not impact how favorably the proposal was assessed as being for Palestinians. Hence, communication medium improved the perception of the peacebuilding proposal for one's own side, which once again was inconsistent with the foreign language effect account.

However, unlike Study 1, communication medium did not influence how the source of the proposal was perceived. It also did not influence the perception that the delegation was acting more in the shared interests of Palestinians and Israelis. And surprisingly, the recipients overall believed that the Palestinian delegation was acting less in their own self-interest when the proposal was offered in a lingua franca as compared to recipient's native language. These findings are inconsistent with the communication accommodation account, as this account hinges

on the idea that proposal evaluations would be improved when using the native language of the recipient by way of improving how the source of the proposal itself is evaluated.

In Study 3, I expanded on these findings by testing an alternate mechanism for the effect, and addressed whether the effect of communication medium extends to other types of conflict relevant information as well.

### STUDY 3: AFFECTIVE RESPONSE TO COMMUNICATION MEDIUM ON CONFLICT-RELEVANT INFORMATION

In Study 3, I had two goals. First, I aimed to examine an alternate mechanism that may explain why the same proposal is more favorably received when offered through the native language of the recipient as compared to using a lingua franca. To recount, while Study 1 provided tentative evidence that receiving a peacebuilding proposal improves evaluations of the source which in turn boosts proposal evaluations, consistent with the communication accommodation account, Study 2 failed to replicate this source evaluation difference across communication mediums. Therefore, in Study 3, I address another possibility, which is instead that communicating information through the native language of the recipient triggers a more positive affective response, which in turn boosts how favorably the same proposal is judged as being for one's own side. Next, I also aimed to examine whether the enhanced judgments of the proposal extend to judgments of other forms of conflict-relevant information, to understand whether communication medium is broadly making people more open to conflict-relevant information or if it is only improving judgements when there is a possible benefit in endorsing a new future course of action.

Beginning with the alternate mechanism, information shared through the native language of the recipient may lead to a more positive affective response than the same information being shared through a lingua franca for a few reasons. First, as mentioned information shared through a foreign language often elicits a broadly weaker emotional response (for a review, see Dewaele, 2010 or Caldwell-Harris, 2015). Evidence for this 'emotional blunting' in a foreign language comes in the form of self-reported emotionality ratings in which bilinguals often report emotion laden phrases (such as 'I love you!') as having a weaker emotional impact (e.g. Dewaele, 2008)

as well as physiological response measures in which emotionally charged language like reprimands (such as ‘Shame on you!’) elicit weaker electrodermal activity (e.g. Harris, Ayçiçeği, & Gleason, 2003). Further work on this emotional blunting have attributed this weaker emotional response in a foreign language to the broader decreased salience of System 1 processes (Hayakawa et al., 2017) as well as the relatively less emotionally rich classroom environment in which most foreign languages are acquired (Dewaele, 2010).

While I had initially theorized that the reduced emotionality of using a foreign lingua franca may render the proposal more palatable, it may be that this emotional blunting is inadvertently preventing the proposed materials from eliciting a positive emotional response at the detriment of judging the proposal more favorably. Although heightened negative emotions can make people less willing to cooperate in conflict, peacebuilding initiatives must elicit some form of positive emotional response to foster a willingness to break the status quo. Hence, if a foreign lingua franca is less effective in eliciting this much needed positive emotional response, this in turn may make recipients of the proposal less willing to accept the proposed measures. This theory would also be in line with work on language nativeness in marketing settings, as marketing materials generally elicit a more positive emotional response and are more favorably received when offered to consumers through a native as compared to foreign language (see Putoni et al., 2009, though also see Kristna & Ahluwalia (2008) which discusses the role of language and product congruency). These findings have led to recommendations that when one wants to use an emotional appeal to sell a product, it may be better to do so in the native language of the consumer where the emotionality of the language is richer (Caldwell-Harris & Aycicegi-Dinn, 2016).

Additionally, beyond the emotional blunting of a foreign language, it may also be the case that the relative fluency of processing proposal materials through a native language is fostering a more positive emotional response. Specifically, information processed through a more proficient, native language tends to be processed more automatically and requires less cognitive resources than information processed through a foreign language (Clahsen & Felser, 2006). This typically results in a native language having a higher degree of processing fluency than a foreign language, which has implications for how individuals emotionally respond, as increasing fluency – such as through repetition (Topolinski, 2014), font (Trent, Lavelock, & King, 2013), or removing background noise (Dragojevic & Giles, 2016) – elicits a more positive emotional response (for a review, see Winkielman et al., 2003). In turn, this enhanced positive emotional response can influence how individuals judge the information or stimuli in question. For instance, increased processing fluency has been found to enhance preferences and liking for stimuli in domains ranging from product evaluations, brand perceptions, and interpersonal judgments (for a review, see Schwartz et al., 2021).

In sum, both the emotional blunting of a foreign language and increased fluency of a native language may result in information shared through a native language eliciting in a more positive affective response than the same information shared through a foreign lingua franca. This more positive emotional response, in turn, may result in the same peacebuilding proposal being judged more favorably for themselves and their own side. Hence, in this study I will assess how recipients feel immediately after reading the proposed measures. If there are differences in how positive they feel after reading the proposal across communication mediums, I will see if differences in the elicited emotional response from the proposal explain any of the variation in how favorably the proposal is judged as being.

Next, in this study I will also examine whether the effect of communication medium on the evaluation of peacebuilding measures may extend to other types of conflict-relevant information. To do so, I also included a historical narrative condition. One possibility, particularly if differences in favorability judgments across communication mediums arise from differences in the extent to which each communication medium elicits positive emotions, is that conflict-relevant information more broadly may elicit a relatively more positive emotional response than when shared in one's native language. If this is the case, communication medium may serve an important role that extends to the sharing of historical narratives between members of each side in conflict. As discussed, society members often have biased beliefs regarding the past events in the conflict, which serves as a crucial foundation upon which they justify the continuation of violence. Because of this, initiatives such as sharing narratives across sides have been used to help debias historical accounts of what previously occurred as well as foster a sense of humanity and sympathy for the plight of the other side. Therefore, if a historical narrative told from the other side elicits a relatively more positive and less negative initial emotional response, this may have positive implications in how effectively historical narratives can shape attitudes moving forward as how individuals initially emotionally respond to new information can influence subsequent attitude change (Petty & Cacioppo, 1986).

However, it may also be the case that the communication medium effect for peacebuilding proposals may not extend to historical narratives. Although both peacebuilding initiatives and historical narratives of past events both pertain to the conflict and have implications for whether de-escalation or resolution is possible moving forward, peacebuilding proposals and narratives differ in several ways. For one, unlike future peacebuilding proposals for which people may not have solidified attitudes for each of the proposed initiatives, people in



conflict often have strongly held, preexisting beliefs about the prior events of the conflict as these narratives serve a central role in justifying both their role as a victim and any future aggression taken against the other side. Therefore, these strongly held, preexisting attitudes may render a communication medium intervention ineffective, as the strength of preexisting attitudes impacts the extent to which people are resistant to new, conflicting information with their prior beliefs. This is particularly the case if communication medium changes attitudes through eliciting a more positive emotional response, as peripheral cues of persuasion such as emotional appeals are far less persuasive when people already have strong opinions about the issue in question (Petty, Tormala, & Rucker, 2004).

Lastly, unlike peacebuilding initiatives, being more open to a narrative from the other side offers less direct personal benefits than a peacebuilding proposal to the recipient, which may influence the effectiveness of communication medium in shaping subsequent judgments. One theory for how emotional appeals can shape our later judgments is the ‘affect heuristic’, which posits that how we initially emotionally respond can inadvertently impact how we form later judgments about the stimulus or situation in question (for a review, see Slovic, Finucane, Peters, & MacGregor, 2007). Under this theory, judgments of relative risk have been found to be particularly impacted by emotion, as positive initial emotional responses lead people to judge something as having higher benefits and lower risks whereas negative emotions lead to judgments of higher risk and lower benefit. Therefore, if reading a peacebuilding proposal in a native language is eliciting a more positive emotional response which in turn is boosting the perceptions of personal benefit for yourself and your own side, these positive effects of communication medium may not carry over to responses to a historical narrative for which there is no direct personal benefit to oneself when judging what is being shared by the other side.

Therefore, to address whether the positive impact of communicating through the native language of the recipient extends to other forms of conflict-relevant information, I included a historical narrative of a well-known event in the history of the Israeli-Palestinian conflict. Specifically, respondents evaluated a historical narrative of the First Intifada (Palestinian uprising) adapted from a real Palestinian account of events and presented from the perspective of a Palestinian source. If communicating about conflict-relevant information is generally received more positively when offered through a native language, people may be more open to a historical narrative offered through their native language as compared to a foreign, lingua franca. However, if instead the effect of communication medium is more limited to situations in which people are judging conflict-relevant information for which they have less solidified attitudes and a direct personal benefit, these positive effects may be more limited to certain forms of conflict-relevant information such as peacebuilding initiatives.

This full data and analysis script can be found on Open Science Framework here (<https://osf.io/9cxhu/>).

## **Method**

### *Participants*

An a-priori power analysis for an ANOVA (between-subjects) was conducted to estimate the number of subjects needed for Study 3. This analysis revealed that we needed a sample size of 193 per cell to reliably detect, with a probability greater than 0.80, an effect size of  $f=0.14$  (based on Study 2), assuming a two-sided criterion for detection that allows for a maximum Type 1 error rate of  $\alpha=0.05$ . Anticipating some attrition, we recruited 811 Jewish-Israeli native Hebrew speakers using the same prescreen procedure from Studies 1 and 2. Of those who participated, 13 (1.6%) reported a higher proficiency

in English than in Hebrew and thus were excluded from analyses. This left a final sample of 798 participants (see Table 3 for demographic information).

Participants were randomly assigned to one of four conditions: reading a trust building proposal in a lingua franca ( $n = 202$ ) or in their native Hebrew ( $n = 202$ ), or alternatively reading a historical narrative in a lingua franca ( $n = 200$ ) or in their native Hebrew ( $n = 194$ ). Similar to Studies 1 and 2, participants assigned to a lingua franca of English had a comparable proficiency in English as those assigned to Hebrew (Lingua Franca:  $M=5.79$ ,  $SD=0.90$ ; Native:  $M=5.74$ ,  $SD=1.00$ ; 95% CI [-0.08, 0.19],  $t(785.26)=0.82$ ,  $p=0.41$ ,  $d=0.06$ ).

**Table 3.** Demographic characteristics of participants in Study 3.

Age	Gender	Education	Religious Identification	Political Ideology
37.10(13.38)	59.15%	29.82%	13.03% Ultra-Orthodox	43.11% Right-wing
	Female	Undergraduate	15.04% Religious	31.70% Centrist
		degree or higher	20.30% Traditional	25.19% Left-wing
			51.63% Secular	

*Materials*

The proposal condition used the same materials as Study 1 and 2. For the narrative condition, a brief historical narrative about the Israeli-Palestinian Conflict was adapted from the book *Learning Each Other’s Historical Narrative: Palestinians and Israelis* (Adwan & Bar-On, 2004; Adwan, Bar-On & Naveh, 2012). We selected a narrative that represented the perspective of Palestinians on the events of the First Intifada (the

Palestinian uprising that erupted in 1987) and edited it to approximately match the proposal in length. Participants were informed that the narrative was generated by Palestinian academics as part of an effort to share stories between both sides of the Israeli-Palestinian conflict. Figure 5 presents the narrative in both English and Hebrew.

<p style="text-align: center;"><b>A NARRATIVE CONCERNING THE FIRST PALESTINIAN INTIFADA THAT WAS PRESENTED BY A GROUP OF PALESTINIAN ACADEMICS AND HISTORY TEACHERS</b></p> <p>The first Intifada broke out spontaneously and without central organization on December 9<sup>th</sup> 1987. Despite the strong determination of the Palestinian people to put an end to the Israeli rule in the territories occupied in 1967, no goals were set in advance. But a short time after it erupted an Intifada leadership was created that represented the popular and revolutionary committees in all cities, villages and refugee camps as well as the four main factions of the PLO (Fatah, the Popular Front, the Democratic Front and the Communist Party).</p> <p>The ongoing struggle strengthened the political position of the Palestinian people and of the PLO. The Intifada was a war of attrition against Israeli control of the territories, causing loss of life, economic instability, and material losses. The struggle also placed the Palestinian issue on the agenda of the United Nations as a problem that has to be solved, and ultimately strengthened the position of the PLO as the symbol and representative of the Palestinian issue.</p>	<p style="text-align: center;"><b>נרטיב העוסק באינתיפאדה הפלסטינית הראשונה שהוצג על ידי קבוצה של אקדמאים ומורים להיסטוריה פלסטינים</b></p> <p>האינתיפאדה הראשונה פרצה באופן ספונטני וללא ארגון מרכזי ב-9 בדצמבר, 1987. למרות הנחישות של העם הפלסטיני לשים קץ לשליטה הישראלית בשטחים שנכבשו ב-1967, לא נקבעו לה מראש מטרות. עם זאת, זמן קצר לאחר שפרצה, קמה לאינתיפאדה הנהגה שייצגה את הוועדות העממיות והמהפכניות בכל הערים, הכפרים ומחנות הפליטים וכן את ארבעת הפלגים המרכזיים של ארגון השחרור הפלסטיני (פת"ח, החזית העממית, החזית הדמוקרטית והמפלגה הקומוניסטית).</p> <p>המאבק המתמשך חיזק את המעמד המדיני של העם הפלסטיני ושל אש"ף. האינתיפאדה הייתה מלחמת התשה נגד השליטה הישראלית בשטחים, והובילה לאובדן חיי אדם, אי-יציבות כלכלית, ולהפסדים חומריים. המאבק גם הציב את הסוגייה הפלסטינית על סדר היום של האו"ם כבעיה שיש לפתור ובסופו של דבר חיזק את מעמדו של אש"ף כסמל וכמייצג של הסוגייה הפלסטינית.</p>
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**Figure 5:** Historical narrative of the First Intifada in both English (left) and Hebrew (right). The narrative was adapted from a Palestinian narrative of the First Intifada.

## *Procedure*

The procedure used in Study 3 was like Studies 1 and 2, barring a few key changes to accommodate the added narrative condition and emotional response items. When evaluating the text after reading either the proposal or narrative, the same questions as Study 2 were used for both conditions, the only change being that the word ‘proposal’ was replaced with ‘narrative’ throughout for those assigned to the narrative condition (e.g. “To what extent do you agree with this [proposal | narrative]?”).

Additionally, to evaluate how participants felt after reading either the narrative or proposal, I also included a new set of items evaluating the extent to which the text evoked different feelings. To examine this, participants rated the extent the Palestinian proposal evoked the following emotions: fear, sympathy, disgust, empathy, hatred, anger. Within this section, they were additionally asked to report on the extent to which the proposal evoked understanding and identification. Lastly, we also included four additional source evaluation trait characteristics assessing the extent to which participants viewed the source of the proposal or narrative as aggressive, cooperative, manipulative, and fair. Consistent with the other questions, all new items were reported on a 1 (*not at all*) to 9 (*to a very high extent*) scale. See Table A3 in Appendix for additional study items in English and Hebrew.

## **Results**

All analyses were conducted using a two-way ANOVA examining the main effects and interaction between Communication Medium (Native | Lingua Franca) and Type of Text (Proposal | Narrative) with political attitudes as a covariate.

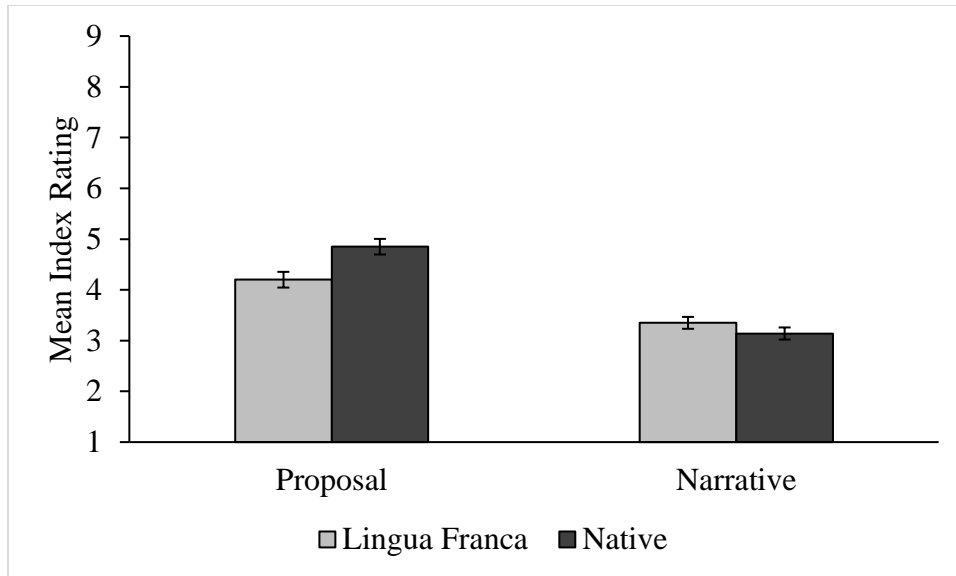
### *Proposal and Narrative Evaluation*

As in Studies 1 and 2, I created a Pro-Israeli index (Cronbach's  $\alpha=0.87$ ). However, because the pro-Palestinian index had a low Cronbach's  $\alpha$  of 0.57, I analyzed the pro-Palestinian and fair to Palestinian measures separately. If using the native language of the recipient broadly improves how favorably conflict-relevant information is received, there should be a main effect of communication medium with no significant interaction with type of text. However, if communication medium affects the evaluation of the proposal but not the narrative, then there should be an interaction between communication medium and type of text.

Language affected only the evaluation of the proposal. I replicated the phenomenon that participants viewed the proposal less favorably for their own side when it was written in a lingua franca ( $M=4.20$ ,  $SD=2.20$ ) than in their native Hebrew ( $M=4.85$ ,  $SD=2.19$ ;  $F(1,401)=12.97$ ,  $p<0.001$ ,  $\eta_p^2=0.04$ ). In contrast, there were no differences in how the narrative was viewed across communication mediums (Lingua Franca:  $M=3.35$ ,  $SD=1.66$ ; Native:  $M=3.14$ ,  $SD=1.66$ ;  $F(1,391)=1.92$ ,  $p=0.17$ ,  $\eta_p^2<0.01$ ). This resulted in a significant interaction between communication medium and type of text ( $F(1,793)=11.12$ ,  $p<0.001$ ,  $\eta_p^2=0.01$ ). This finding suggests that the impact of using a lingua franca is unique to the evaluation of a proposal for future terms of cooperation and does not extend to conflict-relevant information more generally such as narratives of the past events (see Figure 6).

Next, I assessed the extent to which communication medium influenced the perceived favorability of the proposal or narrative for Palestinians. Beginning with the pro-Palestinian measure, communication medium did not significantly influence how

pro-Palestinian the proposal was perceived as being (Lingua Franca:  $M=6.90$ ,  $SD=1.82$ ; Native:  $M=6.78$ ,  $SD=1.80$ ;  $F<1$ ) or how pro-Palestinian the narrative was perceived as being (Lingua Franca:  $M=6.89$ ,  $SD= 2.23$ ; Native:  $M=7.27$ ,  $SD=1.96$ ;  $F(1,391)=3.29$ ,  $p=0.08$ ;  $\eta_p^2=0.01$ ). This resulted in neither a significant main effect of communication medium ( $F<1$ ) nor a significant interaction between communication medium and type of text ( $F(1,793)=3.11$ ,  $p=0.08$ ,  $\eta_p^2 < 0.01$ ). For the fair to Palestinians measure, communication medium did not influence evaluations of how fair to Palestinians the proposal (Lingua Franca:  $M=7.27$ ,  $SD=1.67$ ; Native:  $M=7.30$ ,  $SD=1.56$ ;  $F<1$ ) of narrative (Lingua Franca:  $M=6.25$ ,  $SD=2.28$ ; Native:  $M=6.43$ ,  $SD=2.14$ ;  $F<1$ ) were judged as being. This resulted in neither a significant main effect of communication medium ( $F<1$ ) nor an interaction between communication medium and type of text ( $F<1$ ). Therefore, communication medium did not impact evaluations of either the proposal or narrative as being any more or less favorable to the opposing side. This replicates findings from Studies 1 and 2 for the proposal and extends this result to a historical narrative presented by a Palestinian source.



**Figure 6:** Ratings of the extent to which the proposal and narrative were perceived as pro-Israeli as a function of type of text and the language of the text.

#### *Source Evaluations*

As in Studies 1 and 2, we created a Source Evaluation index (Cronbach's  $\alpha = 0.92$ ). There was no effect of communication medium on source evaluations in the proposal condition (Lingua Franca:  $M=4.39$ ,  $SD=1.86$ ; Native:  $M=4.40$ ,  $SD=2.01$ ) nor in the narrative condition (Lingua Franca:  $M=3.62$ ,  $SD=1.43$ ; Native:  $M=3.53$ ,  $SD=1.70$ ;  $F < 1$ ). Furthermore, communication medium and type of text did not interact ( $F < 1$ ). Because there was no effect of communication medium on source evaluations, no mediation analysis was conducted (Baron & Kelly, 1986).

#### *Evoked Emotions*

To determine whether the effect of communication medium could instead be explained by the extent to which using different languages when communicating with the opposing side evokes a more positive emotional response, we created two index measures to capture the extent to which each type of text evoked positive and negative emotions

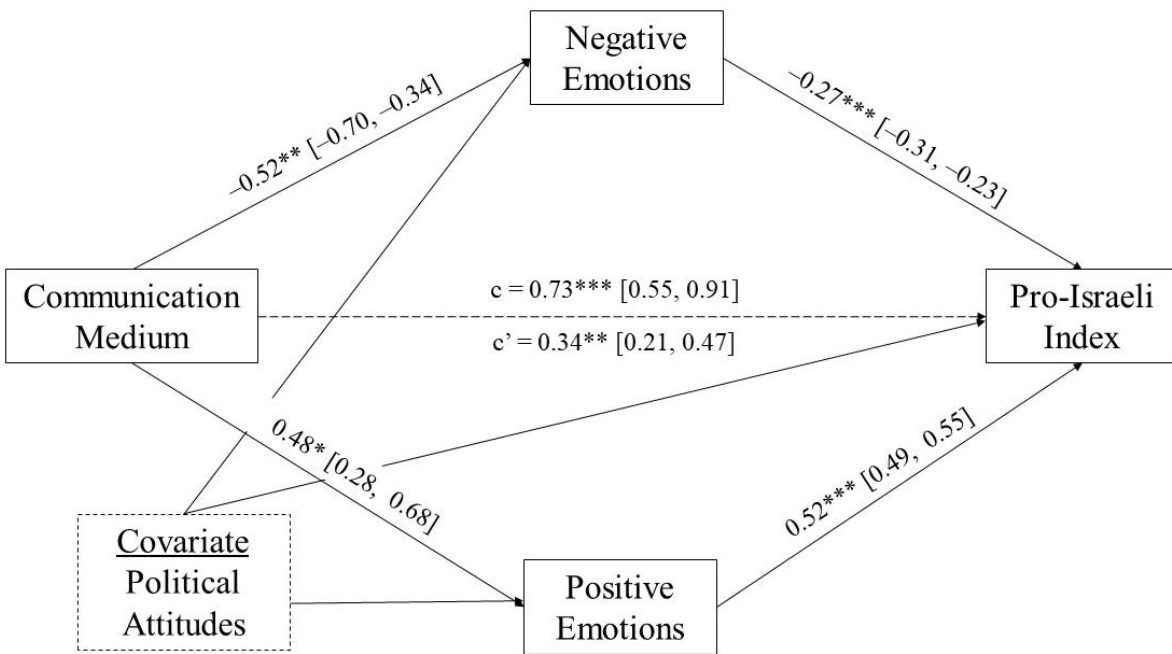


respectively. Here, the Positive Emotion index measured the extent to which the proposal or narrative evoked sympathy and empathy (Cronbach's  $\alpha = 0.88$ ), and the Negative Emotion index measured the extent to which the proposal or narrative evoked anger, hatred, disgust, and fear (Cronbach's  $\alpha = 0.81$ ).

Overall, participants reported lower levels of positive emotions after reading the Palestinian proposal in a lingua franca ( $M = 3.90$ ,  $SD = 2.30$ ) than in their native Hebrew ( $M = 4.29$ ,  $SD = 2.49$ ;  $F(1, 401) = 3.88$ ,  $p = 0.05$ ,  $\eta_p^2 = 0.02$ ). Additionally, they reported feeling significantly higher levels of negative emotions when reading the Palestinian proposal in a lingua franca ( $M = 3.52$ ,  $SD = 2.01$ ) than in their native tongue ( $M = 3.07$ ,  $SD = 2.10$ ;  $F(1, 401) = 6.23$ ,  $p = 0.01$ ,  $\eta_p^2 = 0.02$ ). In the narrative condition, participants reported similar levels of positive (Lingua Franca:  $M = 2.99$ ,  $SD = 2.00$ , Hebrew:  $M = 2.75$ ,  $SD = 1.79$ ;  $F(1, 391) = 1.87$ ,  $p = 0.17$ ,  $\eta_p^2 < 0.01$ ) and negative ( $F < 1$ ) emotions across communication mediums.

Because there was a significant effect of communication medium on the evaluation of the Palestinian proposal as beneficial for Israelis and on the extent to which the Palestinian proposal elicited both positive and negative emotions in participants, I evaluated the extent to which these emotions mediated the effect of communication medium on the evaluation of proposal favorability. To do so, a multi-mediation analysis was conducted using the bootstrapping method with 10,000 simulations to assess the separate indirect effects of positive and negative emotions on the ratings of the Palestinian proposal as beneficial for Israelis across communication mediums. Like with the prior analyses, political attitudes were included as a covariate.

The effect of communication medium on the evaluation of the Palestinian proposal favorability was reduced, but still significant when controlling for positive and negative emotions (from  $b = 0.74$ , 95% CI [0.55, 0.91] to  $b = 0.34$ , 95% CI [0.21, 0.47]), consistent with a partial mediation. Furthermore, positive emotions had an estimated indirect effect of 0.25 [0.04, 0.46], while negative emotions had an estimated indirect effect of 0.14 [0.04, 0.25]. These findings suggest that when participants read the Palestinian proposal in their native Hebrew as compared to a lingua franca, they felt less negatively and more positively immediately after reading the proposal, which in turn was associated with an increase in how favorably the proposal was evaluated as being for Israelis (see Figure 7 for more details).



**Figure 7.** Mediation analysis of the indirect effects of positive and negative emotions on the direct effect of language on pro-Israeli index scores (with political attitudes as a covariate) for Study 3. Mediation coefficients above refer to unstandardized coefficients.

*Note.* \*  $p < 0.05$  \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

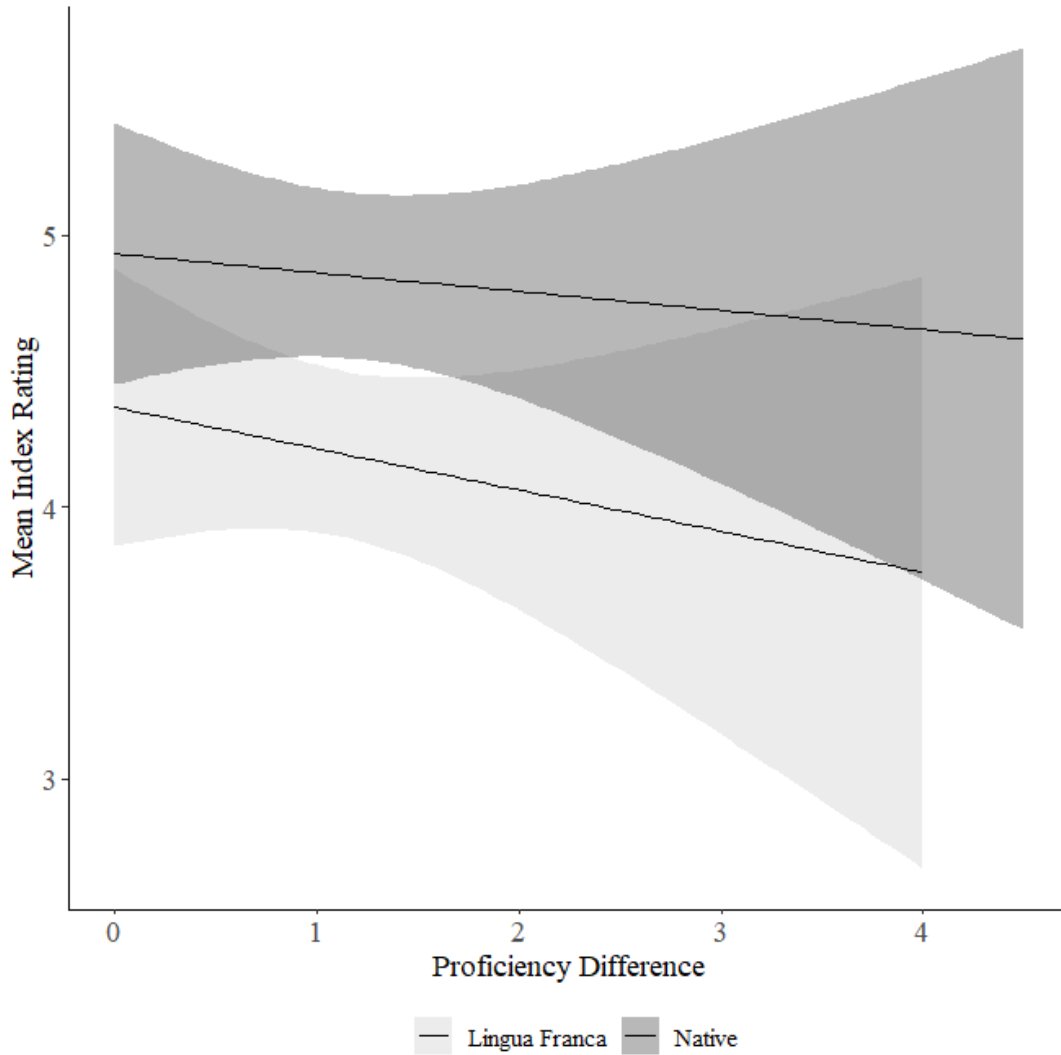
### *Proficiency Differences*

As mentioned, there are two reasons that people may have a more positive emotional response when processing information through their native language as compared to a lingua franca. First, their native language is relatively more fluent, which may boost how positively they feel after reading the proposal. Second, using a foreign lingua franca is more emotionally blunted, which may inhibit how positively they feel after reading the proposal.

While these two theories are difficult to distinguish, if relative fluency is driving the differences in how people respond across communication mediums it may be the case that this effect is stronger when the relative differences in proficiency across the two languages is greater. Put otherwise, for people who are highly proficient in English, the relative difference in fluency between their native Hebrew and foreign English is smaller than when they are less proficient in English. Therefore, if processing fluency drives the effect of communication medium on proposal evaluations, the differences in relative proficiency between their native and foreign languages may influence the effect.

Emotional blunting in a foreign language, on the other hand, is thought to be more tied to language acquisition environment than language proficiency, as people who either acquired a foreign language at an early age or have lived for a long period of time in a country that uses their foreign language as the common language show smaller emotionality differences across languages (Harris, 2004). Hence, if emotional blunting in a foreign language is driving the communication medium effect, it may be less impacted by relative differences in language proficiency.

Therefore, to test this theory, I did an exploratory moderation analysis examining whether differences in proficiency between their native Hebrew and foreign English moderated differences in proposal evaluations across communication mediums. To do so, I first tested whether there was a significant interaction between communication medium and differences in language proficiency on proposal evaluations. Here, there was neither a significant main effect of proficiency ( $F(1, 399) = 1.11, p = 0.29, \eta_p^2 < 0.01$ ) nor a significant interaction between communication medium and proficiency ( $F < 1$ ). A further Johnson-Neyman moderation analysis revealed that there was a significant effect of communication medium (at  $p < 0.05$ ) for 90.84% of participants who had a proficiency difference less than or equal to 2.28; for 9.16% of participants who had a greater proficiency difference there was no significant effect of communication medium (see Figure 8). Though the lack of difference for those with a greater proficiency difference between their native and foreign languages is likely due to the dramatically smaller number of participants within this proficiency range.



**Figure 8.** Influence of communication medium on proposal evaluations across proficiency differences between their native Hebrew and foreign English. Shaded areas refer to 95% confidence intervals.

### Discussion

In the initial studies, I demonstrated that a lingua franca could pose a barrier to conflict resolution. Recipients of a proposal viewed it less favorably for their own side when it was made in a lingua franca compared to their native tongue, which consistently replicated across all three studies. Furthermore, while Study 1 provided initial tentative support for the communication

accommodation account, in which communication medium improves proposal evaluations through boosting evaluations of the source, this effect failed to replicate in Studies 2 and 3. Instead, Study 3 provided support for an alternate explanation. Specifically, using the native language of the recipient resulted in the same peacebuilding measures eliciting a less negative and more positive emotional response than when the same proposal was written in a lingua franca. This more positive emotional response, in turn, made the proposed measures seem better for your own side when they were written using the native language of the recipient as compared to a shared lingua franca.

This improved emotional response when using a native language has two explanations: a native language is more fluent as well as less emotionally blunted than a foreign, lingua franca. Because relative differences in language proficiency did not moderate this effect, this provided some tentative evidence that it is perhaps more the emotional blunting of using a foreign, lingua franca that is driving the effect. However, it is important to note that while the processing fluency account would more strongly predict proficiency differences moderating the effect of communication medium on proposal evaluations, the lack of moderation does not eliminate the possibility that fluency is nonetheless contributing to the effect. This is because while the effect did not get stronger as the proficiency difference becomes greater, the participants in the sample were still Hebrew-dominant language users for whom English is their less fluent language. Therefore, it may be the case that even small differences in relative fluency across languages is still nonetheless resulting in enough of a processing fluency difference to generate a relatively more positive emotional response in their native Hebrew as compared to English as a lingua franca.

One might suggest a much simpler account for these results. It could be that the use of a lingua franca depresses ratings overall, thereby reducing favorability ratings for the proposal when it is presented in a lingua franca. This implies that the proposal is not actually perceived differently across the two languages but that the elicitation of the ratings makes it seem like it is. This would be consistent with findings that show that using a foreign language can change how individuals interact with scales (see the ‘anchor-contraction effect’, De Langhe, Puntoni, Fernandes & Van Osselaer, 2011). However, this account is inconsistent with our overall results. Recall that a lingua franca only reduced favorability ratings of the proposal for Israel, the participants’ own side. Language did not affect the ratings of the proposal’s favorability for the other side. If this account was correct, ratings should have been reduced in a lingua franca across the board and not just when evaluating the favorability of the proposal for Israel.

Additionally, Study 3 also addressed whether communication medium influences how individuals respond to conflict-relevant information more broadly, by testing the effects of communication medium on both how people respond to peacebuilding initiatives as well as a historical account of a prior event in the history of the conflict. Here, while Study 3 replicated the prior beneficial effects of using the native language of the recipient when discussing peacebuilding initiatives, people had a similar response to the historical account across communication mediums. Therefore, these results suggest that communicating in the native language of the recipient does not seem to make people broadly more open to any conflict-relevant information, such as historical narratives of past events for which people likely have more strongly held beliefs about what previous occurred and for which accepting another’s narrative does not confer any direct benefits to the recipient.

While these findings highlight how communication medium may inadvertently impact how the same proposed measures are evaluated, this research could be extended in a variety of ways. For instance, one question which remains to be addressed is how this effect of communication medium may translate from a written to spoken communication mode. Unlike communicating through written text, spoken language comes with different benefits and challenges through the auditory, online nature of the communication process. For one, in a negotiation facilitated through a spoken format in which one party does not know the native language of the other, a lingua franca may be relatively more beneficial because it avoids the need for a third-party interpreter. Also, in situations in which one party wishes to share information in the native language of the other, communicating verbally often entails doing so through a detectable, non-native accent. This non-native accent in turn may inadvertently influence how this information is received by the other side. In Study 4, I address this latter question by examining how individuals respond to peacebuilding measures presented by the opposing side in the native language of the recipient through varying degrees of non-native accented speech.



#### STUDY 4: PERCEIVED ACCENT ON CONFLICT DE-ESCALATION

In the initial three studies, I showed the communicating to the recipient of a peacebuilding initiative in their native language resulted in the same proposal being more favorably received than when it was communicated using a shared, but foreign, lingua franca. However, one unaddressed question from these studies is the consequences of using the native language of the recipient when communicating in a spoken as opposed to written modality. This is important, as speaking to another person in a language that is foreign to you often entails communicating with some degree of detectable non-native accent. This is particularly the case for bilinguals who learned their foreign language later in life, as they often continue to speak with a detectable, non-native accent even when all other aspects of their language production have reached a native-like fluency (Scovel, 2000). Therefore, in Study 4 I examine the impact of communicating peacebuilding initiatives in the native language of the recipient through varying degrees of non-native accented speech.

There are reasons that communicating peacebuilding measures through a more detectable, non-native accent may either help or hinder how favorably peacebuilding measures are received. On the one hand, it may be the case that information processed through a more native-like accent will be more favorably received. This is both because communicating through a more native-like accent may entail an increased processing fluency, and speakers of a more native-like accent may be less harshly judged than their non-native accented counterparts. Beginning first with the disfluency account, following a similar logic to the rationale for why peacebuilding initiatives were more favorably received when communicated through one's native tongue as compared to a lingua franca in Studies 1 – 3, the relative disfluency of information communicated through a non-native accent may inadvertently impact how the

information is judged by native listeners. Therefore, this information disfluency account predicts that increasing the degree to which a speaker communicates with a detectable, non-native accent will decrease fluency, which in turn will decrease how positively people feel after hearing the proposal which in turn will negatively impact proposal evaluations.

Still, it may also be the case that less favorable proposal evaluations may arise due to more negative evaluations of the speaker rather than just the content of what he is sharing. This account – henceforth referred to as the accent bias account – holds that people will more harshly judge the speaker of the proposal when he has a heavier, non-native accent, which in turn will lead to less favorable evaluations of the proposal for one’s own side. Support for this account comes from extensive research on accent bias, which has demonstrated that individuals tend to harbor more negative social evaluations of non-standard speakers than those who communicate using a more standard speech style (for a review, see Gluszek & Dovidio, 2010). Specifically, those who have non-standard speech – such as non-native or regionally marked accents – are typically evaluated more negatively across a variety of dimensions, including traits associated with status (Cohen’s  $d = 0.99$ ), solidarity (Cohen’s  $d = 0.52$ ), and dynamism (Cohen’s  $d = 0.86$ ) (for a meta-analysis, see Fuertes et al., 2012).

Several theories have been offered to explain this tendency to evaluate speakers who have non-standard accents more negatively. First, non-standard accents are more disfluent, and hence there is some evidence that the relative disfluency of non-standard speech elicits a more negative emotional response which in turn negatively impacts social evaluations of the speaker (Dragojevic & Giles, 2016). Second, the extent to which a speaker has a detectable, non-standard accent can represent a greater divergence in speech style when the listener has a more standard accent, with greater speech divergence generally resulting in more negative social evaluations

(Gallois, Ogay, & Giles, 2005). Lastly, because people with non-standard accents are often from underrepresented or historically disadvantaged communities for which people sometimes hold negative, stereotypical views, individuals who speak with a heavier, non-standard accent typically associated with that group can be viewed as being a more prototypical group member (Hogg & Reid, 2006) which in turn can lead to more negative, stereotypical evaluations of the speaker (Romero-Rivas, Morgan, & Collier, 2022).

Therefore, if people form a more negative impression of the source of the proposal when the speaker communicates through a non-native accent, this in turn may result in the proposal being less favorably received than when it is offered by a more native-like speaker. Importantly, though, because there are several proposed mechanisms for why this accent bias occurs, there are a few different causal pathways that this account predicts. If negative social evaluations are triggered by processing disfluency, this would predict that differences in processing fluency would lead to differences in elicited affect, which in turn would impact source evaluations followed by proposal evaluations. However, if instead negative social evaluations are triggered by people viewing the heavier accented speaker as being a more prototypical member of his group leading to increased negative stereotyping, then this would predict that differences in perceived group prototypicality would lead to differences in social evaluations which in turn would impact proposal evaluations.

However, while both the information disfluency and accent bias accounts predict that the proposal will be more negatively evaluated when offered from a heavier, non-native accented speaker, there is reason to believe that the opposite pattern of results may hold. Specifically, the third account – the language incongruity account – instead predicts that heavier accented speech may result in more favorable proposal evaluations than when the speaker communicates

through more native-like speech. Here, the language congruency between the known identity of the speaker and his speech style of communicating through a heavier non-native accent may more closely match listener expectations, which in turn may improve evaluations of the proposal than when the accent and identity of the speaker are incongruent.

To illustrate how language congruency can improve source evaluations, in a study of attitudes of native Japanese listeners listening to varying degrees of native-like speech by foreign Japanese speakers, Ross, Shortreed, and City (1990) found that the listeners rated foreigners with the most native-like Japanese as less cooperative, polite, and empathetic than foreigners using less native-like speech (such as codeswitching or foreigner talk). The authors theorized that foreigners using more native-like Japanese violated expectations for how someone of their background should communicate which resulted in more negative speaker evaluations. This is echoed by Preston (1981), who broadly discusses the negative ramifications that can arise for non-native speakers who achieve a native-like style of speech. This review highlights that when a speaker communicates in an unexpected way – such as when a known non-native speaker has a native-like speech style – listeners can view this as being performative or at worse manipulative, which in turn can lead to harsher evaluations of the speaker than when he has a more congruent, non-native way of speaking.

Hence, if a delegate from the other side who does not share your native tongue offers a proposal through a native-like accent, the incongruency between the language and known identity of the speaker may backfire. Specifically, the incongruency may violate listener expectations of how the speaker should communicate, which in turn may result in the speaker being more negatively evaluated. These more negative source evaluations when the speaker communicates using native-like speech, in turn, may result in the same proposal being viewed as

less favorable for one's own side than when the speaker communicates using more congruent, non-native accented speech.

To test this question, I presented Jewish-Israelis with a peacebuilding proposal from a Palestinian delegate communicated through heavily Arabic-accented Hebrew, mildly Arabic-accented Hebrew, or native-like Hebrew, and measured the extent to which their evaluations of the proposal varied depending on the degree of accent of the delegate offering the proposal. Here, I included both a mild and heavier Arabic-accented Hebrew condition, as prior work on the influence of accent on social evaluations has found that heavier, non-native accented speakers are both considered more prototypical of their group and elicit more negative reactions than their more mildly accented counterparts (Dragojevic, Giles, Beck, & Tatum, 2017).

This study was preregistered on Open Science Framework (<https://osf.io/yz9p5>), and the full data and analysis script will be available upon publication.

## **Method**

### *Participants*

450 Jewish-Israeli native Hebrew speakers participated in an online survey through the survey panel Midgam (<https://www.midgampanel.com/>). All participants were prescreened to ensure they were native Hebrew speakers and were 18 years or older. One person was excluded from analysis due to evidence of random responding, identified based on providing inconsistent responses across several study items resulting in outlier responses to the index measures. This left a final sample of 449 participants (see Table 4 for demographic information).

Participants were randomly assigned to listen to a trust building proposal from a Palestinian delegate in one of three conditions: native-like Hebrew ( $n = 147$ ), mildly Arabic-

accented Hebrew ( $n = 145$ ), or heavily Arabic-accented Hebrew ( $n = 157$ ). Within each accent condition, participants were additionally assigned to listen to one of two token speakers who were previously normed as having a similar degree of Arabic-accented Hebrew.

**Table 4.** Demographic characteristics of participants in Study 4.

<b>Age</b>	<b>Gender</b>	<b>Education</b>	<b>Religious Identification</b>	<b>Political Ideology</b>
44.23 (13.47)	44.10% Female	52.78% Undergraduate degree or higher	5.57% Ultra-Orthodox 15.15% Religious 22.49% Traditional 56.79% Secular	42.31% Right-wing 36.30% Centrist 21.38% Left-wing

### *Materials*

The Israeli-Palestinian peace-building proposal from Studies 1-3 was used for Study 4. While an alternate proposal was developed, the current proposal was judged as one of the few viable paths forward given the tense nature of the conflict at the time of the study. However, a minor modification was made to the proposal text to ensure the proposal used language typical of a Palestinian Hebrew speaker. Specifically, two instances in which violent actions were labelled as terrorism (בטרור) were removed in favor of using the more neutral violent action (פעולות אלימות) throughout.

All other research materials – including instructions, questionnaires, and the consent form - was initially written in English and then translated to Hebrew using a professional translation service. It was then reviewed for fluency by a separate Hebrew-English bilingual before final

corrections were made by two coauthors on the project who are fluent Hebrew-English bilinguals. The final Hebrew version of the materials were used for all participants in the study.

### *Audio Recordings*

Once the proposal was finalized, eleven male speakers between the ages of 35 to 55 years old recorded the proposal in a neutral tone. Of these speakers, 9 were native Arabic, Palestinians speakers who spoke Hebrew as a foreign language and 2 were native Hebrew, Israeli speakers. The age range was chosen to ensure the speaker seemed like a credible, realistic source given that listeners can often detect the age of a speaker from their voice (Hughes & Rhodes, 2010). Additionally, while the proposal is framed as being from a Palestinian representative for all conditions, the two native Hebrew, Israeli speakers were selected for the native-like Hebrew accented condition. This practice of using a native speaker under the guise of being a non-native one is often utilized, both because the majority of non-native speakers often speak through at least mildly non-native accented speech and, if the identity of the speaker is known, listeners will often nonetheless hear a detectable, non-native accent from native speaker recordings if non-native speech is expected (e.g., Rubin, 1992). These initial recordings were then processed using Audacity (<https://www.audacityteam.org/>) and normalized to a similar perceived volume across speakers.

From these processed recordings, a brief, 10 second clip was taken from each recording to act as a sample, and a norming study was conducted with 120 native Hebrew speakers born and currently residing in Israel ( $M_{Age} = 37.41$ , 49.14% Female). In the norming study, following an initial audio check to ensure their audio equipment was turned on and functioning, participants were randomly assigned to rate three of the 12 speakers on the perceived degree of Arabic-accented Hebrew and age of the speaker. To do so, for each audio clip participants

listened to the sample clip and then immediately following the clip rated how accented they perceived the speaker as being (on a scale from 1 (*no detectable Arabic accent*) to 7 (*very heavy Arabic accent*)) and then provided a guess of the speaker's age.

Because one of the two native-like Hebrew speakers was rated as having a slightly heavier accent than the other (Speaker 11), a new native Hebrew speaker was recorded and processed and a second group of 40 native Hebrew speakers was recruited ( $M_{\text{Age}} = 37.63$ , 57.90% Female). In this follow up norming study, participants listened to the new native Hebrew speaker (Speaker 12) and Speaker 4 and Speaker 9 from the initial norming study in a randomized order. To ensure accent ratings were comparable across the two norming studies, accent ratings for Speaker 4 and Speaker 9 were compared and did not yield a significant difference between the initial and follow up norming study ratings for each of those speakers respectively ( $ts < 1$ ). Therefore, data for Speaker 12 was used in the final norming dataset (see Table 5 for more details).



**Table 5.** Mean accent ratings and perceived age of the speaker from norming study (Study 4). Higher scores for mean accent rating indicate the speaker was rated as having heavier, Arabic-accented Hebrew.

Speaker	Number of Ratings	Mean Accent Rating	Mean Perceived Age
1	34	5.00	42.94
2	31	5.68	41.58
3	32	4.63	39.44
4	31	5.55	34.45
5	34	3.62	35.06
6	31	4.74	36.62
7	26	4.04	35.08
8	37	5.47	25.70
9	28	3.61	32.04
10	36	1.42	32.75
11	28	2.43	42.18
12	38	1.34	34.76

After reviewing the final norming data, I selected Speakers 2 and 4 as the heavily Arabic accented Hebrew speakers, Speaker 7 and 9 as the mildly Arabic-accented Hebrew speakers, and Speaker 10 and 12 as the native-like Hebrew speakers. An ANOVA comparing ratings of accent across the assigned accent conditions confirmed the speakers were rated as having significantly different levels of perceived accent in Hebrew ( $F(2, 193) = 253.90, p < 0.001, \eta_p^2 = 0.73$ ), with further paired t-tests revealing significant differences between each of the accent conditions

(Heavy vs. Mild:  $p < 0.001$ ; Heavy vs. Native-like:  $p < 0.001$ ; Mild vs. Native-like:  $p < 0.001$ ).

Lastly, a final set of paired t-tests yielded similar perceived accent ratings of the speakers within each accent condition ( $ts < 1$ ).

### *Procedure*

Prior to the start of the study, all participants were prescreened to ensure they were native Hebrew, Jewish-Israelis that were born and raised in Israel and had normal or corrected to normal hearing. Participants who passed these requirements were then automatically redirected into the main study, and randomly assigned to listen to the proposal from a Palestinian delegate in one of three accent conditions: native-like Hebrew, mildly Arabic-accented Hebrew, or heavily Arabic-accented Hebrew. Additionally, within each accent condition participants were randomly assigned to listen to one of two speakers who were rated as having similar perceived accent in the norming study (see *Audio Recordings* above for more details on the speaker selection).

Upon entering the study, participants first completed a brief audio check to make sure their sound was turned on and their audio equipment was functioning. For the audio check, participants played a brief recording instructing them to select a color from a list of options. Those who did not pass the audio check after two attempts were unable to advance to the main study. For those who passed the audio check, they were told they would be listening to the main points from a trustbuilding and security cooperation proposal that was being offered by a representative from a Palestinian delegation, and to listen carefully as they would be asked questions about the offer later in the study. Following these instructions, the next page would then automatically play the proposal. Participants were only able to advance once the audio ended and participants could only listen to the recording once.

Next, participants completed a series of measures reporting how favorably they judged the proposal as being for each side. Specifically, to examine how favorable they perceived the proposal for Israel, participants were asked to report the extent to which they perceived the proposal as pro-Israeli, fair to Israelis, how much they agreed with the proposal, and how much they thought Israelis more broadly would agree with the proposal. To examine how favorable they perceived the proposal as being for Palestinians, they reported the extent to which they perceived the proposal as pro-Palestinian and fair to Palestinians. Additionally, at the end of the evaluation section participants were asked to report the extent to which they saw this proposal as being a good basis for negotiations as well as pass a brief attention check in which they were asked to select a certain value on a scale. Participants who failed this attention check were removed from the study. All measures were completed on a scale from 1 (*not at all*) to 7 (*to a very high extent*).

Following the evaluation section, participants completed two additional sections assessing how participants felt after reading the proposal and how they felt about the source of the proposal (the Palestinian delegate). These two sections were counterbalanced so that for half of participants, the source evaluation section came first whereas for the other half of participants the emotional response section came first. For the emotional response section, participants reported the extent that the proposal made them feel different emotional states, including both negative emotions (anger, hatred, hostility, fear, concern, a sense of threat, disgust, contempt) and positive emotions (sympathy, empathy, hope, and optimism). For the source evaluation section, participants rated the Palestinian delegation on the extent they viewed him as having different traits. These included the extent they saw him as being high in status (intelligent, education, competent, successful), solidarity (trustworthy, credible, sincere, and honest), and

warmth (friendly, warm, and good-natured) as well as the extent to which they thought he was being coercive (manipulative, looking after his own interests, demanding). Additionally, at this end of the source evaluation section, participants also rated how close they think the Palestinian representative is to the Palestinian people as a measure of prototypicality of the speaker, using a 1 to 6 scale of increasingly overlapping circles to dictate the degree of closeness between the Palestinian representative and other Palestinians (see Appendix A5 for a visualization of each level of the scale). All questions in the emotional response and source evaluation sections, barring the prototypicality measure, were reported on a scale from 1 (*not at all*) to 7 (*to a very high extent*).

At the end of the main study questions, participants were asked a series of questions evaluating the ease of understanding the Palestinian delegate as well as answer two comprehension questions regarding the proposal. For the processing fluency questions, this included two questions in which they rated the extent the speaker was easy to understand and clear to understand on a scale of 1 (*not at all*) to 7 (*to a very high extent*). For the comprehension questions, participants were asked to identify the topic and source of the proposal. Lastly, prior to finishing the study participants responded to a series of demographic questions. These questions included two items on their religious background and political attitudes questions regarding the Israeli-Palestinian conflict from Studies 1 – 3, as well as an additional measure assessing how frequently they interact with Palestinians in their everyday lives.

## **Results**

All analyses were conducted using a two-way ANOVA examining the main effect of Accent (Heavy | Mild | Native-like), and in instances in which a significant effect of

Accent was detected further post-hoc Tukey contrasts were performed to determine which of the accent conditions significantly differed from one another.

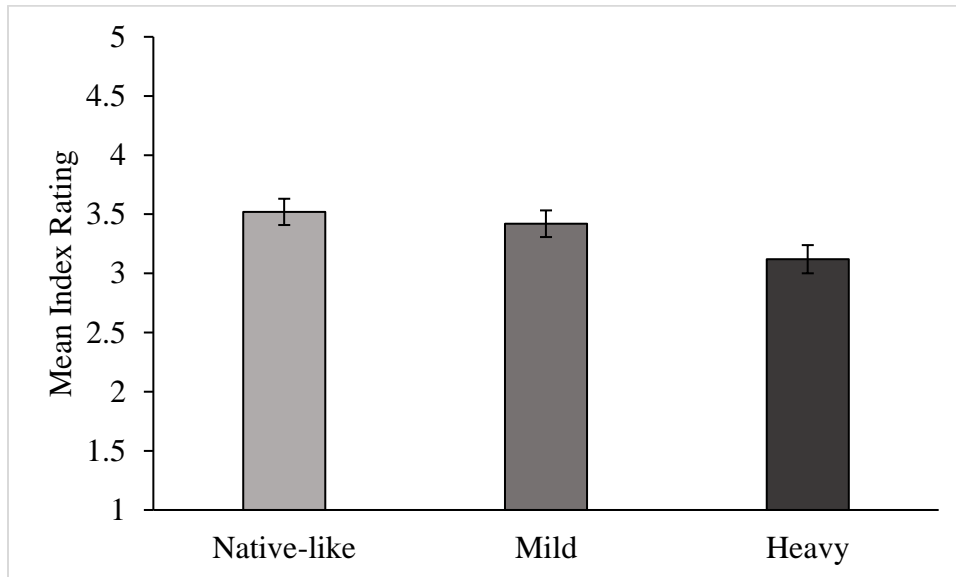
As with other studies, because political attitudes influence how individuals respond to conflict-relevant information, I initially included the main effect and interaction of political attitudes on the main dependent variables (how favorable the proposal is viewed as being to Israelis or Palestinians) to determine whether preexisting political attitudes serve as a moderating factor. However, because political attitudes did not interact with accent condition, the models reported below were simplified to control for political attitudes as a covariate. However, the results hold even when political attitudes are removed from the models.

Finally, I additionally tested whether intergroup contact (how often people interact with Palestinians) moderated how individuals responded to the proposal, however neither the main effect nor interaction of frequency of intergroup contact reached significance across any of the main dependent variables. Therefore, this factor was dropped from the models reported below.

### *Proposal Evaluation*

A pro-Israeli index was created by collapsing the pro-Israeli, fair to Israelis, self-agreement, and general Israeli agreement measures (Cronbach's  $\alpha = 0.89$ ) to examine if language influences the extent to which the proposal is viewed as beneficial for Israel. Here, there was a main effect of Accent ( $F(2, 445) = 3.71, p = 0.03, \eta_p^2 = 0.01$ ), with further post-hoc contrasts revealing a significant difference in proposal evaluations between the Native-like ( $M = 3.52, SD = 1.36$ ) and Heavy ( $M = 3.12, SD = 1.38$ ) accent conditions ( $t = 2.47, p = 0.04, d = 0.23$ ). For the Mild accent condition ( $M = 3.42, SD =$

1.46), there were no significant differences detected in proposal evaluations between the Mild and Native-Like ( $t = 1.11, p = 0.51, d = 0.06$ ) or Mild and Heavy ( $t = 1.32, p = 0.38, d = 0.17$ ) conditions (see Figure 9 below).

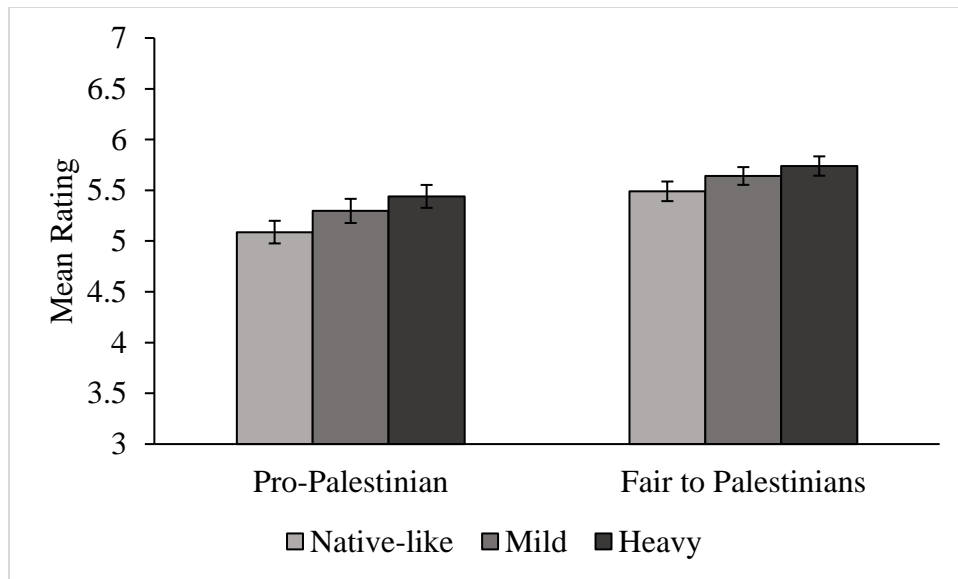


**Figure 9:** Mean of the index of the ratings of the extent to which the proposal was perceived as pro-Israeli as a function of the accent of the speaker who presented the proposal (Study 4).

*Note.* Y-axis truncated for clarity.

To assess how favorable to Palestinians the proposal was viewed as being, two separate ANOVAs were run on how pro-Palestinian and fair to Palestinians the proposal was viewed as being. However, similar to Study 3, the Cronbach's alpha failed to reach the 0.80 threshold preregistered as needed to justify collapsing the measures into a single index (Cronbach's  $\alpha = 0.63$ ). Therefore, each item was analyzed separately. Beginning with how pro-Palestinian the proposal was viewed as being, the proposal was evaluated as being similarly pro-Palestinian across accent conditions (Native-like:  $M = 5.09, SD = 1.37$ , Mild:  $M = 5.30, SD = 1.29$ , Heavy:  $M = 5.44, SD = 1.40$ ;  $F(2, 445) = 2.58, p =$

0.08,  $\eta_p^2=0.01$ ). Additionally, regarding how fair the proposal was viewed as being for Palestinians, there was no main effect of accent ( $F(2, 445) = 1.85, p = 0.16, \eta_p^2=0.01$ ), with participants giving similar ratings of how fair the proposal is for Palestinians across accent conditions (Heavy:  $M = 5.74, SD = 1.17$ , Mild:  $M = 5.64, SD = 1.07$ , Native-like:  $M = 5.49, SD = 1.18$ ; see Figure 10 below)



**Figure 10:** Mean ratings of how pro-Palestinian and fair to Palestinians the proposal was perceived as being as a function of the accent of the speaker who presented the proposal (Study 4).

*Note.* Y-axis truncated for clarity.

Lastly, participants were asked to report the extent that they thought the current proposal was a good basis for negotiations between the two sides. Here, there was a significant effect of accent ( $F(2, 445) = 3.06, p = 0.05, \eta_p^2=0.01$ ), with further post-hoc contrasts revealing a marginally significant difference in evaluating the proposal as being a good basis for negotiations between the Heavy and Native-like accents (Heavy:  $M = 3.48, SD = 1.91$ ; Native-like:  $M = 3.95, SD = 1.91$ ;  $t = 2.18, p = 0.08, d = 0.20$ ). For the Mild accent condition ( $M = 3.84, SD = 1.90$ ), there were no significant differences

detected between the Mild and Native-like ( $t = 1.10, p = 0.52, d = 0.05$ ) or Mild and Heavy ( $t = 1.05, p = 0.55, d = 0.16$ ) conditions.

Because there were no significant differences in proposal evaluations detected between the Mild accent condition as compared to the other two accent conditions, the subsequent analyses on how individuals evaluated the source of the proposal, how they emotionally responded to the proposal, and the perceived fluency of the proposal will only report differences between the Native-like and Heavy accent conditions for brevity. However, for the full analyses including comparisons to the Mild accent condition, see Appendix A6 for more details.

### *Source Evaluations*

To understand how individuals evaluated the source of the proposal across accent conditions each of the trait evaluation measures were grouped into four categories: Status (intelligent, educated, successful, and competent), Solidarity (trustworthy, credible, honest, and sincere), Warmth (friendly, warm, and good-natured), and Coerciveness (manipulative, self-interested, and demanding). For three of these measures - Status (Cronbach's  $\alpha = 0.86$ ), Solidarity (Cronbach's  $\alpha = 0.94$ ), and Warmth (Cronbach's  $\alpha = 0.86$ ) – Cronbach's alpha met the preregistered requirement of at least 0.80 to warrant collapsing them into a single index item. However, for the Coerciveness items – namely how manipulative, self-interested, and demanding the Palestinian delegate was viewed as being – these only achieved a Cronbach's alpha of 0.73 and hence each item was analyzed separately.

Beginning with the perceived status of the source of the proposal, there was a significant effect of Accent on source evaluations ( $F(2, 445) = 6.07, p < 0.01, \eta_p^2 = 0.03$ ),



with participants rating the Palestinian delegate more highly in traits such as intelligence, competence, and education when they communicated through a Native-like ( $M = 4.35$ ,  $SD = 1.40$ ) than Heavy accent ( $M = 3.82$ ,  $SD = 1.30$ ;  $t = 3.39$ ,  $p < 0.01$ ,  $d = 0.32$ ).

Participants also rated the source of the proposal as warmer depending on Accent ( $F(2, 445) = 3.52$ ,  $p = 0.03$ ,  $\eta_p^2=0.01$ ), with participants rating the Palestinian delegate more highly in traits such as friendliness, warmth, and being good-natured when they communicated through a Native-like ( $M = 3.94$ ,  $SD = 1.32$ ) than Heavy accent ( $M = 3.54$ ,  $SD = 1.41$ ;  $t = 2.42$ ,  $p = 0.04$ ,  $d = 0.24$ ). However, there were no significant differences in how participants rated the solidarity of the source of the proposal ( $F(2, 445) = 2.07$ ,  $p = 0.13$ ,  $\eta_p^2=0.01$ ), with the Palestinian delegate receiving similar ratings in traits such as how trustworthy, honest, and sincere he was perceived as being across accent conditions (Native-like:  $M = 3.45$ ,  $SD = 1.53$ , Heavy:  $M = 3.13$ ,  $SD = 1.49$ ).

For the measures which captured how coercive they viewed the source of the proposal as being, there were no significant differences detected in how manipulative, demanding, or self-interested the Palestinian delegate was viewed as being between across accent conditions. Specifically, while there was a significant main effect of Accent in how manipulative the Palestinian delegate was viewed as being ( $F(2, 445) = 3.83$ ,  $p = 0.02$ ,  $\eta_p^2=0.01$ ), this effect was driven by a marginally significant difference in manipulateness ratings between the Mild ( $M = 3.69$ ,  $SD = 1.74$ ) and Heavy ( $M = 4.24$ ,  $SD = 1.80$ ;  $t = 2.19$ ,  $p = 0.07$ ,  $d = 0.25$ ) conditions with there being no significant differences in manipulateness ratings between the Native-like ( $M = 3.96$ ,  $SD = 1.94$ ) and Mild ( $t < 1$ ) and Native-like and Heavy ( $t = 1.30$ ,  $p = 0.40$ ,  $d = 0.13$ ) conditions. Furthermore, there were no significant differences in the extent to which participants

viewed the Palestinian delegate as looking out for his own interests (Native-like:  $M = 5.37$ ,  $SD = 1.55$ , Heavy:  $M = 5.68$ ,  $SD = 1.38$ ;  $F(2, 445) = 1.95$ ,  $p = 0.14$ ,  $\eta_p^2=0.01$ ) nor in how demanding the delegate was viewed as being (Native-like:  $M = 3.79$ ,  $SD = 1.83$ , Heavy:  $M = 3.95$ ,  $SD = 1.72$ ;  $F(2, 445) = 2.57$ ,  $p = 0.08$ ,  $\eta_p^2=0.01$ ).

#### *Source Prototypicality*

To measure how prototypical of a group member the Palestinian delegate was viewed as being, participants answered a question in which they selected which of six diagrams best represented how closely they viewed the Palestinian delegate as being with Palestinian people more broadly. Here, participants rated the Palestinian delegate as significantly more prototypical to other Palestinians depending on his accent ( $F(2, 445) = 7.51$ ,  $p < 0.001$ ,  $\eta_p^2=0.03$ ), with participants rating the Palestinian delegate as more prototypical when he spoke with a Native-like ( $M = 3.79$ ,  $SD = 1.73$ ) as compared to Heavy accent ( $M = 4.45$ ,  $SD = 1.63$ ;  $t = 3.53$ ,  $p < 0.01$ ,  $d = 0.33$ ).

#### *Processing Disfluency*

To capture how disfluently they perceived the Palestinian delegate as being, participants rated how easy and clear the Palestinian delegate was when delivering the proposal (Cronbach's  $\alpha = 0.95$ ). Here, there was a significant effect of accent on processing disfluency ( $F(2, 445) = 6.83$ ,  $p = 0.001$ ,  $\eta_p^2=0.03$ ), with participants rating the speech from the Heavy ( $M = 5.25$ ,  $SD = 1.61$ ) as compared to Native-like ( $M = 5.68$ ,  $SD = 1.33$ ) accent condition as being less fluent ( $t = 2.41$ ,  $p = 0.04$ ,  $d = 0.23$ ).

#### *Emotional Response*

Finally, to examine the influence of accent on how individuals felt immediately after reading the proposal, two index measures were generated assessing the extent they felt

positive emotions (sympathy, empathy, hope, and optimism; Cronbach's  $\alpha = 0.93$ ) and negative emotions (anger, hatred, hostility, fear, concern, a sense of threat, disgust, and contempt; Cronbach's  $\alpha = 0.91$ ). Here, participants reported that the proposal evoked similar degrees of positive (Native-like:  $M = 3.19$ ,  $SD = 1.60$ , Heavy:  $M = 2.85$ ,  $SD = 1.55$ ;  $F(2, 445) = 2.53$ ,  $p = 0.08$ ,  $\eta_p^2 = 0.01$ ) and negative (Native-like:  $M = 2.70$ ,  $SD = 1.49$ , Heavy:  $M = 2.96$ ,  $SD = 1.43$ ;  $F(2, 445) = 2.05$ ,  $p = 0.13$ ,  $\eta_p^2 = 0.01$ ) emotions.

### *Exploratory Mediation Analyses*

To better understand what factors may explain the difference in proposal evaluations across accent conditions, I conducted a series of exploratory mediation analyses. To remind, two theories predicted that the proposal would be less favorably received when offered by a Palestinian delegate with heavier, Arabic-accented Hebrew than by a Palestinian delegate with more native-like Hebrew: an information processing disfluency theory and accent bias theory. Under the processing disfluency theory, this predicted that relative differences in processing fluency between accent conditions would be explained by differences in processing fluency by way of affect, in which native-like speech would be processed more fluently, resulting in a more positive emotional response to the proposed measures which in turn would lead to more favorable judgments of the proposal. Under the accent bias theory, individuals would judge the Palestinian delegate more harshly when he had a heavier, non-native accent, and these more negative evaluations of the delegate would translate into more negative evaluations of the proposal itself.

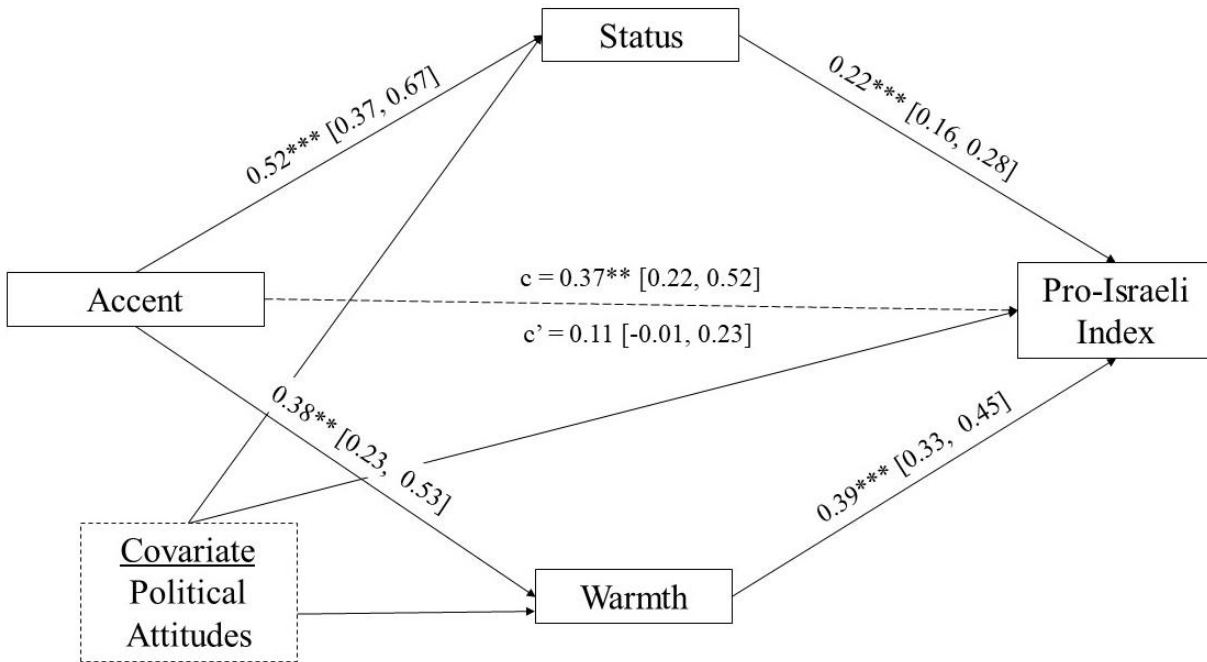
Consistent with the information processing fluency account, the proposal was rated as being significantly more disfluent when shared by a heavier Arabic-accented

Hebrew speaker than by a more native-like Hebrew speaker. However, key to this theory was that differences in fluency would result in a more favorable emotional response to the proposed measures, whereas in the current study no significant differences were detected in how positively or negatively people felt after reading the proposal across accent conditions. Therefore, these results do not suggest that people are judging the proposal more favorably for themselves because of an increase in positive affect after listening to the proposal being delivered through more fluent speech.

However, consistent with the accent bias account, participants did judge the Palestinian delegate more harshly (in both status and warmth) when he spoke through heavily Arabic-accented Hebrew as compared to native-like Hebrew. Therefore, I conducted a multi-mediation analysis using the bootstrapping method with 10,000 simulations to assess the separate indirect effects of perceived status and warmth of the Palestinian delegate on ratings of the proposal as being more favorable for Israelis when offered through a native-like Hebrew accent as compared to heavier, Arabic-accented Hebrew. Like with the prior analyses, political attitudes were included as a covariate.

The effect of accent on the evaluation of the Palestinian proposal favorability was rendered non-significant when controlling for perceived status and warmth of the Palestinian delegate (from  $b = 0.37$ , 95% CI [0.22, 0.52] to  $b = 0.11$ , 95% CI [-0.01, 0.23]), consistent with a full mediation. Furthermore, perceived status had an estimated indirect effect of 0.12 [0.07, 0.17], while perceived warmth had an estimated indirect effect of 0.15 [0.08, 0.22]. These findings suggest that when participants heard the same proposal offered through heavier, Arabic-accented Hebrew, they viewed the Palestinian representative offering the proposal as both lower in status (e.g. intelligent, educated,

and successful) and warmth (e.g. friendly, warm, and good-natured), which in turn was associated with a decrease in how favorably the proposal was evaluated as being for Israelis (see Figure 11 for more details).



**Figure 11.** Mediation analysis of the indirect effects of perceived status and warmth of the Palestinian representative on the direct effect of accent on pro-Israeli index scores (with political attitudes as a covariate) for Study 4. Mediation coefficients above refer to unstandardized coefficients.

*Note.* \*  $p < 0.05$  \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

As previously mentioned, there are a number of theories as to why heavier, non-native accented speech typically results in less favorable evaluations of the speaker. One theory – the processing disfluency theory – was not supported because there was no difference in elicited affect across accent conditions. However, another theory – the prototypicality theory – posits that individuals who communicate through heavier, non-native accented speech are evaluated as being more prototypical members of their group.

This can have negative implications for the speaker when individuals harbor negative, stereotypical attitudes about the group to which the speaker belongs, as the heavier, non-native accented speech can more saliently activate these negative attitudes than when the speaker has a milder non-native or native-like accent. Consistent with this account, people judged the heavy, non-native accented delegate as being both more prototypical and more harshly evaluated him in both status and warmth as compared to when the delegate spoke using more native-like Hebrew.

Therefore, I proceeded to test whether differences in the perceived prototypicality of the Palestinian delegate across accent conditions influenced evaluations of the perceived status or warmth of the delegate, which in turn explained differences in proposal evaluations through a serial mediation model. However, consistent with the requirements of serial mediation (Lemardelet & Caron, 2022), I first tested whether there was a significant positive association between prototypicality and perceived status or warmth by regressing accent and prototypicality on each of the trait dimensions to obtain the effect of prototypicality on each of the trait evaluations while controlling for the effects of accent condition. Here, there was neither a significant main effect of perceived prototypicality on either perceived status or warmth of the Palestinian delegate ( $t_s < 1$ ) inconsistent with serial mediation. Therefore, while the Palestinian delegate was judged more harshly in both status and warmth when he spoke with a heavier, non-native accent, which in turn explained differences in how the proposal was judged, these more negative trait evaluations of the speaker were not due to differences in the perceived prototypicality of the delegate across accent conditions.

## Discussion

In Study 4, I found that the accent through which peacebuilding initiatives are communicated can inadvertently influence how people respond to the proposed measures. Specifically, when native Hebrew speakers heard a proposal being shared by a heavily Arabic-accented Hebrew speaker, they judged him more harshly in both perceived status and warmth compared to when the Palestinian delegate had more native-like Hebrew, which in turn influenced how favorably they judged the proposal as being for their own side. These findings provided initial support for the accent bias theory, in which negative evaluations typical of more heavily accented, non-native speakers can impact how people judge the information that is being shared. Additionally, these findings provide strong evidence against the language incongruency theory, which predicted that the incongruency between the speaker identity and speech style when communicating through more native-like Hebrew would result in more negative evaluations of the Palestinian delegate, which in turn would result in less favorable judgments of the proposal in question.

However, while this study did provide support for the accent bias account, it did not provide support for one explanation for accent bias – namely, that individuals judge heavier accented speakers more negatively due to perceiving them as more prototypical group members. In light of this, future studies may more closely examine why people are evaluating the speaker more negatively when he communicates through heavier, non-native accented speech. One possible explanation, in line with communication accommodation theory, is that rather than signaling group prototypicality speaking with a heavier, non-native accent serves as a form of speech divergence from that speech style of the recipients. Particularly with heavy, non-native accents, it may be the case that listeners perceive the speaker who is communicating in their native language but through heavily non-native accented speech as putting in insufficient effort

to communicate clearly (Gallois et al., 2005). Alternatively, it may be that rather than activating group-specific stereotypes, the delegate is being more harshly judged due to stereotypes regarding non-native speakers more generally. This would be in line with Lindemann (2003), which found that native listeners rated a non-native speaker as lower in status even though the vast majority of individuals were unable to correctly identify the specific non-native accent they were listening to.

Lastly, as mentioned while there were differences in perceived fluency of the proposal across accent conditions, these differences in processing fluency did not elicit significant differences in how individuals emotionally responded to the proposed materials across accent conditions. This finding was inconsistent with the information processing fluency account, which posited that the relatively more disfluent speech of the heavily Arabic-accented Hebrew delegate would result in a less positive emotional response, which in turn would negatively impact proposal evaluations. This also did not support one possible explanation for the accent bias theory, namely that processing disfluency would trigger a more negative emotional response, which in turn would negatively impact how the speaker is evaluated. However, it may be the case that recipients adjusted quickly to the relative processing disfluency of the accent upon listening to the proposal. This would be consistent with some work which suggests that native listeners can adapt to the relative processing difficulties of listening to non-native speech within as little as a few sentences of exposure (Clarke & Garrett, 2004).

In sum, the accent through which peacebuilding measures can shape how people judge the speaker, which in turn can surprisingly influence how people respond to the same peacebuilding measures. However, while these findings illustrate that accent bias can occur even when the speaker is offering a proposal which offers a possible benefit to the recipient, an



important next step would be to see if there are ways to mitigate these negative social evaluations of heavily non-native accented speech which have downstream consequences on how the information they share is evaluated. As discussed, non-native speech is typical of individuals communicating through a language that is not native to them, and often lingers after all other facets of language production reach a high degree of fluency. Therefore, harsh judgments of the speaker by native listeners are unwarranted, particularly if these negative social evaluations arise from perception that non-native accented speech is due to lack of communicative effort or general, negative assumptions of the intelligence or character of non-native speakers.

Hence, future studies may examine ways to alleviate these negative evaluations of heavily accented non-native speakers. For instance, if these negative social evaluations arise from a perceived lack of communicative effort to speak in a more convergent, native-like manner to the listeners, one intervention may be to highlight the convergence in speech that speakers are demonstrating simply by choosing to communicate in the native language of the recipient rather than through interpretation or a lingua franca. Alternatively, if these negative social evaluations arise from general negative stereotypes regarding non-native speakers, an alternate intervention that may be effective amongst largely bilingual populations such as those found in Israel may be to highlight the hypocrisy of negatively judging an outgroup member communicating in your native language using a non-native accent in a manner in which you would neither want nor hope native speakers of your foreign language to judge yourself.

## GENERAL DISCUSSION

*“Human beings do not live in the objective world alone, nor alone in the world of social activity as ordinarily understood, but are very much at the mercy of the particular language which has become the medium of expression for their society.”* – Edward Sapir, “Language: An Introduction to the Study of Speech” (1921)

In situations of violent, intergroup conflict, these studies broadly demonstrate that the language through which we choose to communicate can have repercussions in how the same peacebuilding initiatives are received by the other side. In Studies 1 – 3, Jewish-Israelis receiving a peacebuilding initiative communicated either in their native language or through English as a lingua franca evaluated the same proposal as being worse for their own side when it was offered in a lingua franca. This was both the case when the proposal was originally from an ingroup (Israeli) or outgroup (Palestinian) delegation, though did not extend to evaluations of how favorable the proposed measures would be for the other side. These two findings suggested that communication medium was not impacting proposal evaluations simply by the choice in language serving as a goodwill gesture nor was communicating through a lingua franca broadly devaluing the proposed measures due to a bias in how individuals respond when using a foreign language (e.g., anchor-contraction effect; De Langhe et al., 2011).

Furthermore, while Study 1 provided tentative evidence for the communication accommodation theory, in which delegates who converge onto the native language of the recipient are more favorably judged, Studies 2 – 3 failed to replicate this effect. Instead, Study 3 suggested that information shared through one’s native language elicits a more positive affective response, which in turn helped explain why the proposal was more favorably received than when the same information was communicated in a lingua franca. While it may be either the relative

higher degree of fluency of a native language or the emotional blunting of a foreign language which drove differences in evoked emotions across communication mediums, proficiency differences between the native Hebrew and foreign English of participants did not moderate the effect of communication medium on proposal evaluations. This provided some tentative, although not conclusive, evidence that it may be the emotional blunting of a foreign language that is driving this effect rather than differences in processing fluency across communication mediums.

Additionally, Study 3 demonstrated the effect of communication medium does not extend to any form of conflict-relevant information. One possibility from Studies 1 and 2 is that when information regarding the conflict is being shared through one's native language, people may be more open and receptive to it than when the same information is communicated through a foreign, lingua franca. If so, it may be the case that communicating in the native language of the recipients would not only positively impact how people responded to future peacebuilding initiatives, but that it also may make them more open to other forms of conflict-relevant information such as historical narratives of past events. However, Study 3 did not support this theory; while the positive impact of peacebuilding measures offered in one's native tongue was replicated, these effects did not extend to how positively people evaluated a historical narrative from the conflict being shared by the other side.

Given the results of Studies 1 through 3, one lingering question left unaddressed was how peacebuilding measures communicated in the native language of the recipient would be received if they are shared through a spoken rather than written modality. Here, one salient difference between written and spoken speech is that in choosing to communicate in the native language of the recipient, this almost always entails doing so through a non-native accent when the two

parties do not share a native tongue. Therefore, Study 4 examined whether the extent to which a Palestinian delegate spoke with varying degrees of Arabic-accented Hebrew influenced how the same peacebuilding proposal was evaluated by Jewish-Israeli recipients. Here, Jewish-Israelis evaluated the same peacebuilding proposal as being worse for themselves and their own side when offered by a Palestinian delegate with heavy Arabic-accented Hebrew as compared to a Palestinian delegate with native-like Hebrew. Furthermore, the heavy Arabic-accented Hebrew delegate was judged as being lower in both status (e.g., intelligence, education, competence) and warmth (e.g., friendly, warm, good-natured) compared to the native-like delegate, which in turn explained differences in how the same proposal was evaluated across accent conditions. Importantly, though, these negative evaluations of a non-native speaker were specific to individuals rated as having a heavy non-native accent, as these differences in both how the source and proposal were evaluated did not extend to a Palestinian delegate who offered a proposal through mildly Arabic-accented Hebrew.

In sum, this work has important implications for the de-escalation and resolution of ethnopolitical conflicts. Specifically, if individuals view peacebuilding measures in cross-national conflict more favorably when presented in their native language or through more native-like speech, one could leverage this information to increase the chances of a proposal being favorably received thereby facilitating conflict resolution. More broadly, these studies highlight the role of an ever-present actor that has often been overlooked in previous research. Namely, the medium through which we communicate during conflict plays an important role by influencing how individuals respond to what is being shared. Given that this ‘silent actor’ can influence our openness to conflict de-escalation efforts, it would be important to examine how communication medium interacts with other barriers that arise during conflict.

While these studies show how we choose to communicate can influence how peacebuilding measures are received, there are several ways in which these findings could be extended to better understand the influence of communication medium on receptiveness to peacebuilding efforts. For one, one important way to extend the current research would be to examine how Palestinians, as opposed to Jewish-Israelis, respond to peacebuilding initiatives shared through different communication mediums. While there is reason to believe that the effects from Studies 1 through 4 would still hold, it may be that the choice in using the native language of the recipient will serve as a more salient goodwill gesture to a Palestinian audience. In the current Israeli-Palestinian conflict, Israelis are generally viewed as being in a higher power position than their Palestinian counterparts (Maoz, 2000). Hence, if an Israeli delegation chooses to share a peacebuilding proposal in Arabic in a native-like manner, this act of language convergence from a higher power delegation may be a more salient goodwill gesture to the recipient than when a lower power delegation converges to the language of the higher power receiving party.

Relatedly, it would also be important to extend these findings to other ongoing intergroups conflicts. While the focus of this series of studies – the Israeli-Palestinian conflict – serves as a prime example of violent, protracted conflict, parties engaged in intergroup conflict not sharing a native language is the more the rule than the exception. For example, the ongoing Russo-Ukrainian War, which to date has killed approximately sixty-two thousand people while displacing 17 million, represents another example of ongoing, violent conflict for which parties do not share a native tongue and continued conflict comes with a grave cost in security, resources, and human lives for those involved (Faulconbridge, 2023). Furthermore, similar to the Israeli-Palestinian conflict, the Kashmir conflict is a protracted conflict which has been ongoing

for decades, and involves parties who speak multiple different native languages such as Kashmiri and Dogri (Kashmir), Urdu (Pakistan), and Hindi (India) (Mohan, 1989). Examining how communication medium influences peacebuilding efforts in different conflicts which vary in, amongst other factors, the languages, cultures, and power dynamics of the parties involved would be essential to fully understanding the ramifications of communication medium in shaping attitudes regarding conflict de-escalation efforts.

## **Conclusion**

To conclude, finding ways to bridge divides in violent, intergroup conflict is essential to reducing the human suffering imposed by ongoing war. These studies contribute to the growing literature demonstrating the importance of communication-based interventions in deescalating conflict (e.g., Bar-On & Kassem, 2004; Hameiri, Porat, Bar-Tal, & Halperin, 2014), however importantly demonstrate that changing something as small as the medium of communication or accent of a speaker can significantly shift attitudes in the face of possible peacebuilding initiatives. This sentiment is perhaps best summarized by the late Nelson Mandela "If you talk to a man in a language he understands, that goes to his head. If you talk to him in his language, that goes to his heart." He followed through with this idea when he learned Afrikaans during his imprisonment on Robben Island and then used it to negotiate with the Apartheid representatives. Perhaps addressing them in their native tongue helped him reach their hearts and negotiate a better future.

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APPENDIX

Table A1

*Items used in Study 1*

<b>Section</b>	<b>English Text</b>	<b>Hebrew Text</b>
Proposal Evaluation	To what extent is this proposal pro-Israeli?	באיזו מידה ההצעה היא פרו ישראלית?
	To what extent is this proposal pro-Palestinian?	באיזו מידה ההצעה היא פרו-פלסטינית?
	To what extent is this proposal fair?	באיזו מידה ההצעה הוגנת?
	To what extent do you agree with this proposal?	באיזו מידה את/ה מסכימ/ה עם הצעה זו?
Source Evaluation	To what extent do the [Israelis   Palestinians] that presented the proposal seem to you:	באיזו מידה מציגי ההצעה [הישראלים   הפלסטינים] נראים לך:
	Reliable	אמינים
	Honest	ישרים וכנים
	Trustworthy	כאלו שאפשר לסמוך עליהם
	Warm	חמים
	Threatening	מאיימים
Considerate	מתחשבים	

*Note.* All items were measured on a scale from 1 (*not at all* | בכלל לא) to 9 (*to a very high extent* | במידה רבה מאוד).

Table A2

*Additional Items used in Study 2*

<b>Section</b>	<b>English Text</b>	<b>Hebrew Text</b>
Proposal Evaluation	To what extent is this proposal fair to Israelis?	באיזו מידה ההצעה לדעתך הוגנת כלפי ישראלים?
	To what extent is this proposal fair to Palestinians?	באיזו מידה ההצעה לדעתך הוגנת כלפי פלסטינים?
Source Evaluation	To what extent do the Palestinians that presented the proposal seem to you:	באיזו מידה מציגי ההצעה הפלסטינים נראים לך:
	Acting only out of their own Palestinian interests	פועלים רק מתוך האינטרסים שלהם כפלסטינים
	Acting out of shared Palestinian and Israeli interests	פועלים מתוך אינטרסים משותפים פלסטינים וישראלים

*Note.* All items were measured on a scale from 1 (*not at all* | בכלל לא) to 9 (*to a very high extent* | במידה רבה מאוד).

Table A3

*Additional Items used in Study 3*

<b>Section</b>	<b>English Text</b>	<b>Hebrew Text</b>
Evoked Feelings	To what extent does the Palestinian [proposal   narrative] evoke in you each of the following feelings:	באיזו מידה הנרטיב הפלסטיני מעורר בך את התחושות הבאות:
		פחד
	Fear	אהדה
	Sympathy	גועל
	Disgust	אמפטיה
	Empathy	שנאה
	Hatred	כעס
	Anger	הבנה
	Understanding	הזדהות
Source Evaluation	To what extent do the Palestinians that presented the proposal seem to you:	באיזו מידה מציגי ההצעה הפלסטינים נראים לך:
	Aggressive	אגרסיביים
	Cooperative	נוטים לשיתוף פעולה
	Manipulative	מניפולטיביים
	Fair	הוגנים

*Note.* All items were measured on a scale from 1 (*not at all* | לא בכלל) to 9 (*to a very high extent* | במידה רבה מאוד).

Table A4

*Items minus Prototypicality Measure used in Study 4*

<b>Section</b>	<b>English (for reference only)</b>	<b>Hebrew Text</b>
Proposal Evaluation	To what extent is this proposal pro-Israeli?	עד כמה ההצעה פרו-ישראלית?
	To what extent is this proposal pro-Palestinian?	באיזו מידה ההצעה פרו-פלסטינית?
	To what extent is the offer fair to Israelis?	עד כמה ההצעה הוגנת כלפי הישראלים?
	To what extent is the offer fair to Palestinians?	באיזו מידה ההצעה הוגנת כלפי הפלסטינים?
	To what extent do you agree with this proposal?	באיזו מידה אתם מסכימים עם ההצעה?
	To what extent do you think Israelis would agree with this proposal?	באיזו מידה לדעתכם ישראלים יסכימו עם ההצעה הזו?
	To what extent do you think this proposal is a good basis for negotiations?	באיזו מידה אתם רואים בהצעה בסיס טוב למשא ומתן?
Source Evaluation <i>Trait Items</i>	To what extent was the Palestinian representative you just heard:	באיזו מידה היה הנציג הפלסטיני ששמעתם זה עתה:
	Intelligent	אינטליגנטי
	Educated	משכיל
	Trustworthy	אפשר לסמוך עליו
	Successful	מוצלח
	Credible	אמין
	Reliable	מהימן

	Honest	ידידותי
	Friendly	נעים
	Warm	כן
	Sincere	טוב לב
	Good-natured	מניפולטיבי
	Manipulative	דואג לאינטרסים שלו
	Looking after his own interests	תובעני
	Demanding	
Source Evaluation <i>Prototypicality</i>	Which diagram do you think best represents how much the Palestinian representative is close to the Palestinian people?	איזו דיאגרמה לדעתכם מייצגת בצורה הטובה ביותר עד כמה הנציג הפלסטיני הוא חלק מהעם הפלסטיני?
Emotional Response	To what extent did the offer make you feel:	באיזו מידה ההצעה גרמה לכם להרגיש:
	Anger	כעס
	Hatred	שנאה
	Hostility	עוינות
	Fear	פחד
	Concern	דאגה
	Threatened	תחושת איום
	Disgust	גועל
	Contempt	בוז
	Sympathy	סימפטיה
	Empathy	אמפתיה
	Hope	תקווה
	Optimism	אופטימיות
Processing Disfluency	To what extent was the Palestinian representative you	באיזו מידה היה הנציג הפלסטיני ששמעתם זה עתה:

just heard:

קל להבנה

Easy to understand

ברור להבנה

Clear to understand

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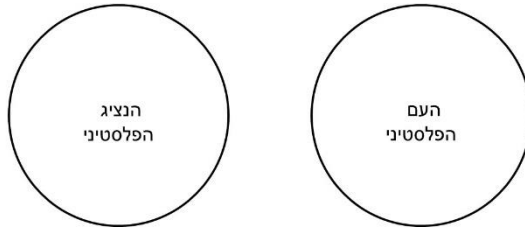
*Note.* All items were measured on a scale from 1 (*not at all* | בכלל לא) to 7 (*to a very high extent* | במידה רבה מאוד).

Table A5

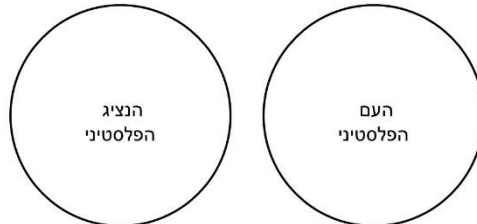
*Prototypicality Measure used in Study 4*

Source Evaluation <i>Prototypicality</i>	Which diagram do you think best represents how much the Palestinian representative is close to the Palestinian people?	איזו דיאגרמה לדעתכם מייצגת בצורה הטובה ביותר עד כמה הנציג הפלסטיני הוא חלק מהעם הפלסטיני?
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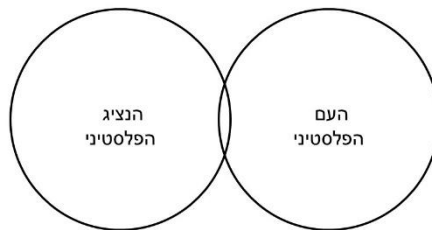
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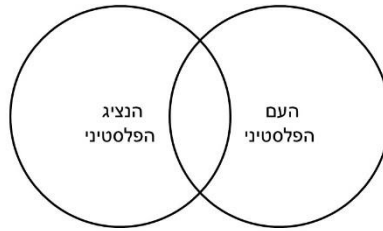
2



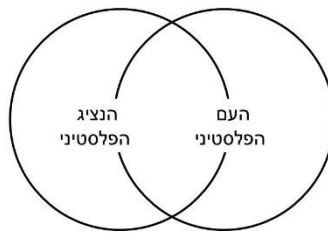
3



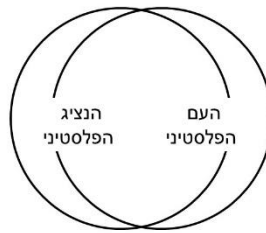
4



5



6



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*Note.* Values inside the diagram circles represent Palestinian representative | הנציג הפלסטיני in the lefthand circle and Palestinian people | העם הפלסטיני in the righthand circle.



Table A6

*Descriptive Statistics and Tests Comparing Mild versus Native-like and Heavy Accents (Study 4)*

Type of Evaluation	Sub-Measure	Descriptive Statistics (Means & SDs)	F-test	Native-like vs. Mild	Mild vs. Heavy
Source Evaluation	Status	Native-like: 4.35(1.40) Mild: 4.10(1.39) Heavy: 3.82(1.30)	$F(2, 445) = 6.07$ , $p < 0.01$ , $\eta_p^2 = 0.03$	$t = 1.97$ , $p = 0.12$ , $d = 0.15$	$t = 1.38$ , $p = 0.36$ , $d = 0.17$
	Solidarity	Native-like: 3.45(1.53) Mild: 3.32(1.44) Heavy: 3.13(1.49)	$F(2, 445) = 2.07$ , $p = 0.13$ , $\eta_p^2 = 0.01$		
	Warmth	Native-like: 3.94(1.32) Mild: 3.76(1.43) Heavy: 3.54(1.41)	$F(2, 445) = 3.52$ , $p = 0.03$ , $\eta_p^2 = 0.01$	$t = 1.10$ , $p = 0.52$ , $d = 0.10$	$t = 1.05$ , $p = 0.55$ , $d = 0.13$
	Manipulative	Native-like: 3.96(1.94) Mild: 3.69(1.74) Heavy: 4.24(1.80)	$F(2, 445) = 3.83$ , $p = 0.02$ , $\eta_p^2 = 0.01$	$t < 1$	$t = 2.19$ , $p = 0.07$ , $d = 0.25$
	Self-Interested	Native-like: 5.37(1.55) Mild: 5.43(1.46) Heavy: 5.68(1.38)	$F(2, 445) = 1.95$ , $p = 0.14$ , $\eta_p^2 = 0.01$		
	Demanding	Native-like: 3.79(1.83) Mild: 3.50(1.68) Heavy: 3.95(1.72)	$F(2, 445) = 2.57$ , $p = 0.08$ , $\eta_p^2 = 0.01$		
Source Prototypicality		Native-like: 3.79(1.73) Mild: 4.40(1.56) Heavy: 4.45(1.63)	$F(2, 445) = 7.51$ , $p < 0.001$ , $\eta_p^2 = 0.03$	$t = 3.13$ , $p < 0.01$ , $d = 0.31$	$t < 1$
Processing Disfluency		Native-like: 5.68(1.33) Mild: 5.03(1.63) Heavy: 5.25(1.61)	$F(2, 445) = 6.83$ , $p = 0.001$ , $\eta_p^2 = 0.03$	$t = 3.67$ , $p < 0.001$ , $d = 0.35$	$t = 1.37$ , $p = 0.36$ , $d = 0.11$
Emotional Response	Positive	Native-like: 3.19(1.60) Mild: 3.17(1.66) Heavy: 2.85(1.55)	$F(2, 445) = 2.53$ , $p = 0.08$ , $\eta_p^2 = 0.01$		
	Negative	Native-like: 2.70(1.49) Mild: 2.69(1.45) Heavy: 2.96(1.43)	$F(2, 445) = 2.05$ , $p = 0.13$ , $\eta_p^2 = 0.01$		

Note. Post-hoc Tukey contrasts only provided when the  $F$ -test is significant ( $p < 0.05$ )