Relative Political and Value Proximity in Mediated Public Diplomacy: The Effect of State-Level Homophily on International Frame Building

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Abstract
This paper applies the homophily thesis to public diplomacy and offers an empirical examination of a country’s success in its mediated public diplomacy efforts. It analyzes international frame building, the process of creating or changing media frames in the international communications arena, by applying it to the case of Israeli mediated public diplomacy efforts during the war in Gaza in the winter of 2008-2009. The paper claims that one way to use the homophily thesis in empirical analyses of international frame building campaigns in conflicts is to measure the political and value proximity of a country promoting frames to other countries. Yet proximity should be measured relatively rather than in absolute terms. Therefore, one should look not only at the dyadic proximity between two actors (i.e., Country A that attempts to promote its frames to Country C), but rather at the relative proximity between Countries A and C considering the proximity between the rival Country B and the target Country C. The study proposes a model and a method to facilitate empirical analysis of this claim. Using sophisticated computerized content analysis, our analyses demonstrated that relative proximity was related to successful international frame building in the hypothesized direction: the closer the relative proximity between Israel and a foreign country, the greater the acceptance of Israel’s views.
Relative Political and Value Proximity in Mediated Public Diplomacy: The Effect of State-Level Homophily on International Frame Building

In recent years, there has been a growing interest in the role of public diplomacy in international conflicts. Writings on public diplomacy, defined as “efforts by the government of one nation to influence public or elite opinion in a second nation for the purpose of turning the foreign policy of the target nation to advantage” (Manheim, 1994, p. 4; see also Gilboa, 2000; Leonard, 2002), emphasize the central role of public opinion vis à vis foreign states in world politics. The importance of the media in this context is discussed by Entman (2008, p. 89) who defines mediated public diplomacy as organized attempts by a government to exert as much control as possible over the way state policy is portrayed in foreign media. It is argued that frame building contests play a central role in mediated public diplomacy (Sheafer and Gabay, 2009; Sheafer and Shenhav, 2009). Frame building means the “processes that influence the creation or changes of frames applied by journalists” (Scheufele, 1999, p. 115; see also de Vreese, 2002; and Zhou and Moy, 2007).

Understanding mediated public diplomacy is central due to abundant evidence that media framing can have a significant effect on the public’s support for war and peace (e.g., Althaus, Bramlett and Gimpel, forthcoming; Iyengar and Simon, 1993; Maoz, 2006, forthcoming; Sheafer and Dvir-Gvirsman, 2010; Wolfsfeld, 1997, 2004). Yet despite increasing interest in mediated public diplomacy, empirical examination and theoretical understanding of the field are still limited. This paper proposes both a model and a method to facilitate empirical analysis of mediated public diplomacy. The model is based on the homophily thesis, which states that “contact between similar people occurs at a higher rate than among dissimilar people” (McPherson, Smith-Lovin and Cook, 2001, p. 416). This thesis, noted by classical philosophers, such as Aristotle in his Rhetoric and Plato in Phaedrus (McPherson, Smith-Lovin and Cook, 2001), has received attention in various studies on social networks at
the state level. Similar concepts such as affinity and cultural proximity are used by scholars in a wide array of fields. These studies show that cultural proximity between countries influences international aid (Ball, 2010) and international business (Zhou, 2010), reduces the probability of war (Maoz et al., 2006), and affects perceptions of foreign states (Sigelman, 1982) and foreign people (Geva and Hanson, 1999).

The homophily thesis may also explain relations in the field of public diplomacy (Entman, 2008; Nye, 2004; Sheafer and Gabay, 2009). Our model emphasizes two major parameters of the homophily thesis at the state-level: value proximity and political proximity between states. The first involves political values closeness and affinity, while the second represents shared political and policy interests. According to the model, these are two major sources of successful mediated public diplomacy attempts, and in particular, successful international frame building.

We shall apply the homophily thesis to the case of Israeli mediated public diplomacy efforts during the war in Gaza in the winter of 2008-2009 (“Operation Cast Lead”). The empirical analysis is based on two sets of data. Daily internal messages from the Israeli Prime Minister’s Office and the Ministry of Foreign Affairs comprise the first set of data. They provide a rare opportunity to trace the production of Israeli strategic messages during the war in Gaza on a daily basis. Our unique access to the strategic framing of the Israeli “war room” provides an unusual opportunity to study a country’s frame building success during a war. The second set of data includes computerized and manual content analyses of international media coverage during the war.

**Mediated Public Diplomacy in the Wake of New Warfare**

Political actors realize the need to create a favorable image among foreign publics (Nye, 2004) and understand that sympathetic media coverage is a prerequisite for achieving this goal (Sheafer and Shenhav, 2009). Consequently, the battle to gain access to the media and to affect media framing have become central in the international arena, and particularly in
modern warfare and political conflicts (Baum and Potter, 2008; Van Ham, 2003; Wolfsfeld, 1997). Sheafer and Gabay (2009) call this a contest of international agenda and frame building. The focus of this study is the state’s efforts to control or affect international frame building. This process can be seen as strategic in that “participants maneuver strategically to achieve their political and communicative objectives” (Pan and Kosicki, 2003, 40; see also Entman, 2004, 47; and Gamson and Modigliani, 1987).

Previous studies suggest that the success or failure of contenders to influence the creation of frames applied by foreign journalists is influenced by the cultural and political proximity between the sender and the receiver of the frames (Entman, 2008; Sheafer and Gabay, 2009). Scholars argue that when it comes to frames, some have a natural advantage because their ideas and language resonate with the culture and values of the target audience (Benford and Snow, 2000; Entman, 2004, 2008; Frensley and Michaud, 2006; Gamson, 1992; Miller and Riechert, 2003; Pan and Kosicki, 2003; Wolfsfeld, 1997). The logic is simple: individuals, journalists, and organizations understand, accept, tolerate, prefer, and are open to and interested in frames promoted by actors whose values and worldview are close to their own. A frame promoted by a foreign country that shares the home country’s political values is more likely to be accepted by both journalists and the general public than a frame promoted by a foreign country that possesses a very different set of values. This is a consequence of a basic psychological process, according to which, national culture is responsible for priming certain values (Oyserman, Coon, & Kemmelmeier, 2002; Oyserman & Lee, 2008), and these societal values promote different standards for evaluating information (Smith, Bond & Kagitcibasi, 2006). Therefore, if country A is promoting a frame that is heavily primed by value X, journalists in countries in which the value X is also primed by the national culture will find it easier to accept the frame promoted by country A than journalists in countries in which value X is not primed by the national culture.
Until now political and values proximities have not been conceptually and operationally defined in mediated public diplomacy studies, nor have follow-up attempts to empirically study the effects of these proximities on international frame building been carried out. These are the main goals of the current study.

**A Homophily Model for Empirical Analysis of Mediated Public Diplomacy**

Recalling the homophily thesis that similarity breeds attraction, we study the effects of homophily on international frame building, focusing on value proximity and political proximity.

**The Various Dimensions of Values**

Values exist at individual and collective levels. At the individual level, our focus is on democratic values held by individuals. The World Values Survey project, which analyzes the development of post-materialist values, is probably the best known cross-national study of values held by individuals. Based on comprehensive international surveys, Inglehart and Welzel (2005, 2010) deduced a factor of values people hold, constituted by survival values on the one hand, and self-expression values on the other. From a theoretical point of view, this “reflects polarization between emphasis on order, economic security, and conformity, and emphasis on self-expression, participation (and) trust” (Inglehart and Welzel, 2010, p. 553). Since Inglehart and Welzel (2005, 2010) argue that this factor taps democratic values best, we use it to operationalize democratic values held by the public in different countries.

Conceptions of political culture at the collective level consist of more than the aggregation of individual values. For example, Feldman and Zaller (1992, p. 271) define political culture as “a set of values . . . that animate the principal political institutions of a society.” In fact, Almond and Verba (1963; see also Almond and Powell, 1992; Inglehart, 1990; Lijphart, 1980; and Reisinger, 1995) argued decades ago that political culture and political institutions are closely related. These arguments highlight the need to add an institutional indicator as part of any attempt to take major value parameters into account. In
this study, we use what we see as the most important value at the state’s institutional
structure: the level of democracy of a country’s political regime, that shape the rights and
freedom enjoyed by individuals. Our approach is supported by institutional perspective,
according to which formal institutions embody values that make up their “normative pillar”
(Scott, 2001, p. 54).

Some scholars have classified countries into clusters based on their predominant religious
cultures (Huntington, 1996; Norris & Inglehart, 2011). Huntington’s (1996) typology of
civilizations is the best known classification of religious cultures. It is also the most
criticized, particularly because of the author’s highly debatable “clash of civilizations” thesis.
Yet our focus is not on the clash between the Muslim religious culture and the West, but
rather on possible value differences among religious cultures in general. Multi-country
comparative surveys have revealed several such differences. For example, Inglehart and
Welzel (2010, p. 553) maintain that “the publics of Protestant Europe show relatively similar
values… as do the publics of Catholic Europe, the Confucian-influenced societies, the
Orthodox societies and so forth” (see also Norris & Inglehart, 2011). In line with the above
conclusions, we use a country’s religious culture to represent this supra-state level of values.

We apply a composite variable that represents common values among individuals,
political institutions, and collective identities (civilizations or religions) which constitute
major facets of state values.

**Value Proximity**

Value proximity is the extent to which political values in two units of analysis (countries
in our case) are similar. Thus, value proximity can be operationalized as the accumulation of
similarities or dissimilarities between any two countries on the various value dimensions that
we are studying.
Political Proximity

While value proximity represents shared values between states, political proximity represents shared political and policy interests. This lies at the core of the realist school in the field of international relations, according to which states form alliances on the basis of congruence of strategic interests (Maoz et al., 2006). The expectation is that the greater the shared interests between states – the greater the political proximity between them – the more successful a government will be in promoting its frame in another country’s media. To operationalize political proximity, we use policy-related actions taken by actors. The important factor here is the level of political congruency between the policy-related actions taken by any dyad of actors (states in our case).

The empirical analysis in this paper demonstrates that the value proximity and the political proximity of Israel to the other countries in this study are almost identical. From an empirical perspective, it is reasonable and necessary to combine them in a unified variable called political and value proximity. We elaborate on this procedure in the methodology section. It is important to note, however, that from theoretical and operational perspectives, these are two different indicators of proximity, and when proximities between different sets of countries are examined, these two proximities are very different (results not shown). Therefore, they are treated separately in the theoretical discussion presented here.

Relative Proximities

Contests over international frame building in mediated public diplomacy campaigns almost always involve at least two rival actors (say, Countries A and B) (Sheafer and Gabay, 2009; Sheafer and Shenhav, 2009). When covering such contests, journalists in non-involved countries are expected to be inadvertently influenced by the question, “Which of the competing actors is closer to me - which one of them shares my values to a greater extent?” As discussed above, when two competing countries are attempting to promote their frames to the media of a certain target country, the frame promoted by the country which is,
values-wise, closer to the target country is more likely to win the framing competition and to be accepted by the journalists of the target country (Entman, 2004, 2008; Sheafer and Gabay, 2009; Sheafer and Shenhav, 2009; Wolfsfeld, 1997).

Therefore, in mediated public diplomacy analyses, one should look not only at the dyadic proximity between two actors (i.e., Country A that attempts to promote its frames to Country C), but rather at the relative proximity between Countries A and C considering the proximity between the rival Country B and the target Country C. For example, if we want to examine the success of Israel at promoting its frames to the Australian and Malaysian media, it is crucial to take into consideration not only the proximity of Israel to Australia and Malaysia, but also the proximity of its rival, Palestine, to these countries. Consider, for example, a hypothetical situation in which the proximity of Israel and Australia is similar to the proximity between Israel and Malaysia. Based on this simple proximity Israel should have similar success in promoting its frames to the media in both courtiers. However, if Malaysia is much more proximate to Palestine, then the relative proximity of Israel to Australia is greater than the relative proximity of Israel to Malaysia and hence Israel would have greater success in promoting its frames to the Australian media than to the Malaysian media. In the empirical analyses below, the proximity of Israel to other countries is therefore measured while taking into account the proximity of Palestine to these countries.

**Framing Analysis**

Entman (2004) distinguishes four framing functions, (1) *problem definition*; (2) *identifying causes* (*attribution of responsibility*); (3) *moral judgment*, and (4) *endorsing remedies or improvements* (*treatment recommendation*). According to Entman (2004), “[a]ll four of these framing functions hold together in a kind of cultural logic, each helping to sustain the others with the connections among them cemented more by custom and convention than by the principles of syllogistic logic” (p. 6). Each framing function may include several specific
messages, while the combination of all four functions may be seen as the general or meta-frame, i.e., the overall strategic message that the promoting actor wants to transmit. We employ this approach in the analysis of international frame building (see also Sheafer and Gabay, 2009).

**Hypothesis**

Our hypothesis stems from the expected effects of homophily in terms of political and value proximity on international frame building. Therefore, our hypothesis is that the closer the relative political and value proximity between Country A and Country C, the more successful Country A will be in promoting its meta-frame (consisting of the four framing functions) in Country C’s media.

Please note that as discussed above, the term “relative proximity” refers to the proximity between Country A and a foreign country while considering the proximity between the rival Country B and that foreign country.

A country’s success in promoting its frames to the media of other countries is likely to be influenced by other variables as well. Arguably, the most important influence is the level of trade relations between foreign countries, which represents shared economic interests. Many studies have found trade relations to influence the newsworthiness of foreign countries (e.g., Wu, 2000) and they are expected to play a role in frame building in a way similar to political culture proximity and political proximity. The analyses below control for this alternative explanation.

Other variables may play a secondary role in international frame building but they are not controlled for in this study, mainly because the limited number of cases does not allow multivariate analysis or because of irrelevancy to the current case study. Among them are the extent of migration between two countries (Koopmans & Vliegenthart, 2011), ethnic similarity (Golan, 2007), past colonial relations (Nnaemaka & Richstad, 1980), geographic
proximity (Galtung & Ruge, 1965; Jones, Van Aelst & Vliegenthart, 2011), common
language (Wu, 2000), and the power and standing of the country that promotes frames
(Chang, 1998).

**Israeli Mediated Public Diplomacy during the War in Gaza**

Israel’s public diplomacy efforts during the Gaza war were selected as a case study for analysis
because of unique access to data offering a rare opportunity to trace the production of a state’s
strategic messages during a war on a daily basis and to analyze the impact of these messages on
international frame building.

On December 27, 2008, Israel launched a military operation against Hamas in the Gaza
Strip, with the stated aim “of stopping the bombardment of Israeli civilians by destroying
Hamas’ mortar and rocket launching apparatus and infrastructure” and “of reducing the ability
of Hamas and other terrorist organizations in Gaza to perpetrate future attacks against the
civilian population in Israel.”\(^1\) The operation, named “Operation Cast Lead,” started with a wave
of airstrikes launched by the Israeli Defense Forces (IDF) against targets in the Gaza Strip.
During these attacks, Hamas in turn intensified its rocket and mortar attacks against southern
Israel, reaching major cities such as Beersheba and Ashdod for the first time. The airstrikes were
followed by an operation on the ground, which ended on January 18, 2009, when Israel declared
a unilateral ceasefire, followed by Hamas announcing a one week ceasefire twelve hours later.
Israel completed its withdrawal from Gaza on January 21. According to various sources, the
conflict resulted in between 1,166 and 1,417 Palestinian and 13 Israeli fatalities.\(^2\)

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2. There is no agreement on the number of Palestinian fatalities:
   See: Israeli Ministry of Foreign Affairs, Operation Cast Lead - Humanitarian Aspects,
   and Figures, July 2, 2009.
During the war, the Israeli Prime Minister’s Office and the Ministry of Foreign Affairs issued English-language statements targeted at the international community on a daily basis. They distributed their materials as official guidelines for Israel’s public diplomacy efforts to all relevant units (Israeli embassies, government ministers, and spokespersons). Some repeated earlier frames, while new messages and frames were added as the war developed.

The challenge of explaining and justifying a military operation in Gaza was not an easy one. The asymmetry between the established State of Israel with its fully equipped military forces and Hamas guerilla fighters often cast Israel in the role of Goliath and the Palestinians as David. Furthermore, Israel’s disengagement from Gaza was not accepted by the international community as the end of the Israeli occupation of Gaza (Sheafer and Gabay, 2009).

The first and most detailed document produced by the Prime Minister’s Office and the Ministry of Foreign Affairs began by identifying three types of audiences: the international community, the Muslim world, and the domestic public. Then Israel’s main message was introduced: (1) “The reason: Ongoing and insufferable terrorist fire on a quarter of a million Israeli citizens”; (2) “The goal: To inflict a major blow on Hamas’ terror infrastructure and protect our citizens”; and (3) “The responsibility: The deterioration in the situation is the direct result of Hamas policy. It violated the calm, firing against and attacking Israeli citizens, and invests all its resources in arming itself and gathering power.”

The logic of these messages resonates with Entman’s (2004) four framing functions. The first message encompasses Entman’s (2004) first and second functions, namely, problem definition and identifying causes (attribution of responsibility); the second message refers to the fourth function, a solution to the defined problem (treatment recommendation) from Israel’s point of view, and the third also attributes responsibility. All the messages, in which Hamas is

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presented as a terrorist organization attacking civilians, imply a moral judgment, which is the third function of framing.

From that point on, the messages followed developments, and responded either by emphasizing certain earlier messages or by adding new ones.

**Methodology**

To be able to examine the degree to which Israel succeeded in promoting its frames in foreign media coverage, we have to assess what Israel wanted to communicate during the Cast Lead operation and how the operation was covered by non-Israeli media. Human content analysis was used to assess the frames within the internal messages of Israel’s special strategic “war room”. Automated content analysis was used to gauge the foreign media coverage of the war.

**Israeli Framing**

All English-language Israeli internal messages created by the special strategic force during the three week war were collected and analyzed (N=18). The authors and research assistants manually distilled the main messages developed by Israel and assigned them to the four framing functions described above (i.e., definition of the problem, attribution of responsibility, solutions to the problem, and moral evaluation). For example, the message that the continuing long-term missile attack by Hamas on Israel was the reason for the operation was categorized as a problem definition and as an attribution of responsibility. The main empirical goal was to locate the Israeli frames in foreign media news coverage of the war.

**Media Content Analysis**

For the analyses of media coverage of the war in Gaza, English language media, available for 26 countries via Lexis/Nexis, were used. Relevant news items were selected by searching Lexis/Nexis for items in which the word "Gaza" was mentioned in the period between

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3 Australia, Canada, China, Cyprus, Czech Republic, Egypt, France, Germany, India, Indonesia, Iran, Ireland, Italy, Japan, Jordan, Malaysia, New Zealand, Pakistan, Poland, Singapore, South Africa, South Korea, Thailand, Turkey, United Kingdom and United States.
December 27, 2008 and January 20, 2009. The list of countries includes all countries for which the above data was available on Lexis/Nexis.

English-language media in non-English speaking countries (such as Thailand and China) are more likely to be less representative of the national political values than newspapers in the local language. An English-language newspaper in Indonesia, for example, is likely to represent English-Western values more than other local newspapers. However, we would argue that finding a proximity effect of mediated public diplomacy is more difficult when studying English-language media than when studying media in local language which is expected to be more attentive to local political culture and values. In fact, if English-language media represent Western values in a similar manner, regardless the country in which they are located, one should expect to find no significant difference between countries in the level of acceptance of the Israeli frames. In that case the proximity hypothesis, which is based on homophily between countries, would be rejected.

Automated grammatical analysis using AmCAT (Van Atteveldt, 2008) was used for detecting problem definitions, attributions of responsibility, solutions to the problem, and moral evaluations of Hamas. Previous research (Ruigrok, van Atteveldt and Takens, 2010) has found that although co-occurrence analysis can be used to determine associations and certain frames, it has the drawback of not distinguishing between the different roles that actors can play in the news. This is unfortunate especially in conflict situations, as there is, for example, a vital difference between launching an attack, being the victim of an attack, or commenting on an attack. That is, it is essential knowing whether “Israel attacked Hamas” or “Hamas attacked Israel”. In our study, we overcame this limitation by using automated grammatical analysis of sentences combined with a set of rules to extract semantic roles from the grammatical relations.

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4 All possible English-language news media in all countries for which there are records in Lexis/Nexis were included in the analysis. These were mostly newspapers, but also newswires and television channels such as CNN.
The entire corpus of news items was examined using automated grammatical analysis, addressing only sentences that mentioned one of the relevant actors in this study (i.e., Israel, Hamas and Palestinians; see Table 1). The sentences in the corpus were parsed using the Stanford dependency parser (Klein and Manning, 2003), yielding dependency graphs, which show the grammatical relations between terms. For example, in the sentence “Hamas formally declares the truce over”, /Hamas/ has a subject relation with /declares/, while /truce/ has a direct object relation with the same verb. /Formally/ has a modifier relation, again with /declares/. See Van Atteveldt, Kleinnijenhuis & Ruigrok (2008) for an extensive explanation of the method used.

The next step in the analysis utilized two sets of rules to determine the semantic roles used in order to discover quoted or paraphrased /sources/ and their /quotes/, and rules to determine semantic subjects and objects of the various predicates. These “frame-roles” correspond to the roles extracted in this paper. In the above example, the application of the rules to determine the semantic roles results in the detection of a single relation, with Hamas as subject, declaring to be over as predicate, and the truce as object. These defined roles were combined to construct relations of the form (source: subject/predicate/object), or in other words: who did what to whom, according to whom? In each of these relations, the actors and themes—in this case acts of violence, victimhood, and terrorism—were identified using boolean and proximity search techniques. This approach

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5 Dependency graphs are similar to ‘syntax trees’ or ‘parse trees’ except for the fact that they generally contain abstract nodes such as ‘noun phrases’, while in dependency graphs all nodes correspond to a word from the sentence. Also, in certain sentences a word can play two roles, so that, for example, in the sentence “I asked him to go home”, ‘him’ is both the object of the asking and the subject of the (desired) going. Such sentences result in graphs rather than trees, as a single node has multiple parents.
identifies the semantic roles of actors and semantic relations between actors and these themes.

The automated content analysis was developed to analyze Entman’s (2004) four framing functions, definition of the problem, attribution of responsibility, solution to the problem, and moral evaluation.

Several rounds of pilot studies were done to optimize the automated grammatical content analysis. These brought about a theoretical and methodological clarity that led to the following decisions: First, it was evident that the first two framing functions, definition of a problem and attribution of responsibility, should be combined. When studying a conflict between two actors (Israel and Hamas in this case), it is almost impossible to separate the attribution of responsibility from the definition of the problem, as problem definitions in such conflicts are usually actor-driven. Therefore, when a problem is designated it is usually linked to the attribution of responsibility, articulated by phrases such as “actor x is doing y”. The following phrase taken from a newspaper article is an example: “We strongly condemn the repeated rocket and mortar attacks against Israel and hold Hamas responsible for breaking the ceasefire and for the renewal of violence there,’ she said in a statement.” The relative frequency of this framing function (and the other functions below) was calculated by dividing the number of sentences in which this framing function was found in the media of each country by the total number of sentences in these media.

Second, solutions usually entail certain actions (e.g., Israel’s stated solution to end Hamas attacks on Israel by attacking Hamas). However, not every reference to actions designates a solution (e.g., the Israeli army attacked targets in Gaza). We therefore suggest dividing this function into two sub-functions: means and goals. Means (what the actor is doing) includes all relevant actions of the actor—all actions that are related to the solution presented by that actor. Goals (what the expected outcomes are of the means taken, e.g., "Prime Minister Ehud
Olmert had defined two objectives—an end to Hamas fire and terror, and an end to the organization's military build-up)—include justifications/reasons for the actions of the actor that are related to the solution presented by that actor. The final frame function is calculated as the ratio goals/means, or, in other words, how much is the desired outcome from the perspective of the framing country mentioned out of all mentions of that actor’s actions. This way of calculating the frame function puts a hard test on Israel’s success, as any reference to an attack by Israel that is not accompanied by a stated goal results in lowering Israel’s success.

Third, in order to gauge moral evaluation, only very direct attribution of morality should be considered. In this study, the automated system was programmed to search for co-occurrences of the words “Hamas” and “terror” in the same sentence. For example, this framing function was identified in the following news item: "However, as long as Hamas engages Israel only with terrorism and rocket fire, prospects for peace will dim while people and families suffer".

Fourth, Israel’s meta-frame was calculated by combining the above three framing functions.

**Automated Content Analysis: Reliability Analysis**

The automated coding system is “trained” by using coding rules that are based on the coding categories (the Israeli framing functions distilled from the Israeli messages in this case) and on the actual text (the news media items about the war in Gaza in this case). The first version of the rules was developed based on an analysis of about 50 random sentences from the media coverage of the war. Meanwhile, a trained human coder coded 200 random sentences for the existence of the four framing functions (i.e., definition of the problem with attribution of responsibility; solution to the problem: means; solution to the problem: goals; and moral evaluation of Hamas). Next, AmCAT (the automated system) analyzed the first
100 sentences and the results were compared with those of the human coder. Inconsistencies were used to improve the rules for both the automated system and the human coder. This stage was relatively long, as the team worked specifically on each inconsistency in each sentence. At this point another trained human coder coded the next 100 sentences. Intercoder reliability (using Krippendorf’s alpha) between the two human coders was found to be very high (no lower than .88). The coders discussed the few differences in coding and resolved them to form ‘the gold standard’. Finally, this gold standard was compared with the automated coding using Krippendorf’s alpha. This resulted in the following reliability values: (1) problem definition and attribution of responsibility (Hamas is the problem as it attacks Israeli civilians) alpha = .79; (2) Israel’s solution to the problem (means: Israel should attack Hamas) alpha = .58; (3) Israel’s solution to the problem (goals: Israel’s goal is to stop Hamas from firing rockets at Israel) alpha = .76; and moral evaluation of Hamas (Hamas is a terrorist organization) alpha = .74.

In addition to the usual reliability analysis, Table 2 also presents precision and recall analysis. These metrics, common in Computational Linguistics (e.g., Manning, Raghavan & Schütze, 2008), differentiate between false negatives (i.e., errors of omission, missing frames) and false positives (errors of commission, erroneously finding frames). The precision is the percentage of frames found by the computer that were also present in the gold standard, while recall is the percentage of frames in the gold standard that were found by the computer. As can be seen in the table, all frames except morality have (substantially) higher precision than recall. This means that most of the errors made by the computer consisted of missing frames rather than of falsely identifying frames. When the automated system has identified a framing function, it usually coded it correctly. For the Israeli Solution (means) frame, which had the lowest alpha score (.58), the precision is quite high at 79%, while the recall is a lot lower at 65%.
Automated Grammatical Analysis: Limitations and Solutions

Even though the reliability figures show that computer coding can approximate human coders close enough, we know that human language in many cases is still too complex and subtle for automatic analysis. Whereas human coders err because of tiredness, misunderstanding of coding instruction, and differ because of subjective interpretation of the text, rule-based computer coding makes errors because of missing vocabulary, missing rules, and ambiguous or non-literal language use such as sarcasm.

Consider, for example, the issue of negation found in the following (made up) sentence: “The Israeli argument that Hamas has fired more than 6,000 rockets into southern Israel over the last three years, specifically targeting civilians, *is false.*” While human coders will not identify any Israeli frame here, AmCAT is likely to wrongly identify the framing function “Hamas is the problem”. Yet such sentences that deny an actor’s claims are extremely rare in media articles. In fact, in the sample of 200 sentences that were drawn for the reliability analysis, no such sentence was found. A more common form of negation can be found in the following sentence that was actually included in the analysis: “The Israeli military response upsets Mr. Valenti, who apparently *dismisses* the more than 6,000 rockets Hamas has fired into southern Israel over the last three years, specifically targeting civilians.” In this case, both human coders and AmCAT have coded the sentence as including the frame function “Hamas is the problem”, despite of a reservation regarding Israel’s claim. Also, explicit negation in the predicates is included in the analysis, in the form of specific negation such as “not” or “never”, and in the form of stopping (e.g. stopping the mortar attacks as an Israeli goal).

Ultimately, the question is whether a measurement instrument can produce valid measurements that will account for the existence of frames. This can only be ascertained by
comparing it to reliable manual coding of a set of texts that is representative of the population to be coded. The reliability figures presented above give us the confidence that the computer coding is sufficiently valid to be used for making substantive statements.

**Relative Value Proximity**

Our model applies a composite index of political values, based on relevant, publicly available data. We use this index to measure relative political values proximities between Israel and other nations and to use it as an explanatory variable for the level of success of Israeli mediated public diplomacy efforts. The measurement of each of the political values dimensions is as follows:

*Relative Proximity in the Aggregated Values of Individuals*

As part of the World Values Survey project, Inglehart and Welzel (2005, 2010) deduced a factor of values people hold, constituted of survival values on the one hand, and self-expression values on the other hand (see above). We applied the factor values produced by Inglehart and Welzel to each country and calculated the distance between Israel and each country by subtracting the score of Israel from each country’s own score (in absolute values). Multiplying these distance values by minus one created the proximity measure, of which the larger the value, the more similar a country is to Israel.

Yet it is essential to take the proximity of the rival actor, Palestine, into consideration too in order to measure the *relative* proximity of Israel to each country on the value dimension. In the case of Palestine, we encountered a lack of data since international databases such as the World Values Survey do not have relevant data regarding Palestine. To overcome this empirical limitation, this study used data about Jordan as a proxy. More than 50 percent of all Jordanian citizens are either Palestinian in origin or related to Palestinians (see, e.g., Nevo, 2003). Moreover, the Arab Barometer Survey for 2006 shows that Palestinians and Jordanians hold very similar democratic values, which is the main value tapped by the

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survival-self expression value dimension used in this study. In particular, 74 percent of Jordanians and 79 percent of Palestinians agree with the statement, “Democracy may have its problems but is better than any other form of government.” Therefore, relative individual value proximity to Israel is measured by subtracting the proximity of Jordan to each country on the survival-self expression value dimension from the proximity of Israel to each country.

Relative Level of Democracy Proximity

The political regime of a state represents its institutional political value at the national level. This variable is represented by the country’s level of democracy. Data is based on the Freedom House analysis of political rights and civil liberties. The proximity between states in this category is measured by the difference in absolute values between the democracy levels of any two states. The relative measure is calculated by subtracting the proximity of Palestine to each country from the proximity of Israel to each country on this dimension.

Religion/Civilization Similarity

This variable is based on Huntington’s (1996) typology of civilizations, which mainly rests on the dominant religion in a country. Israel does not strictly speaking belong to any of these civilizations because of its designation as a Jewish state, but it is considered part of Western civilization. All Western countries were coded as 1, and all other countries were coded 0. This coding serves as a relative measure of proximity, since unlike Israel, Palestine belongs to a non-Western civilization, according to Huntington’s typology.

Relative Political Proximity

This variable is operationalized as the voting similarity between states in the United Nations General Assembly. This indicator is a good representation of shared political and policy interests and therefore of political proximity, as it indicates the positions of states on a broad range of political issues (Kim and Russett 1996; Voeten 2000). The vote of each state

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7 http://www.arabbarometer.org/reports/countryreports/comparisonresults06.html
8 http://www.freedomhouse.org/.
on each General Assembly resolution during 2008 was coded (-1=No; 0=Abstain; 1=Yes).\textsuperscript{9} Next, we produced rank-order correlations (Spearman’s rho) between the votes of each of the states to the vote cast by Israel in each UNGA session.\textsuperscript{10} The relative measure is calculated by subtracting the correlations of Jordan with each country from the correlations of Israel with each country.\textsuperscript{11}

**Relative Political and Value Proximity**

As noted, although the conceptualizations and operationalizations of relative value proximity and relative political proximity are very different, the similarity between them is substantial, with a Pearson correlation $r = .87$ (N= 26). This finding demonstrates that relative value proximity and relative political proximity with regard to Israel are closely related. A confirmatory factor analysis with the three relative value proximities and the relative political proximity provides additional support for this conclusion. The factor analysis resulted in a single factor on which all variables were highly loaded (between .79 to .94). This single factor accounted for 79 percent of the variance. Therefore, we combined the values and political proximity variables into a single variable, *relative political and value proximity*. As noted, these proximity variables do not correlate highly for countries other than Israel.

\textsuperscript{9} Voting data was taken from the United Nations Biographic Information System (UNBISNET). [http://unbisnet.un.org:8080/ipac20/ipac.jsp?profile=votingandmenu=searchandsubmenu=power#focus](http://unbisnet.un.org:8080/ipac20/ipac.jsp?profile=votingandmenu=searchandsubmenu=power#focus)

\textsuperscript{10} See Gartzke (1998) for an additional study that uses Spearman’s rho as a measure of correlation between states’ UN voting records.

\textsuperscript{11} Neither the Palestinian Authority nor Hamas is a voting member in the UN. Yet, in line with our solution for the lack of data on the individual values, it is assumed here that the political interests of Jordan and those of other Arab countries represent those of the Palestinians quite well. For example, the correlation between the votes of Jordan and Egypt is almost perfect.
Trade Relations with Israel

Data for this variable is based on the Direction of Trade Statistics Yearbook of the International Monetary Fund.\(^{12}\) It represents the sum of import and export (in millions of dollars) between a country and Israel, divided by the total trade traffic of that country with all other countries in the study. In other words, it represents the relative economic importance of Israel to that country compared with the economic importance of other countries.\(^{13}\) The correlation of this variable with Relative Political and Value Proximity is rather low \((r=.27; \ p>.1; \ N=26)\).

Excluding Outliers

All analyses in Figure 1 below have two versions, one with all countries and another in which influential outliers were excluded. We have used ‘Cook’s D’ statistics (Cook 1977) to measure the influence of each single observation on the model when using linear regression. Observations with an absolute value of Cook’s D greater than 4/n (4/26=.15 in our case) are considered influential outliers (Cook and Weisberg 1982) and were excluded from the analyses.

Results

The analyses below evaluate the success of Israel’s attempts at international frame building during the war in Gaza. The evaluations are based on the various frame functions discussed above and are presented in Figure 1. Analyses are multiple regressions with relative political and value proximity to Israel and trade relations with Israel as the two independent variables. The separate and combined analyses of the different framing functions provide robustness tests. All the graphs in Figure 1 are partial regressions that present only the impact of relative

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\(^{12}\) We used the 2009 yearbook, looking at the 2008 import and export figures for all countries involved in the analysis.

\(^{13}\) This variable went through a linear logarithmic transformation (Log Base 10).
political and value proximity to Israel on the independent variables, when holding trade relations constant. Due to space limitations, we do not present statistics for trade relations.

[Figure 1 about here]

According to the hypothesis, the greater the relative political and value proximity to Israel, the more often the problem definitions and attribution of responsibility presented by Israel (Figure “Hamas is the problem”) will be mentioned. The positive direction of the regression line supports the hypothesis ($R^2$ of the partial impact of political and value proximity is .41). Going back to the previous example of Australia and Malaysia, for example, the relative proximity of Australia to Israel is greater than the proximity of Malaysia (i.e., Australia’s value on the x axis is larger) and Australia’s level of acceptance of Israel’s definition of the problem is greater than that of Malaysia (i.e., Australia’s value on the y axis is larger).

Regarding the Israeli solutions (Figure “Israeli solutions”), the positive direction of the regression line demonstrates that the greater the relative proximity to Israel, the greater the frequency with which Israeli solutions (calculated as the relative level of acceptance of Israeli goals divided by the relative level of acceptance of Israeli means) were mentioned in the country’s news reports ($R^2$ of the partial impact of political and value proximity is .55). This supports the hypothesis.

One of Israel’s main claims is that Hamas is a terrorist organization and hence immoral. As hypothesized, the greater the political and value proximity to Israel, the greater the level of acceptance of Israel’s moral evaluation of Hamas as a terrorist organization (Figure “Hamas is terrorist”). Yet as noted by the low level of explanation ($R^2$ of the partial impact of political and value proximity is .17), the support provided by this analysis to the hypothesis is limited.
Finally, the Israeli meta-frame is an index variable that combines all framing functions (Figure “Israeli meta-frame”). In support of the hypothesis, the positive direction of the regression line demonstrates that the greater the relative proximity to Israel, the greater the frequency with which the Israeli meta-frame was adopted by the country’s news reports. The level of explained variance is rather high ($R^2$ of the partial impact of political and value proximity is .59).

Iran and Cyprus are found to be outliers in all (Iran) or almost all (Cyprus) analyses, as their media accepted Israeli framing to a lesser extent than expected according to the homophily hypothesis. While the case of Cyprus is less clear, that of Iran is easier to explain: The values held by the people of Iran and the people of Israel are not very different (and therefore places Iran as not very distant from Israel), but the political interests of both countries are very different, hence placing Iran as moderately distant from Israel on our main independent variable. But since, at the leadership level, both countries are harsh enemies and since the Iranian leadership controls the media in their country, this leads to media performance which is unexpected according to the proximity hypothesis.

**Discussion**

Mediated public diplomacy is rapidly gaining interest among scholars of political communication, professional practitioners, and policy makers. This is particularly the case during military conflicts, in which mediated public diplomacy is considered to play a central role in influencing the dynamics of the conflict itself (see, e.g., Sheafer and Shenhav, 2010). However, scholarly understanding of this field, both from theoretical and empirical perspectives, still has ground to cover. This paper contributes to the field in several ways. First, it applies the homophily thesis as a basic theoretical framework for understanding the mechanism according to which mediated public diplomacy works. Second, it theoretically and empirically develops the concept of proximity between countries, relying on value
proximities at various levels and on political-policy proximity. The importance and innovative nature of relative proximity is further discussed below. Third, it offers an empirical examination of a country’s success in its mediated public diplomacy efforts during a war. And fourth, from a methodological point of view, it integrates a new technique of computerized content analysis that allows a framing analysis and one that is particularly fit for large-scale content analyses that are required for studying mediated public diplomacy. Reliability analysis with human coders provides support for the accuracy of the automated analysis.

The study is based on unique data, the daily messages produced during the war by a special strategic task force appointed by the Israeli government. Such a detailed set of daily messages best represent a country’s mediated public diplomacy strategy during a war. To the best of our knowledge, a systematic analysis of mediated public diplomacy based on similar sources of information has never been undertaken.

The paper explores the effects of political and value proximity in the context of a violent conflict between two rivals. Building upon the claim that political and value proximity should play a role in studies on mediated public diplomacy, our theoretical and empirical efforts show that at least in the context of conflicts, proximity analysis should be contextualized so as to include all rivaling parties. Specifically, proximity in the context of international frame building contests should be measured relatively, since news media seem to take sides based on which of the competing actors is more proximate to their country’s values and interests. Our hypothesis regarding the effect of relative proximity was supported in the case of Israel’s mediated public diplomacy efforts during the war in Gaza for all the dimensions of framing that were analyzed.

Our findings demonstrate that international frame building efforts are sensitive to a world map held by journalists in foreign countries, which are the target of mediated public
diplomacy. Distances on this map are not measured in metric units, but in units of values, identities, and interests. Moreover, distances on this map are relative, and hence change whenever new actors join the competition. It is a dynamic world map, and this makes mediated public diplomacy contests complex, particularly as more countries are directly or indirectly involved in the conflict.

This study is not free of limitations. The empirical measurement of homophily based on proximity and not on simple dichotomous similarity still needs further development to better account for delicate differences among Western democracies. Since the standard deviation of this variable (Political and Value Proximity to Israel) among Western democracies is half of that among other countries, its effect appears to be stronger for the latter, as can be seen in Figure 1. The number of countries involved (26, not including Israel and Palestine) is limited due to the limited availability of English-language media. In some of the countries the number of news items is low (see Table 1) and that may pose a threat to the validity of the findings, as the effect of a non-representative item might be large. The reliance on English-language media in non-English speaking countries is a limitation in and of itself, since, as discussed above, they are likely to present more Western values than newspapers in the local language. Yet this only means that finding a proximity effect of mediated public diplomacy—and hence support for the hypothesis—is more difficult for the English-language newspaper than for a local newspaper. Additionally, although we gained unique access to non-public messages produced by the Israeli "war room", it is yet impossible to know for sure whether Israel made more promotion attempts in some countries than in others. This does not deny the importance of political and value proximity, but points at the complexities in mediated public diplomacy analysis.
References


Althaus, S., Bramlett, B., & Gimpel, J. (forthcoming). When war hits home: The geography of military losses and support for war in time and space. *Journal of Conflict Resolution*.


Miller, M. M., & Riecher, B. P. (2001). The spiral of opportunity and frame resonance: Mapping the issue cycle in news and public discourse. In S. D. Reese, O. H. Gandy Jr., and A. E. Grant (Eds.), *Framing Public Life: Perspectives on media and our*
understanding of the social world (pp. 107-122). Mahwah, NJ: Lawrence Erlbaum Associates.


Table 1

**Numbers of Articles and of Units of Analysis**

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of Articles</th>
<th>Number of Sentences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>1,273</td>
<td>11,324</td>
</tr>
<tr>
<td>Canada</td>
<td>1,703</td>
<td>15,748</td>
</tr>
<tr>
<td>China</td>
<td>2,085</td>
<td>215</td>
</tr>
<tr>
<td>Cyprus</td>
<td>31</td>
<td>409</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>95</td>
<td>1,561</td>
</tr>
<tr>
<td>Egypt</td>
<td>2,564</td>
<td>440</td>
</tr>
<tr>
<td>France</td>
<td>933</td>
<td>36</td>
</tr>
<tr>
<td>Germany</td>
<td>246</td>
<td>170</td>
</tr>
<tr>
<td>India</td>
<td>71</td>
<td>99</td>
</tr>
<tr>
<td>Indonesia</td>
<td>9</td>
<td>1,009</td>
</tr>
<tr>
<td>Iran</td>
<td>654</td>
<td>1,408</td>
</tr>
<tr>
<td>Ireland</td>
<td>35</td>
<td>1,430</td>
</tr>
<tr>
<td>Italy</td>
<td>23</td>
<td>97</td>
</tr>
<tr>
<td>Japan</td>
<td>26</td>
<td>166</td>
</tr>
<tr>
<td>Jordan</td>
<td>259</td>
<td>2,833</td>
</tr>
<tr>
<td>Malaysia</td>
<td>156</td>
<td>337</td>
</tr>
<tr>
<td>New Zealand</td>
<td>282</td>
<td>119</td>
</tr>
<tr>
<td>Pakistan</td>
<td>36</td>
<td>607</td>
</tr>
<tr>
<td>Poland</td>
<td>350</td>
<td>2,946</td>
</tr>
<tr>
<td>Singapore</td>
<td>31</td>
<td>15</td>
</tr>
<tr>
<td>South Africa</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>South Korea</td>
<td>2,946</td>
<td>97</td>
</tr>
<tr>
<td>Thailand</td>
<td>6,092</td>
<td>181</td>
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<tr>
<td>Turkey</td>
<td>21,217</td>
<td>1,009</td>
</tr>
<tr>
<td>UK</td>
<td>54,321</td>
<td>1,430</td>
</tr>
<tr>
<td>USA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Reliability Analyses of the Automated Content Analysis

<table>
<thead>
<tr>
<th>Frame</th>
<th>Precision</th>
<th>Recall</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamas is the Problem</td>
<td>.94</td>
<td>.74</td>
<td>.79</td>
</tr>
<tr>
<td>Israel Solutions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Means</td>
<td>.79</td>
<td>.65</td>
<td>.58</td>
</tr>
<tr>
<td>Goals</td>
<td>.88</td>
<td>.70</td>
<td>.76</td>
</tr>
<tr>
<td>Hamas as Terrorist</td>
<td>.75</td>
<td>.75</td>
<td>.76</td>
</tr>
</tbody>
</table>

Note: Precision refers to the percentage of frames identified by the automated content analysis that were also found by the human coders. Recall refers to the percentage of frames identified by the human coders, which were also found using automated content analysis. Reliability analysis uses Krippendorf’s alpha statistics. For example, for the “Hamas is the problem” frame, 94 percents of frames found by the computer were correct according to the gold standard. Out of all frames in the gold standard, the computer found 74 percents. This results in a Krippendorf´s alpha of 0.79.
All Countries (N=26)  Outliers Removed

* $p \leq .1$; ** $p \leq .05$; *** $p \leq .01$

Figure 1. Partial Regression Plots of Frame Building

Notes: Figures are partial regressions that represent the impact of Relative Political and Value Proximity to Israel on the relative number of references to the various frames, when holding trade relations constant. Regression summary statistics are presented within each graph, including the slope (b), level of significance, and R square. Outlier countries were excluded from the analyses at the right side using Cook’s D statistics.