



# Lay theories of peace and their influence on policy preference during violent conflict

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**We often talk about peace as if the concept is self-explanatory. Yet people can have various theories about what peace “is.” In this study, we examine the lay theories of peace of citizens embroiled in a prolonged ethnonational conflict. We show that lay theories of peace 1) depend on whether one belongs to the high-power or low-power party and 2) explain citizens’ fundamental approaches to conflict resolution. Specifically, we explore the link between power asymmetry, lay theories of peace, and preference for conflict resolution strategies within large-scale samples of Palestinian residents of the West Bank and the Gaza Strip and Jewish residents of Israel. Results reveal that members of the high-power group (in this case Jewish-Israelis) are more likely to associate peace with harmonious relationships (termed “positive peace”) than with the attainment of justice (termed “structural peace”), while members of the low-power group (in this case Palestinians) exhibit an opposite pattern. Yet both groups firmly and equally interpret peace as the termination of war and bloodshed (termed “negative peace”). Importantly, across societies, associating peace with negative peace more than with positive or structural peace predicts citizens’ desire for a solution that entails the partition of land (the Two-State Solution) whereas associating peace with structural or positive peace more than with negative peace predicts citizens’ desire to solve the conflict by sharing the land (the One-State Solution). This study demonstrates the theoretical and policy-relevant utility of studying how those most affected by war understand the concept of peace.**

termed “negative peace,” as it refers to the negation of overt violence (1, 6). Second, peace can be understood as positive social relationships characterized by friendship, solidarity, and harmony (9, 10). This interpretation is referred to as “positive peace” (11). The third interpretation of peace pertains to a sociopolitical order where equality and justice prevail. This type of peace is termed “structural peace” as it seeks to overturn social systems that perpetuate structural discrimination (1, 12, 13).<sup>\*</sup> So far, scholarly work on peace types has focused on how researchers and educators theorize the concept of peace (1, 4–7, 15). However, little is known about laypeople’s theories of peace. Apart from some exceptions (e.g., 9, 16), lay theories of peace have been left unexplored. Even more surprisingly, little evidence exists about how citizens living in conflict zones understand the concept of peace (but see refs. 11 and 17).

We use “lay theories” to describe the naive knowledge structures that people form and use in everyday life to understand concepts, events, and objects pertinent to their social reality (e.g., 18–22). Although lay theories lack the rigor of scientific theories, people rely on them to understand, interpret, and predict their social world (21, 23). Our current work explores “lay theories of peace,” that is, how people define and understand what peace “is.” In this sense, lay theories of peace are beliefs (what peace is) and not values (what peace should be). According to our proposed framework, lay theories of peace are

lay theories | peace | Israel | Palestine | asymmetrical conflict

*“Into our garden, under the shade of the olive tree, come many guests to enjoy the summer glee. Each one speaks a different tongue, and each has his own way to greet us with peace.”*

“In Our Garden” by Naomi Shemer

**W**e often talk about peace as if the concept is self-evident. People implicitly assume that, stripped from all practicalities and worldly considerations, the abstract notion of peace is intuitive and obvious (1, 2). This is not to say that people are unaware that parties locked in international conflicts have genuine and often profound disagreements about how the conflict should be solved (3). These disagreements are overt and widely recognized. Yet it is presumed that, once differences are settled and accords are signed, the antagonistic relations will transform into “peaceful” ones. When the difficult task of negotiation proves futile, parties accuse each other of not wanting “peace” enough. Could it be that parties to a conflict truly want peace but of essentially different types?

A frequently used typology of peace was offered in the theoretical work of Johan Galtung (1, 4, 5) and the theories sparked by Galtung’s approach (e.g., 6–8). According to this line of research, peace can have three meanings, or interpretations, which are not necessarily mutually exclusive. First, peace can be interpreted as the absence of bloodshed and war. This interpretation is

## Significance

**Most people embroiled in violent intergroup conflict have sincere desires for peace. Yet, we show that, even in its abstract form, the concept of peace encompasses different interpretations, each influenced by the perceiver’s experiences of conflict, and each shaping the way in which the perceiver thinks about conflict resolution. Using original data collected in Israel, the West Bank, and the Gaza Strip, we provide insights about how lay theories of peace are associated with the power structure of the conflict and how they predict citizens’ preferences for solving their long-standing dispute by either dividing resources or sharing them.**

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<sup>\*</sup>Some scholars combine structural and positive peace into one category they call positive peace (e.g., ref. 14). However, Biton and Salomon (11) demonstrated the utility of differentiating between positive and structural peace, particularly in the study of asymmetrical conflicts, where intergroup cooperation can be present within an inequalitarian system.

based on the relative strengths of the three interpretations of peace mentioned above: peace is the “end of war” (negative peace), peace is “harmonious relationships” (positive peace), and peace is “justice” (structural peace) (1, 5, 6, 8). We are interested in the relative emphasis citizens mired in conflict put on ending violence versus harmony versus justice when they interpret the word “peace.” Note that the interpretations do not necessarily compete and could indeed overlap and coexist in the perceiver’s mind. What counts as one’s lay theory of peace is the balance between the three, namely, which interpretations dominate, and which are more peripheral.

At first glance, it may seem that the merit of studying lay theories of peace is unclear. Can lay theories of the abstract notion of peace teach us anything about intergroup conflict and real-world politics? We argue that the answer is yes. During conflicts, citizens’ lay theories of peace can explain the fundamental variations in their preferences for different, sometimes opposite, policies. For example, the more people understand peace as negative peace (i.e., the end of war), the more they will seek a peace accord that, in their eyes, will be most effective in stopping violence. Dividing rival groups by borders is arguably one way in which negative peace could be achieved. On the other hand, division might be perceived as an impediment to positive peace because harmony and friendship may be difficult to attain when populations are segregated. Thus, the more people understand peace in positive peace terms, the more they will aspire for a solution based on sharing, not dividing, the land. Finally, those whose dominant interpretation of peace concerns structural factors might tend to support a solution that, in their opinion, will achieve equality and justice and not necessarily intergroup harmony or the immediate cessation of violence (24).

The unspoken differences in the theories people have about peace may create grave misunderstandings during conflict and consequently inhibit the ability to reach an agreement (25, 26). For example, during bilateral negotiations, both parties might sincerely talk about the painful compromises that everybody needs to make to achieve peace. However, one party could be implicitly referring to compromises aimed at advancing cooperation, whereas the other could be referring to compromises aimed at correcting injustice. Misunderstanding what people talk about when they talk about peace can also lead to the collapse of intergroup dialogue workshops at the grassroots level, especially in asymmetrical conflicts. Although participants from both disadvantaged and advantaged groups may have deep aspirations for peace, those from the disadvantaged group might be thinking about a completely different kind of peace than participants from the advantaged group.

We utilize the asymmetrical conflict between Israelis and Palestinians to advance two research goals. First, we test if citizens’ lay theories of peace reflect the power differences within a conflict. Existing research provides some indication that members of the advantaged group (high-power-group members) would tend to interpret peace in positive rather than structural terms due to their motivation to advance harmonious intergroup relations but to do so without forgoing their privileged status (27, 28). Members of the disadvantaged group (low-power-group members) are likely to display an opposite trend such that they would tend to associate peace more with the aspirations for justice and equality than with friendship and harmonious relationships. We also explore whether the interpretation of peace as negative peace (i.e., the end of war and bloodshed) is prevalent and similar among high-power-group and low-power-group members. Due to the strong need for security shared by high- and low-power groups (29), members of both groups are postulated to strongly and similarly associate peace with negative peace (see also refs. 30 and 31).

Our second goal is to examine whether lay theories of peace predict citizens’ preference for solving their conflict by either

dividing or sharing the disputed land. In the context of the Israeli–Palestinian conflict, these two types of resolution strategies correspond with the two solutions that have been mentioned the most: the Two-State Solution (dividing the land) and the One-State Solution (sharing the land) (e.g., 3, 32–34). We believe that the scholarly and public discourses on the two solutions fail to identify a decisive factor that may influence endorsement of or opposition to each solution, namely, citizens’ theories about what peace “is.”

### Lay Theories of Peace and the Israeli–Palestinian Conflict

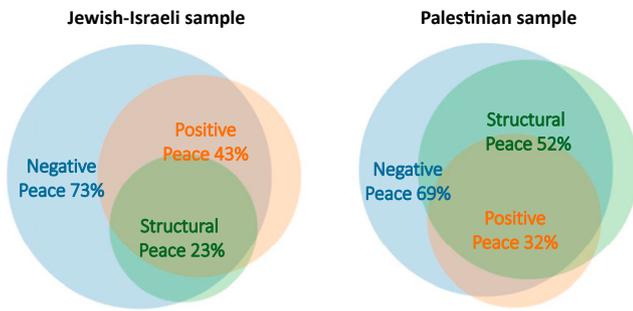
The conflict between the Palestinian and Jewish national movements has had a devastating impact on local, regional, and international stability for roughly a century (35, 36). At its core lies the claim of each party to an exclusive and unbreakable connection to the land between the Jordan River and the Mediterranean Sea. Relevant to this study, the conflict is asymmetrical, with Israel having superior political, economic, and military power (37–39). The most-voiced solutions to the conflict have been the Two-State Solution (2SS) and the One-State Solution (1SS) (34, 40–42). Length limitations confine our ability to elaborate on the histories of the two solutions, their many possible configurations, or the extreme obstacles in implementing them. Speaking in broad terms, the 2SS involves the partition of the land based on the pre-1967 borders into two sovereign states, one for Jews and one for Palestinians. Dividing the land and creating an independent Palestinian state alongside Israel are intended to bring an end to both parties’ claims and terminate their long-standing violent dispute (3). The Oslo Accords, as well as all other comprehensive negotiation attempts, were based on the idea of partition.

Settling all claims and terminating the violence is also the goal of the 1SS. Yet, the central idea of the 1SS is the establishment of one democratic binational entity in the entire area between the “River and the Sea” (43). The most common model of the 1SS pertains to an egalitarian state jointly governed by Jews and Palestinians enjoying equal rights in their shared homeland (44), though some may use the term to refer to a nondemocratic polity.<sup>†</sup> There are many open questions regarding the configuration of each solution. Would the One-State be truly egalitarian? How will security be maintained in the Two-State framework? And what will be the future of Jerusalem? Although each solution has many potential configurations, the critical difference between the 1SS and the 2SS is whether the solution requires the division or unification of land and people (34, 41). Public polls conducted in the last decade demonstrate that, in both societies, the 2SS has more than double the support than the 1SS (45–47). Indeed, throughout the history of the conflict, international endorsement and public support leaned toward the idea of partition, not unification.

We argue that public support for the 2SS hinges on the widespread interpretation of peace as negative peace with the speculated belief that division of land decreases friction and therefore increases the chances of a viable peace. Public support for the 1SS, we claim, hinges on the less common interpretations of peace in structural and positive terms. Underlying the support for the 1SS is the speculation that only a binational state based on cooperation and fair distribution of power and resources will result in sustainable peace.<sup>‡</sup>

<sup>†</sup>Nondemocratic versions of a One State are feared by proponents of civil and human rights and by Palestinians who worry that establishing a One State will mean the de facto continuation of their oppression.

<sup>‡</sup>Of course, dividing the land does not guarantee negative peace. Potentially, Israel and the newly established Palestine could be mired in decades of destructive war. In a similar vein, sharing the land is not a sure recipe for positive or structural peace. The shared state might end up being a place of cruel injustice and extreme alienation.



**Fig. 1.** Percentage of Jewish-Israelis and Palestinians who strongly or very strongly associated peace with negative peace (NP), positive peace (PP), and structural peace (SP) (percentage from 500, the number of participants in each national sample). Following is the percentage of participants who strongly or very strongly associated peace with two or all peace types: in the Israeli sample: NP and PP, 37%; NP and SP, 22%; PP and SP, 19%; NP and PP and SP, 27%; in the Palestinian sample: NP and PP, 30%; NP and SP, 46%; PP and SP, 26%; NP and PP and SP, 26%.

Our overall model postulates that associating peace with structural peace will be more prevalent among low-power vs. high-power group members, whereas associating peace with positive peace will be more prevalent among high-power compared to low-power group members. Yet, due to the omnipresence of violence and hostility, both groups are likely to exhibit high and similar tendencies to associate peace with the end of war and violence (negative peace) (3, 29, 31). Lay theories of peace, that is, the particular mixture of the three interpretations of peace, are thus expected to have a dominant negative peace component among both Palestinians and Jewish-Israelis. Structural and positive interpretations are postulated to be less frequent and more peripheral than negative interpretations and dependent on group membership. Among Jewish-Israelis, positive peace is hypothesized to be the second most common interpretation and structural peace the least common interpretation. Among Palestinians, structural peace is expected to be the second most common interpretation and positive peace the least common.

We further hypothesize that, across societies, the stronger the association of peace with positive peace or structural peace compared to negative peace, the stronger the wish to share (ISS) rather than divide (2SS) the land.<sup>5</sup> We test these propositions using original data that we collected simultaneously among representative samples of 500 Palestinians living in the West Bank and the Gaza Strip and 500 Jewish-Israelis residing in Israel.

## Results

Fig. 1 presents the percentage of participants within each sample who strongly or very strongly associated the word peace with each of the three types of peace. As can be seen, more than two-thirds of Jewish-Israelis (73%) and Palestinians (69%) associated peace with negative peace. Positive and structural interpretations of peace are also notable as well as the difference between the two societies concerning the weight of each interpretation. Within each society, the overlaps demonstrate that the interpretations are not mutually exclusive. Indeed, correlations between the three interpretations are positive and moderate (negative and positive:  $r = 0.40$ ,  $P < 0.001$ ;

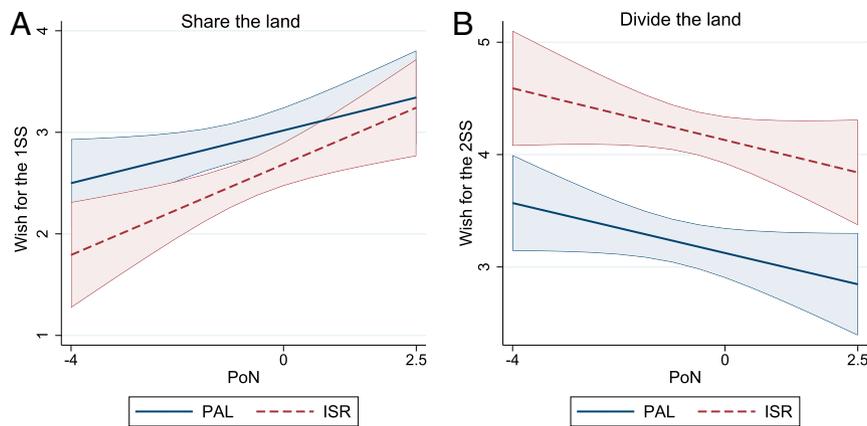
negative and structural:  $r = 0.42$ ,  $P < 0.001$ ; positive and structural:  $r = 0.53$ ,  $P < 0.001$ ), indicating that the interpretations do not compete but coexist. Comparing means between the samples, it appears that Palestinians and Jewish-Israelis highly and equally associate peace with negative peace ( $M_{PAL} = 4.04$ ,  $SD = 1.13$ ,  $M_{ISR} = 4.1$ ,  $SD = 1.02$ ; on a scale from 1 to 5,  $t = -0.9$ ,  $P = 0.37$ ,  $d = -0.06$ ). However, in line with our hypotheses, differences between the groups are evident when it comes to associating peace with positive and structural factors. Relative to Jewish-Israelis, Palestinians were less prone to associate peace with positive peace (partnership, harmony) ( $M_{PAL} = 3.14$ ,  $SD = 1.14$ ,  $M_{ISR} = 3.43$ ,  $SD = 1.06$ ,  $t = -4.2$ ,  $P < 0.001$ ,  $d = -0.27$ ) and more prone to associate peace with structural peace (justice, equality) ( $M_{PAL} = 3.57$ ,  $SD = 1.19$ ,  $M_{ISR} = 2.86$ ,  $SD = 1.1$ ,  $t = 9.9$ ,  $P < 0.001$ ,  $d = 0.63$ ).

To operationalize lay theories of peace (i.e., the relative weights of the three interpretations), we subtracted, for each participant, the varying degrees of strength of each interpretation from each of the other two. For example, to determine the relative strength of positive over negative interpretations (PoN), we subtracted one's inclination to associate peace with negative peace from one's inclination to associate peace with positive peace. The mean score was below zero ( $M = -0.78$ ,  $SD = 1.2$ ,  $t = -20$ ,  $P < 0.001$ ), indicating that, averaged across samples, our participants tended to understand peace more as the end of war than as harmonious relations between people. In a similar manner, we calculated the relative strength of structural over negative interpretations (SoN). Here, too, the score was below zero ( $M = -0.855$ ,  $SD = 1.23$ ,  $t = -22$ ,  $P < 0.001$ ), showing that theories of peace among our respondents have more to do with the negation of war than with justice and equality. Finally, we calculated the relative strength of structural over positive interpretations (SoP). The mean was just below zero ( $M = -0.07$ ,  $SD = 1.1$ ,  $t = -2$ ,  $P = 0.04$ ), revealing a slight preference, averaged across all participants, to interpret peace in positive rather than structural terms.

To test our hypotheses about the link between lay theories of peace and membership in a high- or low-power group, we estimated three regression models: one predicting PoN scores, one predicting SoN scores, and one predicting SoP scores. In all models, respondents' nationality was our main predictor while controlling for collected sociopolitical and demographic measures (political ideology, religious observance, age, gender, and levels of education) as well as the method of surveying (see *SI Appendix* for details). As hypothesized, group membership predicted the SoP score such that the Jewish-Israelis' score was much lower than the Palestinians' ( $b = -1.01$ , [95% CI:  $-1.19$ ,  $-0.84$ ],  $SE = 0.09$ ,  $t = -11.26$ ,  $P < 0.001$ ,  $\eta^2_p = 0.11$ ). In fact, Jewish-Israelis' predicted SoP score was below zero ( $M = -0.58$ ,  $SE = 0.05$ ), whereas Palestinians' score was above zero ( $M = 0.43$ ,  $SE = 0.05$ ). In other words, Palestinians use structural interpretations of peace much more than positive interpretations, whereas Jewish-Israelis exhibit a reverse pattern: positive interpretations dominate structural ones.

Moreover, it seems that group membership also predicted PoN and SoN scores such that compared to Palestinians, Jewish-Israelis had higher PoN scores ( $M_{ISR} = -0.66$ ,  $SE = 0.06$ ,  $M_{PAL} = -0.9$ ,  $SE = 0.06$ ,  $b = 0.24$ , [95% CI,  $0.03$ ,  $0.45$ ],  $SE = 0.11$ ,  $t = 2.25$ ,  $P = 0.025$ ,  $\eta^2_p = 0.005$ ) and lower SoN scores ( $M_{ISR} = -1.24$ ,  $SE = 0.06$ ,  $M_{PAL} = -0.47$ ,  $SE = 0.06$ ,  $b = -0.77$ , [95% CI,  $-0.97$ ,  $-0.57$ ],  $SE = 0.1$ ,  $t = -7.44$ ,  $P < 0.001$ ,  $\eta^2_p = 0.053$ ). This means that the difference between the groups as to whether peace is tantamount to "harmony" or to "justice" is also observable when compared to the more consensual interpretation of peace as "the end of war" (see full results of all models in *SI Appendix, Table S2*). Note that PoN and SoN scores are below zero in both societies. This implies that both Jewish-Israelis and Palestinians think of peace, first and foremost, as the end of war and bloodshed, and only then consider the other two

<sup>5</sup>Jewish-Israeli and Palestinian support for the 2SS declined from 64% in 2010 to an all-time low of 43% in 2018 (45, 46). One reason for the drop is that local and global processes made the 2SS less feasible (47). It could be the case that Jewish-Israelis and Palestinians decreased their support for the 2SS because they think the solution is unfeasible, not because they do not wish for it anymore (48). Indeed, the perceived impracticability of implementing a policy may impact the support for it (49). To override the confounding influence of feasibility, we focused on citizens' wish for each solution rather than their support for them.



**Fig. 2.** The wish for each solution as a function of the inclination to interpret peace in positive rather than negative terms. Scores above zero on the X axis indicate an inclination to interpret peace in positive rather than negative terms. In both societies, the wish for the 1SS increases (A) and the wish for the 2SS decreases (B), the greater the gap between respondents' tendency to interpret peace as positive rather than negative peace.

interpretations. By order of prevalence, lay theories of peace among members of the low-power group include 1) negative, 2) structural, and 3) positive interpretations. Among the high-power group, the order is 1) negative, 2) positive, and 3) structural interpretations. Taken together, these results fully support our hypotheses regarding the similarities and differences in the lay theories of peace held by high-power- and low-power-group members enmeshed in conflict. We now turn to explore the implications of lay theories of peace for conflict-resolution policies.

### Lay Theories of Peace and the Support for Concrete Solutions

Our model postulates that the more one's lay theory of peace is rooted in positive or structural interpretations rather than negative interpretations, the higher the wish for sharing resources rather than dividing them. Put into the context of the conflict in Israel–Palestine, the higher the PoN and SoN scores, the higher the support for the 1SS, and the lower the support for the 2SS.

To test whether interpreting peace in positive more than negative terms predicts the wish for each conflict-resolution strategy, we estimated two multivariate regression models, one predicting the wish for the 1SS and one the wish for the 2SS. In both models, we used participants' PoN score as the key predicting variable while controlling for sociopolitical and demographic measures as well as the surveying method. To identify patterns that may be unique to each national group, we also entered the interaction term between respondents' PoN score and their nationality.

Results show that associating peace with positive peace more than with negative peace predicts higher wishes for the 1SS ( $b = 0.13$ , [95% CI, 0.006, 0.25],  $SE = 0.06$ ,  $t = 2.06$ ,  $P = 0.04$ ,  $\eta^2_p = 0.013$ ) and lower wishes for the 2SS ( $b = -0.11$ , [95% CI,  $-0.23$ , 0.01],  $SE = 0.06$ ,  $t = -1.79$ ,  $P = 0.074$ ,  $\eta^2_p = 0.006$ ), although here the coefficient is marginally significant. Overall, the stronger the interpretation of peace as positive peace rather than negative peace, the higher the wish for the 1SS and the lower the wish for the 2SS (Fig. 2). The lack of interaction with nationality in both models suggests that these trends were similar across societies (see *SI Appendix, Table S3* for full results). These findings fully support our hypothesis about how interpreting peace as harmonious relations more than as simply the absence of war predicts citizens' desires for a solution that entails sharing resources rather than dividing them.

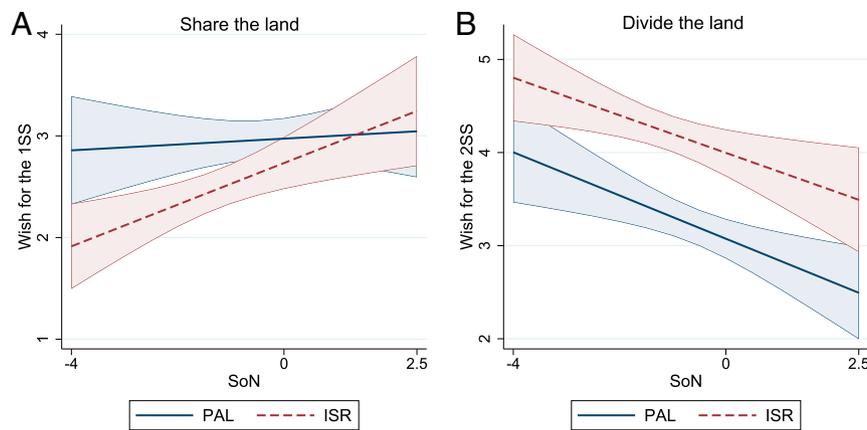
We used similar models to test whether interpreting peace in structural rather than negative terms predicts the wish to solve the conflict by either sharing or dividing the land. Here, the main

predictor was participants' SoN score. Results reveal that, in both societies, the wish for the 2SS drops the more people interpret peace as structural reform rather than as the end of war ( $b = -0.15$ , [95% CI,  $-0.29$ ,  $-0.016$ ],  $SE = 0.07$ ,  $t = -2.19$ ,  $P = 0.03$ ,  $\eta^2_p = 0.007$ ) (Fig. 3B). This finding is in full support of our hypothesis. Interestingly, there was no main effect for associating peace with structural over negative peace on the wish for the 1SS ( $b = 0.03$ , [95% CI,  $-0.11$ , 0.17],  $SE = 0.07$ ,  $t = 0.04$ ,  $P = 0.68$ ), but there was a marginally significant interaction with nationality ( $b = 0.17$ , [95% CI,  $-0.01$ , 0.36],  $SE = 0.07$ ,  $t = 1.82$ ,  $P = 0.07$ ) (Fig. 3A). Decomposing the interaction, it seems that preference for associating peace with structural rather than negative factors predicted the wish for the 1SS among Jewish-Israelis ( $b = 0.2$ , [95% CI, 0.07, 0.32],  $SE = 0.06$ ,  $t = 3.12$ ,  $P = 0.002$ ,  $\eta^2_p = 0.02$ ) but not among Palestinians ( $b = 0.03$ , [95% CI,  $-0.12$ , 0.19],  $SE = 0.08$ ,  $t = 0.4$ ,  $P = 0.7$ ), lending partial support for our hypothesis. Overall, associating peace with justice and equality more than with the absence of war predicts citizens' reluctance to resolve their conflict by dividing the land. It also predicts higher desires to solve the dispute through sharing, but only among citizens from the high-power group (see *SI Appendix, Table S4* for full regression results).<sup>†</sup>

### Discussion

The study provides empirical evidence for our claim that when people embroiled in an asymmetrical conflict talk about advancing peace, they may be talking about different things, not only in pragmatic terms but also in essence. Members of the advantaged group are more inclined than members of the disadvantaged group to understand peace in positive rather than structural terms. For the advantaged, peace is akin to friendship and harmony and much less to justice and equality. This tendency points to high-power-group members' motivation to advance peace by promoting collaboration with the disadvantaged group, while failing to recognize that any advancement toward peace requires the correction of discriminatory structures. Low-power-group members, on the other hand, understand peace as structural change rather than collaboration and partnership. For the disadvantaged, peace is

<sup>†</sup>Although not part of our hypothesis testing, we also explored the association between SoP scores and policy preference. As stated, both structural and positive interpretations are likely to be positively related to the wish for the 1SS and negatively related to the wish for the 2SS. Our exploratory analysis revealed that the tendency to interpret peace as structural rather than positive peace was not associated with the wish for the 1SS or the 2SS. That is, positive and structural interpretations had similar weights in predicting each of our policy outcomes. These trends held across samples and in each national sample (full results provided in *SI Appendix, Table S5*).



**Fig. 3.** The wish for each solution as a function of the inclination to interpret peace in structural rather than negative terms. Scores above zero on the X axis indicate an inclination to interpret peace in structural rather than negative terms. Among Jewish-Israelis, the wish for the 1SS increases (A) and the wish for the 2SS decreases (B), the larger the gap between the tendency to interpret peace as structural rather than negative peace. Among Palestinians, the tendency to interpret peace as structural rather than negative peace is not correlated to the wish for the 1SS (A) but is negatively correlated with the wish for the 2SS (B).

more synonymous with equality and justice than with harmony and partnership. It is not that low-power-group members do not associate peace with positive peace. Thirty-two percent of Palestinians in our sample did. Yet, the accumulated experiences of marginalization might make it more difficult for disadvantaged group members to define peace in positive peace terms.

The different theories people have about peace can lead to severe misunderstandings and hamper resolution attempts. For example, our findings may explain the deep disappointment of citizens involved in an asymmetrical conflict who wish to promote peace by joining dialogue workshops (27, 50, 51). Although participants from both sides may be highly motivated to promote intergroup peace, members of the disadvantaged group are often irritated when participants from the high-power group do not see the connection between peace and rectifying injustice. High-power-group members are also frustrated because their desire to establish friendly relationships with members of the disadvantaged group is met with disapproval. During negotiations, blindness (whether unintentional or deliberate) to how the word peace is used by the other party can be a catalyst for the suspension of peace talks (3, 24). Officials from the high-power party may take it for granted that economic cooperation is a synonym for sustainable peace and become annoyed when delegates from the low-power party frown at the idea of cooperation. At the same time, representatives from the low-power party might assume that the interdependence between egalitarian structures and viable peace is self-evident, only to find out that those from the high-power party promptly dismiss the link between justice and peace (25).

We also demonstrate how citizens' theories about peace predict the preference for overarching policy strategies. The more peace is understood in structural or positive rather than negative peace terms, the higher are citizens' desires to solve their conflict through sharing rather than dividing resources. The fact that in both societies structural and positive interpretations were less common than negative interpretations might explain the relatively low support for the One-State Solution throughout the history of the conflict.<sup>#</sup> It is worthwhile to note that, contrary to our hypothesis, associating peace with structural factors predicted Jewish-Israelis' but not Palestinians' desire for the 1SS. This result might be explained by a growing concern among

Palestinians that the idea of the 1SS has been diverging from the vision of an egalitarian "state for all its citizens" to a system favoring Jews over Palestinians (34). That said, we show that negative peace is the most prevalent interpretation of peace (see ref. 17), equally popular among high-power- and low-power-group members. Here, when the two groups talk about peace, they talk about the same thing—the end of war and violence. This is a good starting point for all those looking for common ground in Palestine–Israel. Indeed, it seems that Jewish-Israelis' and Palestinians' shared preference for the Two-State over the One-State solution is grounded, to some extent, in their common tendency to understand peace in negative rather than structural or positive peace terms.<sup>||</sup>

Notwithstanding the prevalence of negative peace interpretations, our findings also correspond with the theoretical argument that negative peace is an incomplete, even deficient, type of peace (5, 13). In our samples, a substantial portion of participants also associated peace with positive and structural factors, suggesting that comprehensive peace needs to address structural disparities and include harmonious relations between peoples, not only end direct violence. It seems to be the case that the traditional One-State and Two-State paradigms have failed to provide an arrangement that corresponds with the proper balance between the three types of peace, as envisioned by participants in our representative samples. A new model called "Two-States, One-Homeland" proposed by Palestinian and Israeli journalists, scholars, and political activists from diverse ideological backgrounds might offer a configuration that more accurately balances between negative, positive, and structural factors. The "Two-State, One Homeland" model functions as a loose federation. Palestine and Israel will have complete sovereignty over land and people in their jurisdiction while movement through the borders will be free, as well as the choice to reside anywhere in the region. Relevant to our study, the model addresses citizens' preference for dividing the land stemming from the dominant negative peace interpretation but does not dismiss their call for unification driven by the (limited but substantial) positive and structural interpretations of peace (see *SI Appendix* for more information).

<sup>||</sup>An interesting avenue for research is to explore how public opinion on conflict-related policies is related to citizens' interpretations of the concept of "justice." It stands to reason that lay theories of justice would depend on the political power of the group and have some influence on citizens' preference for solutions.

<sup>#</sup>In congruence with public polls, the preference of the 2SS over the 1SS was also evident in our data (*SI Appendix, Table S6*).

This research advances our understanding of conflicts in several ways. First, it provides much-needed empirical evidence on the way people mired in decades of conflict theorize the concept of peace. Ironically, scholarly work has been focusing on what experts think peace is, while failing to explore how those paying the highest price from conflicts interpret the concept. Second, we introduce power asymmetry as a crucial factor necessary to analyze lay theories of peace and reveal the applied utility of these lay theories as predictors of citizens' opinions on practical issues, such as how they want to solve their conflict. Addressing the lack of a bottom-up approach to peace theories, our original data, collected in the West Bank, Gaza Strip, and Israel proper, sheds light on lay theories of peace of those who need peace the most.

## Materials and Methods

**Sample and Procedure.** The study was conducted simultaneously among representative samples of 500 Palestinians residing in the West Bank and the Gaza Strip and 500 Jews living in Israel. Data were collected between 1 and 3 August 2017 during three days of relative calm.\*\* The swift and simultaneous collection of data diminished the chances that conflict-related events will influence results and raised the ability to compare the two samples (52). In all, the samples represent the adult population of Jews living in Israel and Palestinians living in the Occupied Palestinian Territories (OPT) (53, 54). The Israeli sample ( $M_{age} = 44.$ ,  $SD = 15$ ) consisted of 52% males while the Palestinian sample ( $M = 36$ ,  $SD = 13$ ) consisted of 49.8% males. The margin of error for each national sample is  $\pm 4.38\%$  and, for the entire sample,  $\pm 3.01\%$  at the 95% CI. Informed consent was obtained from all participants. Institutional review board approval was granted by George Mason University (see *SI Appendix* for full sampling and surveying procedures and *SI Appendix*, Table S7, for a demographics report).

## Measures.

**Associations of peace.** Respondents rated the extent to which they associated the following word/terms with the general concept of peace: justice, partnership, no war, equality, no bloodshed, harmony (1: no association with peace; 5: very strong association with peace). The terms, adapted from ref. 11, were chosen to represent the three types of peace (justice and equality representing structural peace; no war and no bloodshed representing negative peace; and partnership and harmony representing positive peace). Importantly, there was no mention of the Palestinian-Israeli conflict, the three types of peace, or the concrete solutions. In addition, the order of the words/terms did not allude to any specific connection between them.

Factor analysis using Promax rotation demonstrated that the six associations load well onto three factors and three factors only. Corresponding with the three types of peace, "end of war" and "end of bloodshed" loaded

well on one factor (0.82, 0.74, respectively); "partnership" and "harmony" loaded well on another factor (0.76 and 0.65, respectively); and "equality" and "justice" loaded well on a third factor (0.73 and 0.51, respectively). No cross-loadings above 0.14 were observed.\*\* We therefore collapsed the items end of war and end of bloodshed into a single measure indicating participants' tendency to interpret peace as negative peace ( $\alpha = 0.8$ ); partnership and harmony were collapsed into a single variable indicating the extent to which respondents interpreted peace as positive peace ( $\alpha = 0.71$ ); and justice and equality were collapsed to represent the extent to which respondents interpreted peace as structural peace ( $\alpha = 0.69$ ). Factor loading and reliability were also tested in each national sample and were found to be robust (full report in *SI Appendix*, Tables S8 and S9).

**Wish for the One-State and Two-State solutions.** To gauge Jewish-Israelis' and Palestinians' overarching approaches to solving their conflict across the various configurations, we simplified the description of the two solutions. In this way, participants were compelled to make their judgments based on each solution's core idea rather than on its practical arrangements. Thus, participants were asked to rate, on a scale from 1 to 6, how much they wished for "an agreement respected by both sides that will result in a One State shared by Palestinians and Jews with equal rights" and how much they wished for "an agreement respected by both sides that will result in Two States, one for the Palestinians and one for the Jews" (1: I have no such wish; 6: I wish very much).

## Covariates.

**Demographics.** Demographic variables included nationality, gender, age, education level, and levels of religiosity.

**Political ideology.** We utilized the Adherence to the Ethos of Conflict scale (55) to measure dovish/hawkish ideologies of Jewish-Israelis and Palestinians. The scale is used to gauge core conflict-related attitudes (e.g., The exclusive right of the (Jews/Palestinians) over the Land of (Israel/Palestine) results from it being our historic homeland) and is comparable across the two societies (56). Participants were asked to rate the extent to which they agreed with six ethos of conflict principles (1: totally disagree, 5: totally agree). One item was dropped due to low reliability (scale items provided in *SI Appendix*). The final scale included five items ( $\alpha = 0.67$ ,  $0.77_{ISR}$ ,  $0.51_{PAL}$ ). Higher scores indicate more hawkish positions.

**Data Availability Statement.** The dataset and code are available in the Zenodo public repository under "lay theories of peace" (DOI: 10.5281/zenodo.3892307).

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\*\*The study was part of a larger study on Israelis' and Palestinians' hopes for the future. Full survey is provided in *SI Appendix*.

\*\*Three other words were mentioned (agreement, liberty, and life) but did not load well and so were excluded from analysis.

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