

Shoot a Stranger, Save a Neighbor: Civilian & Combatant Networks Under Fire

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Abstract

During episodes of identity-targeted violence, what leads people to aid and protect the persecuted? Prior research on rescue during the Holocaust and Rwandan genocide has pointed to the importance of social networks, but the mechanisms remain unexplored, and the overall frequency of these behaviors, unknown. After surveying survivors of the 1992-5 Bosnian conflict—the first nationwide survey on wartime rescue in a post-conflict state—I find that cross-group assistance was both widespread and strongly correlated with respondents having more cross-group ties. Yet surprisingly, the strength of those ties does not appear to have had much impact. Most people, it seems, were willing to help not only close friends but even friends-of-friends and acquaintances. Drawing on 160 new interviews with helpers and recipients, I theorize how networks activate cross-group social capital to channel aid to those in need. To address problems in recall bias and demand effects, I validate these findings with three novel data sources: a long-overlooked 1990 census table that disaggregates intermarriage rates by municipality, a newly-completed database covering over 96% of wartime fatalities, and over 130 oral histories collected by multiple local researchers during and after the war. Together, these sources provide compelling evidence for a model that explains how diverse networks lead people to not only save lives but perform everyday acts of kindness during riots, genocide, state repression, and civil war.

Keywords: Networks, Social Capital, Rescue, Genocide, Bosnia, Civil War

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1 Introduction

Sarajevo, 1992: Two Serb militiamen burst into a tall, drab apartment block, grenades in hand, looking for Muslims to kill. In a multiethnic building where a surname can be a death sentence, Dino’s parents have not had time to hide their flat’s nameplate. As the soldiers batter down the door, screaming “Open up, Turks!” the boy’s mother bursts into tears. Just then, an old neighbor living upstairs, a WWII veteran of Tito’s partisans, appears in the stairwell, wearing pajamas. As he steps into the hall, he embraces the soldiers in a great bear hug. “We are all Yugoslavs!” he cries, and in a waterfall of warmth and forgotten pre-war patriotism, ushers the militiamen out of the building (Dino, Muslim man, Sarajevo).¹ What led this man to risk his life to save his neighbors? First, a combination of personality traits, values, and life experience might have made him more willing to step in. Second, he had the capacity to step in—his religion, age, gender, and veteran status allowed him to confront these soldiers in a way others likely could not have. Third, his social connections—the very fact that he had Muslim neighbors—gave him the opportunity and perhaps a reason to intervene. In this study, I develop a theoretical framework to explain wartime cross-group assistance which incorporates all of these causes through the lens of cross-group social capital: the capacity to recruit other individuals’ abilities and resources across a conflict cleavage.

With a few exceptions (Gross 1994; Monroe 1996), political scientists have only recently begun to devote attention to cross-group assistance, building on earlier work by psychologists (e.g., Oliner and Oliner 1988; Staub 1993), sociologists (e.g., Tec 1986), and historians (e.g., Paulsson 2002). Though this new work is sometimes more methodologically sophisticated, its scope remains limited to acts of life-saving rescue in the Holocaust (e.g., Braun 2019; Finkel 2017), Rwanda (e.g., Brown 2014; Fox and Brehm 2018; Fujii 2011; Luft 2015b), and occasionally other genocides (e.g., Sémelin, Andrieu and Gensburger 2014). This study breaks new ground by considering a broader array of helping behaviors and a wider range of violent contexts. Regional and temporal variation in the 1992-5 Bosnian conflict allows me to compare how patterns of assistance vary under genocide, non-genocidal state repression, and conventional civil war. While previous scholarship has focused exclusively on lifesaving rescue, I define assistance as any cleavage-defying behavior which is dyadic with a specific helper and recipient and for which the helper incurs some amount of risk or cost without a net material gain. Examples include providing shelter, employment, provisions, documents, transport, warnings, protection of property, and intervention in an ongoing arrest or attack.

This paper sets out to address three questions about wartime cross-group assistance. First, how widespread was cross-group assistance during the violence in Bosnia? To date, no study has produced even a ballpark estimate of the frequency of rescue or other helping behaviors during a genocide or civil war. Based

¹All quotes with a first name and no citation are from interviews with the author in 2018-9. Names have been changed throughout to protect anonymity.

on a nationwide, door-to-door, probability survey, I show that roughly one in three Bosnians either gave or received wartime assistance from a member of another ethnic group. This estimate is supported both by the ease with which I encountered stories of such acts during my fieldwork and in the abundant testimony collected earlier by local researchers. Second, do more cross-group ties predict more assistance? Through multiple measures of prewar networks, my survey finds that individuals with more cross-group ties were both more likely to provide help and more likely to receive it. This trend appears at the community level as well, where I measure cross-group ties using census data on residential integration and intermarriage, and is further substantiated by parallel trends into related forms of cleavage-defying behaviors such as ethnic defection and community-wide efforts to resist violence. Third, are stronger cross-group ties more predictive of assistance than weak ones? Using both survey and interview data, I show that, surprisingly, the answer appears to be no, at least for helpers, though it may matter for recipients. The relationship between the number of ties and the likelihood of providing assistance does not change whether strong ties, weak ties, or both are being measured, and furthermore, acts of assistance themselves do not appear to come predominantly from strong ties. Indeed, interviewees frequently report getting assistance from people they barely knew or who were friends-of-friends. Yet help from completely unconnected strangers was rare. Having some sort of connection remained important, even if the strength of that connection was not. I speculate on the reasons for this, drawing on suggestions from interviewees that “neighborly norms” of reciprocity and mutual assistance may have pushed helpers to assist anyone they know in their community, regardless of closeness. In the process of addressing these three questions, I demonstrate the value of a mixed-methods approach when credible causal instruments are lacking, generalize existing results on rescue during genocide to cross-group assistance under all forms of mass violence and repression, and arrive at a more nuanced understanding of how networks influence individual behavior during conflict.

The rest of the paper proceeds as follows: In Section 2, I demonstrate how a mixed-methods investigation of cross-group help during a civil war fills an important gap in the conflict literature. In Section 3, I articulate my theory for how capacity, willingness, and networks together create cross-group social capital that can be activated in wartime for cross-group assistance. Section 4 presents the data sources and variables, Section 5 presents the main results of the paper, Section 6 presents supportive evidence and findings on related phenomena, and Section 7 concludes.

2 Literature Review: Networks, Conflict, and Rescue

Much of the micro-level scholarship on civil conflict in recent years points to the importance of social networks in motivating individual behavior in conflict settings ([Gohdes 2015](#); [Larson 2016](#); [Lewis 2013](#); [Marks 2019](#);

Metternich et al. 2013; Perliger and Pedahzur 2011; Petersen 2001; Shesterinina 2016; Staniland 2012*b*; Weidmann 2015; Wood 2008; Zech and Gabbay 2016). When it comes to group-targeted violence, their findings are largely pessimistic. McDoom (2014) finds Rwandans with more friends were more likely to kill during the Rwandan genocide. Balcells (2017), Bergholz (2016), and Kalyvas (2006) find that interpersonal ties carry not only friendship but also rivalry and grievance, leading to betrayal and revenge under the cover of war. Scacco (2008) shows that network ties can motivate people to participate in riots, and Pedahzur and Perliger (2011) show how networks can facilitate terrorist violence. At the community level, Larson and Lewis (2016) find that higher numbers of ties between two ethnic groups in one village can actually reduce cooperation and disrupt intergroup peace. Thus, there is ample reason to suppose that networks harm rather than help persecutees during episodes of identity-targeted violence.

On the other hand, much of the literature on the Holocaust and Rwandan genocide suggests that networks may play a more positive role, particularly when they incorporate cross-group ties. In a decade-long study of nearly 1000 confirmed rescuers, Oliner and Oliner (1988) found that rescuers were twice as likely as non-rescuers to have Jewish friends before the war, pointing to the importance of cross-group ties. In a statistical analysis of the fates of 7665 Jews randomly selected from a Nazi registry in Amsterdam, Tammes (2007) concludes, “Survival correlates most strongly with having close social ties with non-Jews.” Finkel (2017) finds that Jews living in cities that had been more integrated before WWII were more likely to have Christian contacts they could turn to for help, while the rest relied on other Jews with connections, resources, or positions of authority within the ghetto. Braun (2019) finds that Dutch Jews living near a minority denomination church were more likely to survive, presumably due to ties between Jews and their Christian-minority neighbors and dense networks of ties within these minority communities that facilitated collective action. In a qualitative study of rescuers and perpetrators in Rwanda, Fujii (2011) finds that cross-group ties could motivate perpetrators to save certain individuals, even as they persecuted others. Thus, networks have the power to promote both atrocities and assistance. The present study focuses on the latter, expanding the literature on cross-group assistance beyond the contexts of the Holocaust and Rwandan genocide and beyond life-saving rescue to other forms of assistance.

What is the relationship between networks and the other factors thought to promote cross-group assistance? The genocide rescuer literature identifies a myriad of causal factors leading to cross-group assistance, which I group into four categories. First, there are the *network* factors described above (see also Fox and Brehm 2018; Luft 2015*a*; Paulsson 2002). Second, authors such as Gushee (1993) and Bjørnskov (2015) cite biographical factors such as assets, abilities, and social status which affect an individual’s *capacity* to provide assistance. As McAdam (1986) discusses in his study of white civil rights workers (another instance of cross-group assistance in a violent context), individuals who have fewer personal constraints on their

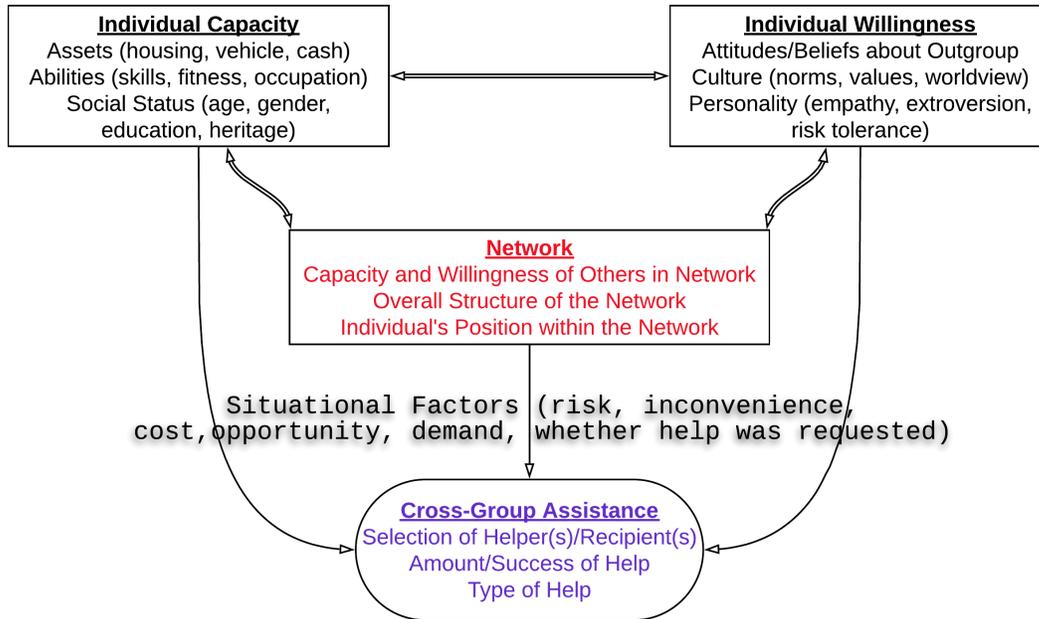


Figure 1: Four sets of factors that drive cross-group assistance and the causal relations between them. The effects of the top three sets (in boxes) on assistance filtered through the situational factors as shown.

time and responsibilities are more likely to engage in high-risk activism. Third, Holocaust scholars such as Fogelman (2011), Fagin-Jones and Midlarsky (2007), and Monroe, Barton and Klingemann (1990) emphasize how individuals' *willingness* to risk their lives to save others stems from personality and attitudinal traits including a universalist worldview, kindness, or bravery. Tec (1986), for instance, examines how individuals' religiosity affected how willing they were to shelter Jews. Fourth, a number of scholars point to a set of *situational factors* which are highly context-specific: the cost of a particular form of assistance (Bartrop 2016), the risk involved (Brown 2014), or whether the persecutee explicitly made a request (Varese and Yaish 2000). In Figure 1, I propose a causal relationship between these four sets of factors. Capacity and willingness both affect assistance directly and are amplified by one's social network. All three sets of factors are moderated by the context in which the act occurs. As the causal arrows imply, these factors are exogenous with respect to cross-group assistance, but not with respect to each other. Thus, while we could, under this model, causally identify the effect that these three sets of factors collectively have on cross-group assistance, one would a source of exogenous variation to distinguish how much of the effect comes from each category. There may be individual variables within each category whose impact could be causally identified, but network variables are not likely to be among them.

I present this causal framework for three reasons. First, I hope it may prove useful to other scholars of cross-group assistance by suggesting how the causes they seek to investigate might be causally related

to the others that have been proposed. Second, I want to avoid implying through my focus on network factors that willingness, capacity, and situation are unimportant. On the contrary, there is ample evidence in the sources cited above to indicate that these factors heavily influence cross-group assistance, and I do not intend to frame this paper as a horse race between my preferred causal factors and theirs. Finally, I wish to be upfront about the causal limitations of the present investigation; those who are hoping for a clean, unimpeachable identification strategy will be disappointed. Almost nothing about networks is ever “as good as random.” Compounding this problem, strong instruments that satisfy the exclusion restriction are hard to come by in the genocide and mass atrocity literature, and even those in the broader civil war literature are being increasingly called into question. An alternative strategy, which is increasingly popular in the conflict literature, is to run an experiment. However, studying ethnic networks in peacetime still leaves us a long way from observing how such networks shape behavior in times of violence. To date, there does not appear to be an ethical and feasible way to manipulate network variables prior to a conflict and then observe what happens. For my part, I do present results from a vignette experiment in which Bosnians are asked how much help they would provide to a persecuted person, while varying the network tie to that hypothetical individual across respondents. This is a far cry, however, from observing how someone would actually behave under dangerous wartime conditions with the lives of real people they know on the line. Thus, while I attempt through regression and matching to control for as many capacity and willingness variables as I can observe, I do not expect the reader to accept my quantitative results as the final word on causality. Rather, by combining these regression results with the process-tracing of my interviews and the frequency with which survey respondents reported getting help through various network channels, I aim to build a persuasive, albeit not infallible, story for how individuals activate cross-group social capital to obtain cross-group assistance.

3 A Cross-Group Social Capital Theory of Assistance

To integrate the causes of cross-group assistance described above into a comprehensive framework, I propose a theory of cross-group social capital. I define an individual’s *social capital* as their ability to get help from other individuals (see [Coleman 1988](#); [Putnam 2000](#); [Wellman and Wortley 1990](#)). To make the definition concrete, let us consider a woman attempting to borrow a lawnmower and the factors that might affect her success. First, how many people does she know well enough to ask for such a favor? This aspect of social capital is determined by the woman’s position in her social network through both her network *degree* (number of social ties) and the *strength* of those ties. It is also a function of how likely people in a neighborhood are to know each other overall—that is, the *density* of ties in the network. Second, how many of those people

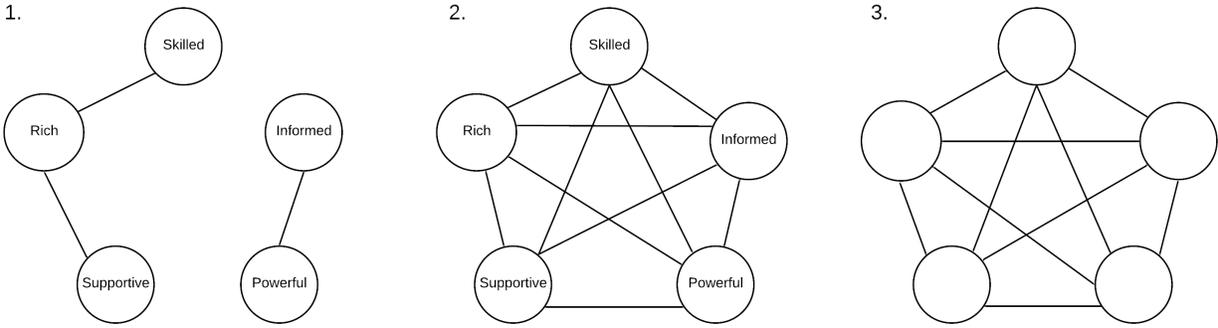


Figure 2: A community’s social capital depends on the capacity of its members and the network connecting them (and also on their willingness to share, not shown).

own lawnmowers? This aspect of social capital reflects the capacity of others in her community to provide the assistance she seeks. Third, how many of those people are willing to share their lawnmowers? The answer to this question includes both an individual’s inherent willingness to share along with the strength of their relationship with the requester and the prevailing social norms of reciprocity and mutual assistance. Thus, social capital brings together the network, capacity, and willingness variables to explain an individual’s likelihood of obtaining assistance. At the same time, it appears to operate on two levels: the community and the individual.

Let us first consider the factors that might lead a community’s higher prewar social capital to exhibit more wartime acts of assistance. In Figure 2, Community 1 on the left lacks social capital due to a sparse network. People have high capacity but lack connections to access one another’s resources. Community 3 on the right lacks social capital due to low capacity. A dense network cannot make up for the fact that no one has anything much to share. Community 2 in the middle has both a dense network and plentiful capacity and, hence, high social capital. How much the density of that network matters, however, is influenced by the social norms and personal factors that affect someone’s willingness to share. If the community has strong social norms of helping out strangers in need, then the network might not matter so much, except to the extent it spreads information about who needs things and who has what to offer. If that is public information which everyone is readily aware of through, say, a community bulletin board or newspaper, then the network fades into the background and Communities 1 and 2 are equivalent in terms of social capital. Likewise, if the community happens to attract particularly openhearted, generous individuals, the results are the same. However, with many forms of assistance, the network really does make a difference, whether by motivating people to help or through providing information to match helpers and recipients. Thus, we can assume that the *denser* the network, the more easily people can access things from one another, and the *stronger* the ties in the network, the more willing people will be to give or request assistance.

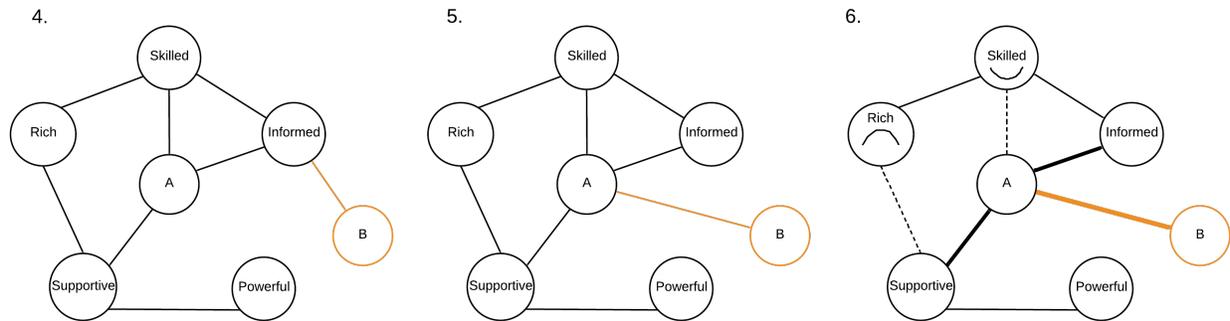


Figure 3: Even when holding capacity and network density constant, an individual’s social capital depends on their position in the network and other individuals’ willingness to share.

Now consider social capital on the individual level: who within a given community is likely to give and receive assistance? In Figure 3, we see in Community 4 that A has more social capital than B does due to his central location. Degree (number of alters) is, hence, associated with social capital. Degree is not the whole story, however. In Community 5, we see the exact same network structure except that B’s position has changed. By connecting to A rather than to the informed individual, B gives up some of her direct access to useful information, but gains indirect access to that information as well as supports and skills via A’s connections. Whether this marks an increase or decrease in social capital will depend on what sort of assistance B is seeking and whether those skills and support are the sorts of things that can be shared with higher-order alters. A friend of a friend may be a good bicycle mechanic, who—at your friend’s request—will fix your bike for free, but they are not necessarily a good shoulder for you to cry on no matter how supportive they are of your friend. For better or worse, however, changing B’s connection has clearly affected B’s social capital without affecting B’s degree. Social capital, as the saying goes, is not just about whom you know, but whom the person you know knows. Lastly, in Community 6, we see that even the structure of higher-order connections does not capture the full picture unless we consider the strength of the ties (indicated by line thickness) and individuals’ inherent willingness to help (indicated by the smile and frown). In this network, B is, in all likelihood, better able to prevail upon A to muster assistance from A’s alters on her behalf. A, in turn, probably stands a better chance of mustering support from the informed and supportive nodes than in the previous network, unless an individual’s willingness to share news or gossip is unaffected by the strength of their tie (the sensitivity of the information will likely play a role). A and B are now far less likely to be able to obtain support from the rich individual, both because the connections to him are weaker and because the rich individual is disinclined to share. However, the weak connection to the skilled individual may not make much of a difference if that individual’s baseline willingness to share is high enough that he will share with anyone who asks. However, all things being equal, we would conclude that more ties (higher *degree*) and *stronger* ties should make an individual more likely to give or receive assistance.

Despite its ability to bring people together and enhance their access to emotional support, goods, and services, social capital can have extremely deleterious effects. For instance, [McDoom \(2014\)](#) and [Satyanath, Voigtländer and Voth \(2017\)](#) document how social capital can lead people to support genocidal regimes or even join in the killing. [Putnam \(2000\)](#) draws a distinction between the “bonding” and “bridging” dimensions of social capital: the former bonds together members of the same homogeneous cluster, the latter bridges the gaps between clusters. However, this framework is too broad for our purposes, since an organization or club could provide bridging social capital by bringing together members of different genders or social classes without addressing the conflict cleavage at hand. Furthermore, if ethnicity is so irrelevant before the war that members of different ethnic groups are quite likely to be found in the same social circle, the term “bridging” makes little sense. Ties that are bridging in a structural sense may not be bridging in terms of social cleavages, and visa versa. Therefore, I employ the term *cross-group social capital* to specify one’s ability to muster assistance across salient social divisions and not merely from outside one’s tight-knit community, family, or circle of friends. The central argument of this paper is that prewar cross-group social capital predicts wartime acts of cross-group assistance.²

This theory of cross-group social capital can be used to make predictions about the relationship of capacity, willingness, and network variables to wartime assistance. This study sets out to test the latter, incorporating the first two sets of predictors (as well as situational factors) as control variables. First, as related in the preceding discussion, communities with denser networks have more social capital, all things being equal. In a conflict context, communities with a greater density of cross-group ties will have more cross-group social capital. Thus, I predict such communities will host more acts of assistance in wartime as well. Second, since individuals with a higher network degree have more social capital, those with more cross-group ties will have cross-group social capital. Members of the persecuted group with more cross-group social capital will be better positioned to obtain it from the dominant group. The relationship between helpers and cross-group social capital is less obvious since they are not in need of anything from the outgroup. Nevertheless, to the extent that more cross-group social capital involves having more cross-group ties, would-be helpers will find themselves with more opportunities to help people they know.

Hypothesis 1 (Degree-Density): The frequency of cross-group ties and cross-group assistance will be positively correlated. a) Individuals with more cross-group ties will be more likely to give or receive assistance. b) Communities with more cross-group ties will display more acts of assistance.

²To be clear, social capital may simultaneously generate both more assistance and more betrayal. Communities with tight-knit networks may have a high density of negative ties such as rivalries and grudges that lead to murder and denunciation, as well as positive ones that facilitate kindness and protection. The fact that the focus of the present study is on acts of assistance should not be taken as negation of the fact that many individuals in Bosnia were betrayed by those they knew.

Regardless of the quantity of cross-group ties a community or individual possesses, we might also expect the quality of those ties to be important. In the presence of great danger, cost, inconvenience, or ingroup pressure, a helper may limit their help to those they feel closest to. An individual in need of help, meanwhile, may not feel comfortable putting their life in someone's hands unless they already have a high level of trust. Furthermore, tie strength may encompass not only the emotional content of a relationship but the frequency of interaction. Those who interact more often may be more likely to find one another in the right place at the right time. On a community level, if a would-be helper is deciding whether to risk social condemnation to provide assistance, noting that others have best friends or spouses in the persecuted group might provide a reassuring signal or give them more options for auxiliary helpers to recruit. The persistence of these ties after the start of the war may also be easier to observe. A would-be helper may not know if his neighbors are still on speaking terms with their outgroup friends, but he is likely to know if they are still living with outgroup spouses, parents, and children.

Hypothesis 2 (Tie Strength): We should expect a positive correlation between cross-group tie strength and assistance at both an individual and community level. a) Individuals with more strong cross-group ties relative to their total number of cross-group ties should be more likely to give or receive assistance. b) Communities with more mixed marriages relative to the frequency of ethnically mixed apartment complexes or neighborhoods should display higher rates of assistance.

3.1 Scope Conditions and Case Selection

One of the primary aims of this study is to expand the scope of the genocide rescuer literature, not only to non-lifesaving forms of assistance, but to new contexts. Although the cross-group social capital theory implies the existence of two or more groups, it does not specify what types of groups they must be. For there to be a clear ingroup and outgroup, residents of a local community must have a shared conception of who is a member and who is not, whether that distinction is based on religion, sect, ethnicity, race, class, language, region, or something else entirely. These identities may, at times, be fluid, but once the violence begins, they must be sufficiently "sticky" that persecuted individuals cannot easily shed them. Ideological identities can become as hard to escape as ethnic ones, as [Balcells \(2017\)](#) makes clear in her examination of rivalry and revenge during the Spanish Civil War. The theory of cross-group social capital does not require the individuals to be socialized into separate clusters. Therefore, it is sufficiently flexible so as to not require a deep societal cleavage before the conflict begins. All that matters is for individuals to be targeted based on a hard-to-remove identity and for there to be ties between members of the two groups. The violence itself can take the form of a riot or pogrom, civil war, identity-based state repression, ethnic cleansing, or genocide.

Purely interstate wars with domestic armed opposition will often fall outside the scope of the theory due to the lack of ties between groups living in different areas, but there are exceptions. Within domestic conflicts, the model would be inapplicable in regions where the entire population is being targeted.

The 1992-5 conflict in Bosnia & Herzegovina provides fertile ground in which to test this theory. The conflict was organized along ethnoreligious lines, yet the three groups—Muslims, Croats, and Serbs—had a high rate of intermarriage and mixed neighborhoods before the war. The four years of violence featured widespread territorial cleansing, massacres, and an act of genocide in which civilians were targeted en masse based on their group identity. Thus, it is the sort of place where the model would predict cross-group assistance. At the same time, however, this conflict provides widespread subnational variation allowing me to test both the validity and scope of the model. Rates of intermarriage, a good proxy for cross-group network integration, varied widely by township, as did rates of mixed neighborhoods and non-private apartments. Civilian fatality rates during the war also varied widely. Shifting alliances between the three groups ([Christia 2012](#)) allows me to filter out effects that are dyad-specific. Across townships and years the conflict varied not only in intensity but by type. Some areas like Vitez and Mostar saw back-and-forth contestation of territory between two armies engaged in trench warfare. Others like Prijedor and Bijeljina were dominated by one-sided violence including massacres and ethnic cleansing. Sarajevo experienced a siege, Srebrenica an act of genocide, and Banja Luka a crackdown on Muslims that resembles non-cleansing repression of a minority by an authoritarian state. Finally, the declaration of autonomy by a Muslim-majority township in the far northwest created a Muslim-on-Muslim conflict where no cleavage had previously existed. This sub-conflict provides an excellent test as to whether the model works well in the absence of a prewar social cleavage.

4 Data and Methods

4.1 Outcome Variables

The primary data source for this analysis comes from a door-to-door randomized probability survey of adults who were at least 7-years-old and living in the country at the outbreak of hostilities.³ Though past scholars such as [Oliner and Oliner \(1988\)](#) have surveyed known rescuers to better understand their motivations and attributes, the present survey represents the first systematic effort to measure the frequency of assistance in the general population. To measure the frequency of cross-group assistance, enumerators read aloud six

³Working paper note (November 1, 2020): Due to the COVID-19 pandemic, the main wave of the survey has been postponed. Results reported herein are from the pilot. While the small sample size is far from ideal ($N = 100$), it is still large enough to draw valid inferences given the validity of the sampling strategy. The 95% margin of error for a sample this size is at most ± 9.8 percentage points, and considerably lower for proportions expected to be close to zero. For detailed methodology and an analysis of impact of outmigration, death, and memory biases, see [Online Appendix](#).

categories (*provisions, documents, shelter, transport, warning, intervention*), pausing after each one to ask whether the respondent had given that type of aid, received it, or neither. Aggregating the responses at the individual level, I generated three binary outcome variables: *help, gave help, and received help*. The first is an aggregation of the latter two. All individuals who responded affirmatively were asked a series of follow-up questions about the incident they could best remember, including the ethnicity of the other person and their relationship (see [Online Appendix](#) for further details).

4.2 Main Predictors

To measure respondents' prewar social networks, I created a new survey instrument that presents a list of common Bosnian names and asks respondents to identify which names correspond to people they knew before the war.⁴ Many popular first names in Bosnia are used primarily by a single ethnic group, and those I chose were unambiguous. Therefore, if a Muslim respondent reported knowing people with five of the ten Muslims names, but only one of the ten Croat names and zero of the ten Serb names, we can infer that this individual had relatively few cross-group ties before the war. In order to minimize social desirability bias, I placed this battery, which I dub an *identity roster*, prior to any questions that mentioned ethnicity, religion, politics, or the conflict.⁵ Names were presented in alphabetical order rather than subdivided by ethnicity in order to avoid giving the impression that ethnicity was a topic of interest. Nevertheless, there are two primary forms of bias we should be concerned with. First, respondents who did not engage in help might harbor greater animosity toward other groups and thus might deny having known individuals with outgroup names. Second, individuals who gave/received help might have been more likely to have maintained contact with outgroup members in the years since the war, making them more likely to recall those people (they might also be more likely to remember the name of the helper/recipient). Both of these biases would result in an overestimate of the relationship between assistance and cross-group ties. To address these biases, I offer three alternative measures of prewar networks. The variable *mixed community* captures whether the respondent reported living in a mixed community, *mixed family* captures whether relatives were intermarried before the war, and *apartment* reports whether the respondent lived in an apartment building. Apartments in Yugoslav-era Bosnia were often provided by either the state or state-owned companies and, under Yugoslav law, were distributed according to a strict quota system designed to ensure each ethnic group received equitable access to state resources. Thus, apartment buildings were likely to lead respondents having cross-group neighbors more than might be found in many traditionally segregated neighborhoods

⁴Namely, "someone who knew your name whom you would have said hello to on the street in those days."

⁵The consent script did not mention these things either. The opening text began, "We are conducting research about friends and neighbors in Bosnia. We are studying what these relationships were like in Yugoslav times and how they have changed since." For ethical reasons, we requested consent again before beginning the module related to the war, warning the participants that this was to be the topic.

and villages. All three of these indicators should be robust to memory biases, though the mixed family and community variables still pose some risk of a respondent denying a connection to a disliked group. Therefore, in Section 6, I perform robustness checks at the township- (*općina*-) level with data from the 1991 Yugoslav census. *Non-private housing* captures the percentage of individuals living in apartment buildings, *exposure* measures the probability that two individuals drawn at random will be from different ethnic groups, and *mixed families* measures the percentage of households where not all members of the same group.⁶

To measure the distribution of tie strength, the identity roster asked respondents to state whether the person with a given name whom they had known best was a relative, close friend, friend, or acquaintance. From this question, I construct the variable *strong ties*, a count of all ties that were not acquaintances. Since the identity roster represents a novel approach to network data collection, I validate it with a traditional name generator in which respondents were asked to name friends they felt close to from before the war from school, work, clubs and organizations, neighborhood, and “other.” To minimize the risk of upper censoring of the data, respondents were permitted to list up to 10 names, though few did. I constructed the variables *ingroup friends*, *outgroup friends*, and *total friends* based on an aggregation of their responses across categories. To determine which names belonged to the respondent’s own group, I had two Bosnian research assistants code the ethnic identities of all 564 names (see Online Appendix for inter-coder reliability). For names which could plausibly belong to more than one ethnic group or whose provenience could not be determined, I ran robustness checks with each possible coding.

4.3 Control Variables

Opportunity The frequency of cross-ethnic social ties and cross-ethnic violence both vary by region, inducing an uneven landscape of opportunity for assistance. Areas with more people naturally provided more opportunities for assistance, as did areas with a larger share of the population belonging to the disenfranchised group. Battles were often fought and atrocities occurred in ethnically mixed areas where multiple actors sought to shore up their territorial claims. Although the violence eventually reached nearly every part of Bosnia, demand for cross-group assistance was not evenly distributed. Generally speaking, being a Muslim in areas controlled by Serb separatists proved far more dangerous than being a Serb in areas held by the Muslim-dominated Bosnian government. Also, while some areas saw significant contestation between the different sides leading to expulsions and massacres, others remained firmly under the control of one side throughout the war. I account for these factors in three ways. First, I include the variables *Muslim pop*, *Croat pop*, and *Serbs pop* to control for each group’s share of a township’s population, based on census data. Second, I include the vote share for non-ethnic parties based on 1990 municipal election returns to capture prewar

⁶This study appears to be the first to analyze sub-national data on intermarriage within prewar Bosnia.

rivalry and identity-based contestation. Third, I include the number of *civilians killed* in each township as a proxy for the level of victimization and hence the need for assistance. This variable may also serve as a proxy for the level of risk involved for helpers and recipients. These data derive from *The Bosnian Book of the Dead*, a decade-long project conducted by the Sarajevo-based Research & Documentation Center, which outside evaluators estimate contains at least 96% of direct fatalities of the war (Ball, Tabeau and Verwimp 2007). Each line of the database provides the victim's name; birth date; ethnicity; soldier versus civilian status, military formation in which they fought (if applicable); and the places of birth, last residence, and death (Tokača 2012).

Capacity In models where the outcome is *help* or *gave help*, I control for helper characteristics that may confound the respondent's network attributes. Since children from monoethnic villages or neighborhoods become more likely to meet people outside the ingroup as they grow older and travel farther afield for school or work, their set of alters is likely to become more diverse as they age. Their capacity to offer assistance likewise increases as they grow older. Therefore, I control for *age* in all these models. I also include two economic variables directly related to assistance: whether someone in the respondent's household owned a *car* or a weekend/summer *cottage*, both of which were fairly common in Yugoslav times and could be used for transport or shelter. I also include *gender* and *education*, though these could also be thought of as willingness variables.

Willingness To control for willingness, I include the following attitudinal controls: how religiously the respondent was raised (*religiosity*), whether their parents would have disapproved if their child had married a member of the outgroup (*parents disapprove*), and if being Yugoslav was important to their parents (*parents Yugoslav*). All of these factors are likely to affect both one's propensity to form outgroup ties prewar and one's willingness to provide cross-group assistance. I include two biographical availability traits: whether the respondent had other people to support financially (*dependents*) and whether they were taking care of children daily (*childcare*). These traits could constrain one's ability to make outgroup friends and affect their willingness to take risks on behalf of others (though this could also be seen as a capacity issue). Finally, I control for the personality traits most likely to affect willingness to help and propensity to form outgroup friendships. I assess these using the BFI-2, the shortened version of the Big Five Personality Inventory, standard in the field of personality studies, that measures individuals along five personality dimensions (Soto and John 2017). To this I added one question from an earlier section of my survey, *thrill-seeking*, that asked participants if they tended to seek out risky, thrill-seeking or dangerous activities for fun before the war.

4.4 Interviews

Over the course of 10 months, I conducted over 160 interviews with individuals who had lived in Bosnia during the war. The war is still a sensitive topic in Bosnia, and many Bosnians are either tired of talking about it, wary of discussing it with a stranger, or worried about how their own neighbors will react if they found out what they had said. Thus, the vast majority of interviews were arranged through one of four interpreter/research assistants, who tapped their extended social networks including relatives' acquaintances and former colleagues. That said, even when each research assistant knew the respondent and could vouch for me, an overwhelming majority of those contacted declined to be interviewed. In addition, a considerable number of interviewees had no prior connection to my research assistant but were referred to us by people we had already interviewed. Finally, a handful of interviewees were found by approaching individuals on the street or at their place of work, engaging them in friendly conversation about their past, and asking if they would consent to a formal interview. See [Online Appendix](#) for details on procedures.

Interviews collected a quarter century after the fact present many of the same cognitive and response biases that surveys do. In an effort to partly address these concerns, I turn to a collection of 90 interviews with Bosnians involved in cross-ethnic assistance collected by Serb/Yugoslav cardiologist Svetlana Broz during and immediately after the war ([Broz 2004](#)). Broz's sample complements my own; unlike me, she is a woman, a native speaker, a Serb⁷, and a cultural insider. I also rely on *Signalji Srca*, a collection of 42 stories of cross-ethnic assistance compiled by the Research and Documentation Center (RDC) which also produced the *Bosnian Book of the Dead* ([RDC 2010](#)). Thanks to their extensive database and local connections, the team succeeded in getting confirmation of key details from both the helper and recipient in many cases from people who knew them. Thus, as with Broz's work, a comparison between my interviews and the RDC collection can shed light on potential biases introduced by my positionality or approach ([Fujii 2017](#)). I also included interviews from various memoirs, refugee accounts, and secondary sources.

5 Results

5.1 Gauging the Frequency of Assistance

Just how widespread was cross-group assistance? As shown in figure 4, three out of 10 respondents reported having given or received cross-ethnic help (30%, with a 95% confidence interval of [21, 40]). The numbers remain substantial even if we limit the scope of assistance to the five categories of acts other than providing *provisions: documents, shelter, transport, warning, and intervention*. Thus, the remarkable frequency of

⁷Due to U.S. role in the Bosnia and Kosovo wars, I was more likely to be perceived as hostile the Serb perspective.

FREQUENCY OF CROSS-GROUP ASSISTANCE BY CATEGORY

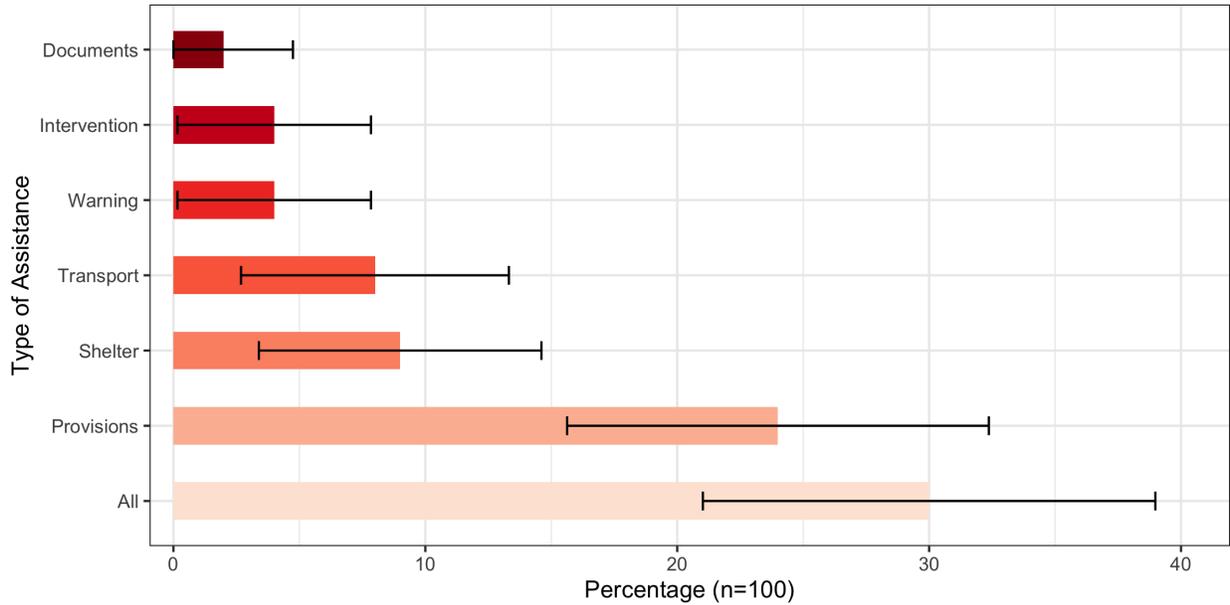


Figure 4: Helpers and recipients are pooled. Error bars represent 95% confidence intervals for population frequencies.

assistance cannot be explained simply by people who were sheltering in the communal basement of their apartment buildings sharing their pantry and humanitarian care packages with all of their neighbors, a theme that frequently came up in my interviews in Sarajevo. The other five types of assistance are more likely to be dyadic, or at the very least, would only be relevant to members of a persecuted group. As my interviews suggest, most non-*provisions* acts of assistance required a conscious choice to defy the conflict cleavage, rather than just dispersing help indiscriminately to whichever alters from any group happened to be on hand. Thus, even with a narrower definition of what constitutes assistance, we still see these behaviors in 14% ([7, 21]) of the population. See [Online Appendix](#) for a sensitivity analysis, as well as a breakdown into help given and help received.

Does such widespread assistance seem credible in light of other evidence? Anecdotally, I can say that over my 10 months of fieldwork, I frequently came upon stories of cross-ethnic help when I wasn't even looking for them. The Alamo rental car agent, my first landlady, a staff member at the survey firm, and a professor I met at a coffeehouse all volunteered stories about themselves or a relative who had been rescued from dire straits as soon as I mentioned why I was in Bosnia and what I was studying. Although my research assistants often tried to seek out people they knew who had stories, we often met with older Bosnians who didn't have a clear picture of what my research was about and who, it turned out, had helped an outgroup member during the war or had themselves been helped. The limiting factor when it came to getting interviews was not whether people had relevant experiences to share but whether they were willing

to share them with an American researcher or even willing to relive them at all. Similarly, Broz (2004) does not seem to have had much trouble finding cases for her collection even while the war was still going on. Her project of collecting positive stories began, in fact, while she was running a free clinic in Serb-held Eastern Bosnia during the first year of the war and began hearing such tales from her patients. Her clinic was situated in the Drina valley, a region that had seen some of the most brutal ethnic cleansing and massacres, yet despite this tragic circumstance (or because of it) stories of cross-ethnic assistance abounded. Mertus et al. (1997)’s anthology of writing by women refugees, compiled during the war, also contains references cross-ethnic assistance in nearly all their stories about “the journey out” from Bosnia, despite the fact that the editors were not explicitly seeking them. Returning to her hometown of Srebrenica for her master’s thesis, two decades after the massacre, Medic (2016) managed to interview three Serb helpers and eight Muslim recipients in the course of two weeks. This sample represents only a fraction of the helpers Medic identified since most were not willing to be interviewed. In the course of field testing questions for my pilot survey, one of my research assistants found that many of the older residents in her building had helped or been helped during the war. Thus, whether the researcher was a complete outsider (myself, Mertus), a regional insider but outsider to the community (Broz, Mertus’ coauthors from other Yugoslav republics), community insider (Medić and my research assistants), we see a similar pattern: individuals who gave or received help are not hard to come by.

5.2 Evaluating the Degree-Density Hypothesis

I find substantial support for the degree-density hypothesis through logistic regression on my survey outcomes. In all the relevant models, having a higher outgroup degree is consistently associated with providing cross-group assistance. As shown in the first row of Table 1, the number of outgroup names a respondent identified on the identity roster is positively associated with giving help (note the p-values, rather than standard errors, are shown). The name generator yields a very similar result (Model 2). All coefficient estimates for continuous variables have been standardized, except for dummy variables, so a change of one unit corresponds to one standard deviation. They have also been exponentiated in order to be interpretable as odds ratios. Thus, a one standard deviation increase in outgroup names corresponds to the odds of outgroup help nearly doubling (that is, being multiplied by 1.79). Note that the coefficient estimates for *Outgroup Names* in Model 1 and *Outgroup Friends* in Model 2 are strikingly similar, despite the marked difference in how each of them measures outgroup degree. This similarity suggests that the effect of outgroup friends on giving help is relatively insensitive to how it is measured, and that 1 SD difference in how many people a respondent knew by sight had the same effect as 1 SD difference in how many close friends she had. Having

Table 1: Logistic Regressions for Giving and Receiving Assistance

	Gave Help (1)	Gave Help (2)	Gave Help (3)	Received Help (4)	Received Help (5)	Received Help (6)
Outgroup Names	1.79 (0.02)			8.38 (0.00)		
Outgroup Friends		1.65 (0.04)			1.72 (0.32)	
Mixed Family			4.38 (0.05)			3.30 (0.21)
Age	3.49 (0.00)	3.41 (0.00)	3.90 (0.00)			2.13 (0.07)
Parents Yugoslav	2.13 (0.02)	2.05 (0.03)	1.93 (0.04)	10.14 (0.01)	5.25 (0.01)	2.72 (0.01)
Car	5.06 (0.04)	5.63 (0.03)	5.45 (0.03)	21.08 (0.03)	14.19 (0.02)	6.54 (0.03)
Parents Disapprove	0.26 (0.04)	0.26 (0.04)	0.36 (0.11)	0.00 (0.01)	0.02 (0.00)	0.09 (0.03)
Ingroup Names				0.38 (0.12)		
Sociability				0.17 (0.01)	0.24 (0.01)	0.42 (0.04)
Agreeableness					0.39 (0.08)	
Religiosity				3.76 (0.03)		
Outgroup Killed				0.28 (0.01)	0.36 (0.05)	
Ingroup Pop					0.56 (0.25)	
N	100	100	100	100	100	100
AIC	92.18	93.10	90.85	65.68	70.60	71.53
BIC	107.81	108.73	106.48	91.73	96.65	89.77
Pseudo R2	0.44	0.43	0.46	0.56	0.50	0.41

p-values are shown in parentheses. Coefficients are exponentiated and can be interpreted as odds-ratios (effects above 1 are “positive”). All continuous predictors are mean-centered and scaled by 1 standard deviation. Standard errors are heteroskedasticity robust.

relatives in mixed marriages is also positively and significant. All things being equal, a Bosnian from a mixed family had nearly four-and-a-half times the odds of providing cross-group assistance as someone a family with no mixed marriages.

The effects of network-related variables on receiving help vary more substantially, probably because there are fewer positive cases. Thus, these results should be interpreted with caution. Nevertheless, it appears that *outgroup ties* had a strong and statically significant effect on *received help* at a $p < 0.01$ level. The coefficient estimates for *outgroup friends* and *mixed family* are not significant, though they are about the same size as in the previous models. The effects of living in an apartment building or living in a mixed community on the eve of the war were far from being significant for both the *gave help* and *received help* outcomes (not shown). None of the township-level network proxies (*percent mixed families*, *non-private housing*, and *exposure*) showed meaningful effects. Figure 5 shows predicted probabilities for outgroup assistance (giving and receiving pooled) based on the number of outgroup names identified. The effects are almost linear with slope 1 for the entire interquartile range, such that a 25 percentage point increase in outgroup degree corresponds to a 25 percentage point increase in the probability of assistance.

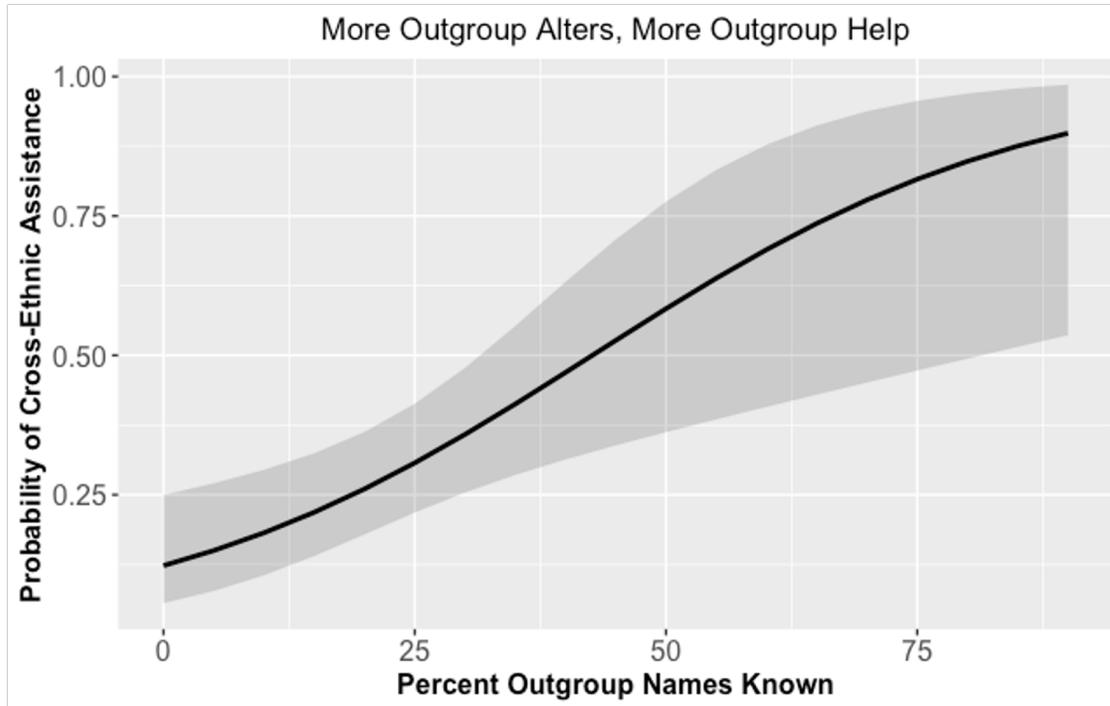


Figure 5: Predicted probabilities for *outgroup names*. The more people with outgroup names in the identity roster that respondents claimed to have known before the war, the greater the likelihood of giving or receiving wartime assistance. 95% confidence interval shaded.

Although I tested two dozen capacity and willingness variables, only a few displayed a statistically meaningful relationship with assistance. The machine learning algorithm used in model selection (see Online Appendix) consistently selected the same set of four control variables from among the 24 tested in all *gave help* models. With one exception, they show consistent effects sizes and statistical significance no matter which network-related variable was included. Of the capacity variables, *age* and *car* showed up in all six models, while *gender*, *cottage*, and the biographical availability variables of *dependents* and *childcare* did not show meaningful effects. Respondents who were older at the time of the war were more likely to give assistance. This effect is likely driven in large part by general inability of children to give assistance, though the correlation between assistance and age continues into adulthood. When it comes to receiving assistance, *age* has too little explanatory power for the algorithm to select in Models 4 and 5 and has a significant but diminished effect in Model 6. Owning a car is positively associated with cross-group assistance in all six models, though its effect on receiving help is harder to pinpoint. Were the effect only significant for giving help, we might reasonably infer that it is the car itself that plays a role in providing assistance. However, since it also affects receiving help, we are left wondering whether it is perhaps also serving as a proxy for wealth, occupation, or some other underlying variable that makes receiving help more likely.

Two willingness variables were significant in almost all the models: *parents disapprove* and *parents*

Yugoslav. As expected, offspring of parents who disapproved of intermarriage before the war were less likely to give assistance, while those whose parents considered it important to be Yugoslav were more likely to help. Notably, the effects remain when *mixed family* is included in the regression (Model 3). Thus, these parent-based variables that seem to be operating through a willingness mechanism are not merely proxies for having a diverse family network. One somewhat surprising finding is that both of these variables remain significant and exert even stronger effects on *received help*. Although rescue scholars have generally examined willingness variables for context of helpers, not recipients, it is entirely possible these factors make a person more willing to seek assistance from the outgroup, particularly in cases where ingroup assistance is also an option. Finkel (2017), for instance, shows that Eastern European Jews who were more assimilated were more likely to pursue outgroup help as a survival strategy during the Holocaust, while those who were less assimilated tended to rely on wealthier or more powerful members of their own group. Finkel attributes these different survival strategies largely to network factors, yet, ironically, my analysis shows that something more than that is likely going on, at least in the case of Bosnia. Perhaps because most Bosnians lived under conditions that were closer to civil war than to genocide, their ingroup options were more plentiful and the consequences of getting no help less dire. In that case, ingroup and outgroup help would be direct substitutes, and those who felt less comfortable around outgroup members would simply turn to ingroup alters instead. Alternatively, if one's own parents did not identify as Yugoslav and did not approve of intermarriage, perhaps that is a sign that outgroup members in the same community didn't either. Therefore, although we only have data on the parents of the recipient in these last three models, these variables could be signifying a decreased willingness to help among their outgroup alters. Model 4 provides some evidence for this conjecture: *ingroup names* is associated with a *decreased* likelihood of receiving assistance. Even when holding the number of outgroup alters constant, having more ingroup alters (or perhaps, having a greater fraction of one's alters be from the ingroup) may lead one to appeal to an ingroup alter for aid instead of an outgroup alter.

Two items for the BFI personality test show up: *sociability* and *agreeableness* show up in the *received help* models, though there is not a clear reason why these pro-social personality traits should make receiving assistance *less* likely. Likewise, *religiosity* shows up in Model 4 with a strong and substantial effect, but it's not clear why someone whose parents were *more* religious should be more likely to get but not give assistance. A higher number of *outgroup [civilians] killed* is associated with less likelihood of assistance in Models 4 and 5, perhaps because the more outgroup members were killed, the more likely your group was to be in control of that township, thus obviating the need for receiving assistance. Yet *ingroup civilians killed* strangely does not hold notable explanatory power. Finally, ingroup population was selected in exactly one model, and its p-value does not come close to being significant.

All told, it appears we have substantial evidence that having a higher outgroup degree is associated

COEFFICIENT PLOT FOR THE EFFECTS OF STRONG & WEAK TIES ON **GAVE HELP**

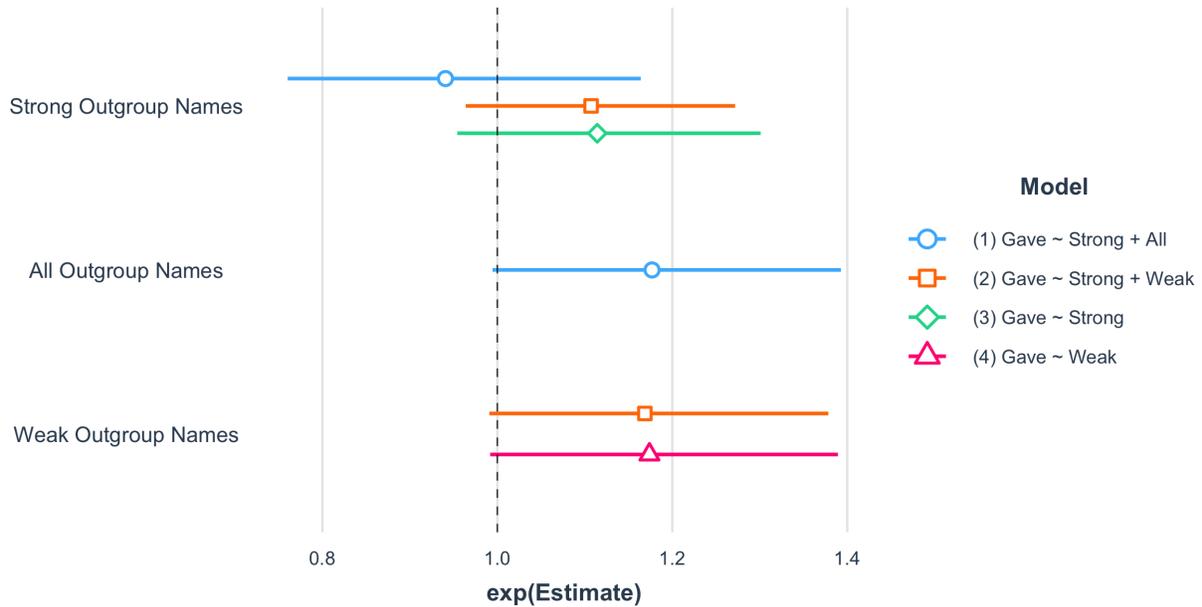


Figure 6: Logistic regression with same control variables as in Table 1, Model 1. Estimates are exponentiated to represent odds ratios but not standardized since they are already on the same scale. Thus, a one-unit increase is equivalent to identifying one additional name on the identity roster as weak, strong, or either. 95% confidence intervals based on HC2 robust standard errors.

with a greater likelihood of giving and receiving assistance. Community and township level variables do not appear to play a role, though given that there are only 100 respondents spread across 43 of the country’s 109 townships, this relationship is bound to be noisy. Hopefully, with more data, future research will be able to determine more conclusively whether cross-ethnic network density at the community level, and not just in the individual’s family and friends, is associated with higher rates of assistance.

5.3 Evaluating the Tie Strength Hypothesis

Perhaps the most surprising finding of this analysis is that one’s odds of providing assistance appear to be unaffected by tie strength. Figure 6 shows the results of four logistic regressions involving tie strength, using the same control variables as Model 1 in Section 5.2. The coefficient estimates are again exponentiated to be interpretable as odds ratios, meaning that 2 indicates a doubling of the odds and 1 leaves the odds unchanged, a null effect. The results shown are based on the identity roster follow-up question, which asked respondents about their relationship to the possessors of each of the names they said they knew. Names which the respondent identified as acquaintances are coded as weak, while those which they identified as friends, close friends, and relatives are coded as strong. Further disaggregation was not possible due to lack of data (the median number of friends was 1 for both variables), but the results seem fairly clear. The effect

of *strong outgroup ties* on providing assistance is indistinguishable from null in all three cases, whether we control for the total number of all *outgroup ties* (Model 1), the number of *weak outgroup ties* (Model 2), or neither (Model 3). The effects of all *outgroup ties* and *weak outgroup ties*, on the other hand, are much closer to being significant ($p \approx 0.06$). We can interpret the first model as follows: conditional on the total number of outgroup ties, increasing the fraction of those ties that are strong has no effect on the probability of helping. In fact, the exponentiated coefficient estimate is less than one, meaning if that point estimate is correct, having more strong outgroup ties would actually lower one’s odds of becoming a helper (the estimate is not precise enough for us to rely on, however). In models 2-4, we see that strong and weak ties are virtually interchangeable. Their point estimates and confidence intervals are virtually identical whether we include either or both of them in the model.

The non-effects of tie strength of helping are confirmed by a vignette experiment embedded in the survey. Respondents were asked how much help they would be willing to provide first, to a neighbor fleeing intimate partner violence, and second, to a local man on the run from corrupt municipal authorities. The persecutee in the story was variously described as a acquaintance, friend, close friend, or in-law in different treatment conditions, and the ethnicity of the name and whether the persecutee asked for help were varied as well, resulting in factorial design. None of the treatments including tie strength demonstrated a statistically meaningful effect.

The results for receiving assistance are less clear. Again, we borrow the controls from Section 5.2, this time belonging to Model 4 in Table 1. In the first model, we see that the effect of *strong outgroup ties* is not significant when we control for the total number of outgroup ties, but the latter isn’t either and the coefficient estimates are similar. In Model 2, we see that the number of strong outgroup ties is significant both statistically and substantively when both *strong* and *weak outgroup ties* are included in the model. For a given number of weak ingroup ties, adding more strong ties seem to have a considerable effect on the odds of providing assistance, nearly doubling them. On the other hand, *weak outgroup ties* may or may not have an effect independent of *strong outgroup ties*, and that effect may or may not be zero—there is simply not enough evidence to tell. Finally, when we consider the effects of *strong* and *weak outgroup ties* separately in Models 3 and 4, we see that the estimate of *strong outgroup ties* on their own is diminished, though still significant at a $p < 0.05$ level, while the estimate for *weak outgroup ties* is shifted considerably towards zero.

What are we to make of these contrasting findings? One potential interpretation is that, all things being equal, Bosnians were likely to provide assistance to whomever they knew, regardless of how well they knew them. Yet, they were only likely to receive assistance from those they knew well. The latter finding sounds illogical, unless Bosnians with few strong outgroup ties were substituting ingroup help for outgroup help or passing up getting help at all if their situation was not so dire. Naively, we should expect the

COEFFICIENT PLOT FOR THE EFFECTS OF STRONG & WEAK TIES ON **RECEIVED HELP**

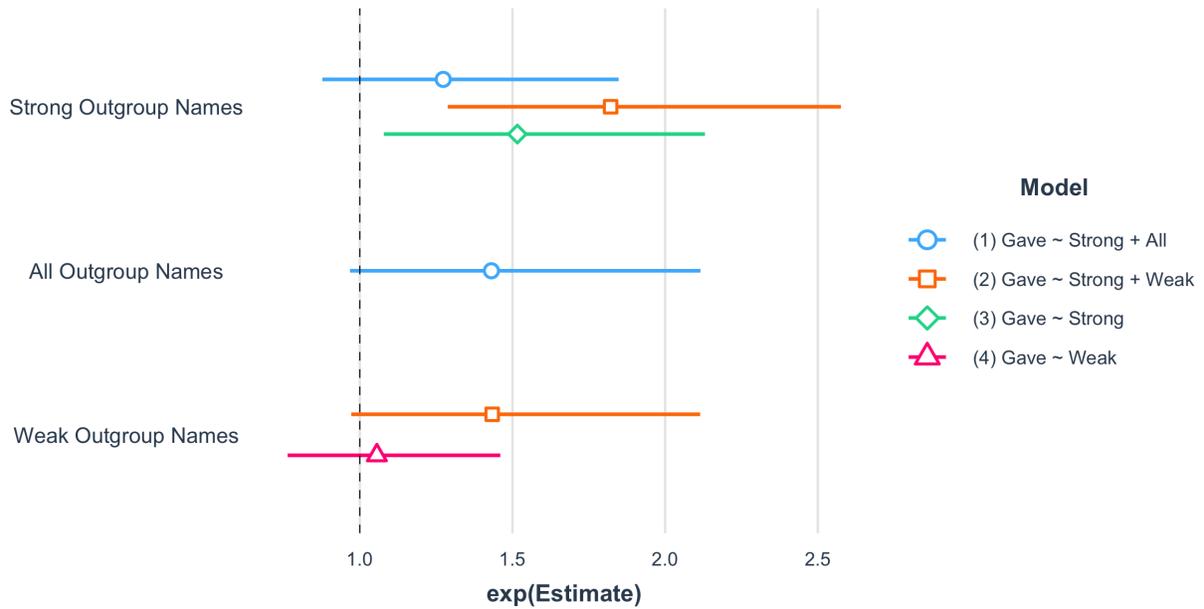


Figure 7: Logistic regression with same control variables as in Table 1, Model 4. Estimates are exponentiated to represent odds ratios but not standardized since they are already on the same scale. Thus, a one-unit increase is equivalent to identifying one additional name on the identity roster as weak, strong, or either. 95% confidence intervals based on HC2 robust standard errors.

total number of strong ties used to provide assistance and the total number of strong ties used to receive assistance to be equal, since they are, in fact, the exact same ties. There are a few ways out of this paradox, however. First, this might simply be a data problem. With only 15 individuals reporting having received assistance, the noise in the outcomes is considerable. Second, ties need not be symmetric: one person may consider someone a friend while the other considers them an acquaintance. They may feel differently about the relationship, or they may have different thresholds for their definition of “friend.” Third, it is entirely plausible that recipients would retroactively classify a relationship they had with a helper as friendship, even if at the time both considered each other to be acquaintances. Finally, and most importantly, just because strong ties make you more likely to receive assistance does not mean that assistance had to come through a strong tie. Persecutees with many strong ties may have felt more inclined to trust any outgroup member they knew, regardless of tie strength. Conversely, helpers with more ties of both types may have felt more compelled to do something to help, but then sought out those they cared about most to offer assistance to. In order to assess which of these four explanations seems most likely, let us ask the helpers and recipients themselves whom they got help from or gave help to.

The importance of weak ties is reflected in my interviews and in those previously collected by other scholars. Consider the following quote from Hasan, a Muslim man caught in a roundup of Muslims in the

Grbavica neighborhood of Sarajevo, which had just fallen to Serb militia:

My neighbor took me out of that group so they don't take me somewhere. Because they were separating [Muslims] for the concentration camp in Lukavica. Before the war we never even had a coffee. Yeah, we greeted each other just out of politeness. I didn't even know his name!

Or this quote from Jovana, a Serb woman in Banja Luka who helped out one of her Muslim acquaintances:

I was taking care of my neighbor's children. Two girls. They lived with me, yeah. They were high school students. Their parents were there but they were afraid for them. And so they slept [in my house] because we were neighbors. Their parents and I worked together. We weren't really [close] but we knew each other. I worked in [sales] and they worked in production. They were there for a month.

In both these cases, we observe weak ties providing crucial assistance, in Hasan's case from the recipient's point of view, in Jovana's case, from the helper's. That said, these ties are weak in the sense of affect, not the frequency of interactions. In both cases, but particularly in Jovana's case, the helper and recipient(s) saw each other on a regular basis, thus increasing the chances they would be aware of one another's need for assistance and capacity/willingness to provide it. Hasan surely had stronger ties elsewhere in the community, but they did not have timely information about his plight and, thus, were unable to provide assistance, if they were even able. In nearly all of my interviews, I explicitly asked how close the helper and recipient were and found that they were "normal friends," much more often than close friends, as well as acquaintances some of the time. Rarely, however, did I hear of instances of complete strangers with whom no network connection existed.

In sum, we have overwhelming evidence to suggest that weak outgroup ties are capable of channeling assistance and that those who have more of them are more likely to provide it. This does not, however, confirm [Granovetter \(1973\)](#)'s "strength of weak ties" theory, which argues that weak ties are *more* effective than strong ones at passing along new information and opportunities. There is no evidence here to suggest that weak ties have some special property that makes them more effective. In fact, as [Centola and Macy \(2007\)](#) state in their abstract, "The strength of weak ties is that they tend to be long—they connect socially distant locations." Cross-group ties are often already "long" in this sense, particularly in Bosnia given the ethnic homophily seen in friendships, marriages, and residential patterns. Thus, for any tie, conditional on it being cross-group, weakness probably does not confer any additional benefits. This finding may extend to other contexts, well beyond Bosnia and civil war. Strong ties may make people more likely to *receive* assistance, but the data is too noisy to be confident that this finding will hold up for further scrutiny. While

the effect of strong ties on recipients is inconclusive, however, the non-effect of strong ties on helpers appears quite robust and somewhat puzzling. Why wouldn't a helper be more motivated to help people he cares a lot about than someone he barely knows? I address this empirical puzzle in the following section.

5.4 Neighborly-Norms: A Counterweight to Weak Ties?

There is a saying in Bosnia - your neighbor is more important than your brother. When the war happens of course you will help your neighbor. - *Davor, Serb-Croat from Travnik*

One possible explanation for the absence of tie strength is that strong social norms of mutual assistance, trust, hospitality, and reciprocity might render tie strength largely irrelevant. Such social norms increase the willingness of everyone in the community to offer assistance, perhaps not evenly, but monotonically. If there is a high level of trust in the neighborhood, village, or apartment building, persecutees might feel more comfortable asking for assistance rather than fleeing or resorting to self-help. If there is a cultural obligation to welcome anyone who knocks at your door asking for aid, then how you feel about the individual at your doorstep may not be so important. This open door may extend to all of humanity, all members of one's ethnic group, or all member's of one's immediate locale. The last of these is the most relevant, however, since individuals—at least in the contexts examined here—are more likely to find themselves in need of help when living among neighbors, though, of course, help on the frontlines or in a distant concentration camp can still occur. I therefore home in on looking for a culture of “neighborliness;” that is, a set of norms and expectations that include neighbors knowing each others' names, greeting each other, socializing, celebrating together, sharing resources, and coming together in times of need.

Neighborly norms are hard to detect quantitatively. Ideally, one would harness data from a survey such as the World Values Survey or American Community Survey designed to measure trust, civic engagement, and other markers of community-mindedness across locales, as both [Rice and Feldman \(1997\)](#) and [Dinesen \(2012\)](#) have done subnationally for descendants of different immigrant groups. However, no such data appear to exist for Bosnia prior to the war. On the other hand, interviews offer considerable suggestive evidence that such norm may have played a decisive role in making up for the weakness of ties. Consider Hasan and Jovana whose stories were presented in Section 5.3. Both gave or received assistance through weak ties, yet in both cases, the outgroup member was a neighbor. This proved to be a common theme throughout my fieldwork. A lexical search through my interview transcripts revealed the word “neighbor” and its derivatives appeared, on average, over 10 times per transcript. Though joint holiday celebrations and life-cycle events were a frequent theme in interviews, Bosnians didn't need a special occasion to visit one another. Doors were generally unlocked, particularly in apartment complexes, and neighbors would regularly

drop by unannounced. Selmo, a Muslim man who lived in an apartment building in Grbavica, recollected: “We all knew each other very well. And we were all very, very friendly and went into each other’s homes, regardless of who, what and how.” Radoš, a Serb interviewed by the RDC, described a similar situation in the town of Brčko: “I had a such good relationship with my neighbours. We were so close that we never had coffee alone” (RDC 2010, 54). Coffee, an important focal point of social life for Bosnians of all three groups, comes up in other accounts as well. Ifeta, a Muslim woman from Sarajevo, recalled that residents in her apartment complex would begin their daily routine by making enough coffee to serve to guests on the assumption that at least one neighbor was likely to drop by before going out for the day.

When I asked whether the neighbors who helped them were also friends, some interviewees reacted with confusion. “Yes, we were friends; they were our neighbors!” was a common reply, as if my question had been redundant. Although they may not have had a close relationship with all the families in their immediate vicinity, the assumption in these interviewees’ statements was that the social expectation was to refer to all neighbors as friends, regardless of tie strength. With that mental classification came certain expectations of how people ought to act toward one another and their obligations of mutual assistance if one of them was in need. In Sarajevo, I found this to be true both in the *mahale*, densely-packed hillside neighborhoods with winding streets dating to the Ottoman period where families had lived for generations, and the newer apartment blocks in Dobrinja built to house athletes and officials during the 1984 Winter Olympics. Interviewees from all over the city frequently declared that they didn’t know who was a member of which group growing up, or at least, that they didn’t know of each other as Muslims, Croats, and Serbs. This remained true right up until the eve of the war. Ajna, a Muslim woman from the center of the city, recalled the moment when all that began to change. It was 1991, a year before the war, when her 17-year-old son Midho answered a knock at the door. “Mom, some man came to write something at the door,” he called. “They are asking me what are we? What nationality? I don’t know what we are.” For families like these, neighborhood affiliation far outweighed ethnic affiliations with which violence entrepreneurs sought to label them.

Day-to-day life outside of these urban centers could also be quite integrated, even when religious practice, traditional house architecture, and style of dress made one’s ethnic affiliation readily apparent. Norwegian anthropologist Tone Bringa, who conducted fieldwork in the Central Bosnian village of Dolina in 1988-9, writes about how residents simultaneously felt a strong affiliation with both their neighborhood and their religious community. Visits between Muslim and Catholic neighbors were common, though not quite so much as visits to the homes of coethnics. Members of both groups were bound together by rituals of reciprocity, from hosting guests to attending one another’s life-cycle events with gifts in tow. Neighbors came together for collective work projects, such as helping a neighbor build a new house, which carried with

it an unstated expectation that the new homeowners would provide food and drinks to the volunteers and they would participate in a neighbor's work party some time in the future. Through all these interactions, residents constantly reinforced their separate identities through language like "yours" and "ours," remarking on the differences and similarities in one another's customs (Bringa 1995). Thus, even in communities where ethnic affiliation was an important facet of everyday life, neighborly norms could still flourish uniting people across ethnic lines.

Once the war began, assistance from neighbors proved widespread. In my survey, 23 out of 64 respondents with stories of help said that the helper and recipient were neighbors, and a similar fraction of my interviewees said the same. Samir, a Muslim man from Sarajevo, invited all his neighbors to come stay in his basement, where he had a water source, after the city's water supply was disrupted by shelling. He recalled:

Really here in the neighborhood, we all shared everything, whatever we had. Regardless of what someone's name was [i.e., their ethnicity], we shared together food and everything we could, if someone got something [in the mail] and so on. Refugees came to that house over there, we all from the neighborhood who have been living here for a long time offered them [what we could]... everyone, not just me, everyone.

This description is typical of Muslim Sarajevans I spoke with, aside from those in Serb-controlled Grbavica. Another Sarajevo resident, Maja, echoed this sentiment: "We helped each other, regardless of religion, regardless of everything." Outside of Sarajevo, neighborly assistance frequently took on a more personal character. The half-Serb, half-Croat man whose quote started off this section, Davor, recalled how his family fled Travnik during the war and settled in a village near Sanski Most, taking up residence in a house abandoned by other refugees. Davor, who was a child at the time, played with the Muslim kids across the street and the two families soon established strong neighborly ties, in spite of having just fled Muslims elsewhere in the country. Some months passed and Arkan's Tigers, one of the most notoriously brutal Serb paramilitary gangs, took up residence next door. Villagers got word that the gang would soon be hunting down Muslims to rape and kill, and so, in the middle of the night, the entire family moved in with Davor's family and stayed for several days. For Davor's parents, there was no question whether to grant their request for help, despite the incredible risk it posed to themselves and their own children. Thus, we see how norms of neighborly obligation and hospitality continued to function in wartime and that those obligations could be extended to new neighbors, not just to those who had had years to accumulate social capital.

My interviewees recalled how neighbors could both betray and assist. Mujo, a Muslim man from Banja Luka, recalled,

I know one man who experienced a tragedy. From his neighbors, Serbs. In Prijedor. Because his

next-door neighbors killed his. . . they killed. . . they just left him, his mother and his sick sister and they killed his father, two brothers and one more sister. He managed to get out to Travnik. We met, and we hung out. He would come to my next-door neighbor in Travnik, a Serb, an older man who lived alone. He would bring him food, wood, and every day he would come to help him. To help him. That is simply unbelievable [after] what he experienced.

This story speaks to the robustness of neighborly norms. Not only did this man's sense of obligation to neighbors in general transcend the earth-shattering betrayal by the specific neighbors he had known, but he applied it to the new neighbors in the place where he found refuge just as readily as someone who had been integrated into the neighborhood for generations. Janja Pantić, a Croat woman from Vareš interviewed by Svetlana Broz in 1998, describes how Muslims and Croats in her community "lived as one soul" until October 23, 1993, when the HVO (the main army of the Bosnian Croats) embarked on a brutal ethnic cleansing of the Lakša Valley, raping and murdering 37 Muslims in the outlying village of Stupni Do. "The worst for me, as a Croat, was watching our Muslim neighbors being herded down the street. ... I tried to help them but I really felt helpless," she recalled. Later, after HVO forces retreated, Janja and her husband were among the few Croats not to evacuate with them. They sought refuge in the very same school where their Muslim neighbors had been imprisoned and tortured, hoping the newly arrived UN peacekeeping forces would protect them.

After we'd spent two nights in the school we came back to our homes. Many of the apartments in our entryway had been looted and ransacked. Ours had gotten by unscathed, thanks to a Muslim neighbor who had taken the name plate off our door which showed our last names, and had written "Muslims" on a scrap of paper and stuck it there. After that we spent many days together, looking after each other and helping out. (Broz 2004, 144-6)

Thus, neighborly norms could survive *within the same community* even after brutal violence and continue to generate cross-group assistance.

Through my interviews and the other interview collections cited, we see that neighborhoods, villages, and apartment buildings had strong norms of friendliness, reciprocity, and mutual aid before the war that continued to normalize cross-group assistance in wartime. Though not all neighbors helped, and some betrayed, there is considerable evidence that prewar norms remained operational in the minds of many individuals. In places like Sarajevo, this neighborhood-based social capital resulted in people sharing what they had with all their neighbors, regardless of tie strength or ethnicity. In other parts of Bosnia, we see that neighborly norms can remain robust in the face of betrayal and lead people to take huge risks on behalf of neighbors being targeted. One striking and unexpected feature of these testimonies was that the expectations of neighborly behavior were not confined to neighbors who had known each other for years

and were deeply embedded in an existing network. Rather, they were so internalized that refugees almost immediately begin to apply them to their new neighbors wherever they ended up. Thus, cross-group social capital from neighborly norms can be seen as a decidedly non-network phenomenon.

At the same time, however, norms-based social capital can help explain the failure of tie strength to influence people's likelihood of proffering assistance. Prewar expectations of how neighbors should interact provided cues to Bosnians of how to act in wartime. Those who had not become hateful and genuinely wanted to help would have felt an obligation to any neighbor, not just individuals who they were closest to. Those who were neither actively looking for someone to help but not opposed to it could still be called upon to provide aid due to strong cultural expectations of what constituted proper behaviors and how Bosnians had come to see their role vis-a-vis the community. Networks still mattered to the extent that only 20% of the respondents in my survey were helped by someone they had no connection to whatsoever. The rest were helped either by people they knew directly or higher-order alters recruited by people they knew.

6 Alternative Specifications

While it would be ideal to have an independent data source measuring the frequency of cross-group assistance to address concerns about biases in self-reported acts of assistance, no such data source appears to exist. As an alternative, I present here data on related types of cleavage-defying behaviors: community resistance and boundary crossing (also called ethnic defection). While these behaviors are distinct from dyadic acts of assistance, the patterns we see in their distribution lend support to the argument that cross-group social capital promotes cleavage-defying behaviors in general, and thus may also facilitate cross-group assistance.

6.1 Resistance

Organized, community-wide resistance to violence and ethnic cleansing presents yet another way to examine how cleavage-defying relates to cross-group social capital. For instance, [Kaplan \(2017\)](#) documents how communities in Colombia frequently come together to prevent drug cartels and paramilitaries from carrying out violence in their towns. Therefore, while both cross-group assistance and community resistance defy the conflict cleavage and entail risk, the latter may have more selfish motivations as individuals may simply not wish to see their own home and families engulfed in violence. However, in the context of identity-targeted violence such as in Bosnia, community resistance is more likely to resemble cross-group assistance. Since armies and militias in Bosnia were associated with a particular ethnic group, the takeover of a mixed town generally spelled disaster for one ethnic group and might (though not always) lead to gains for the other through the redistribution of property and jobs. Furthermore, opposing a takeover would require members

of the dominant group to stand up to their own coethnics. Like cross-group assistance, there are no comprehensive records of where such acts of resistance took place, though the major ones in cities are documented in newspapers. In my qualitative research, I came upon a village in Serb-controlled central Bosnia where Serb residents had convinced local military authorities that their Muslims neighbors did not pose a threat and should be left alone.⁸ Therefore, I measure community resistance through survey responses. This approach presents biases, of course, though they are distinct from those related to self-reported assistance. Social desirability is somewhat less of a concern, since respondents are being asked about events that took place in their town rather than acts they themselves engaged in. Whereas the bias in reporting cross-group assistance is more likely to be in the positive direction, the bias in reporting community resistance is more likely to be negative since people are more likely to have forgotten events they didn't participate in or not have known about in the first place.

Of the two-thirds of respondents who said their prewar communities were "mixed," 47% said there were collective efforts to avoid violence (29% were unsure). Taking into account sampling variance, we can draw a ballpark estimate that resistance to violence took place in roughly half to three-quarters of Bosnian communities that were mixed and a third to half of Bosnian communities overall (see [Online Appendix](#) for further details). These figures, while high, seem reasonable in light of existing evidence. In Sarajevo and Mostar, thousands of citizens participated in rallies calling for peace and reaffirming a commitment to a multiethnic state. Most interviewees told me that few, if any, outgroup members they knew before the war began treating them hostilely or acting nationalistic. When violence finally did erupt in March and April of 1992, it came primarily in the form of paramilitary groups staging coordinated attacks on the civilian population, rather than civilians spontaneously turning on their neighbors.⁹ Many interviewees report that neighbors of all ethnicities set up joint patrols to protect their apartment buildings, neighborhoods, or villages from outside agitators. Even after fighting had commenced, leaders in communities throughout Bosnia attempted to head off the violence. Based on a variety of local media accounts, [Burg and Shoup \(1999\)](#) recount an interethnic citizens forum in Gorazde, joint defenses of Tuzla by all three ethnic groups, Croat-Muslim efforts to keep the peace in Vareš and Fojnica, a cease-fire agreement between the local JNA commander and four municipalities in the Northwest, joint Muslim-Serb patrols in Doboj, and JNA attempts to stem violence in Sarajevo.

To test whether cross-group social capital is again at play, I ran logistic regressions on respondent-reported community *resistance* with all the township-level variables in my data that I deemed relevant. As [Figure 8](#) reveals, out of all the predictors, the percentage of mixed families has the strongest effect. The

⁸Amazingly, the Muslims were only left unscathed but were evacuated by the Serb forces alongside their Serb neighbors when the territory was on the verge of falling to the Croatian Army in September 1995.

⁹Though many would later do so once the war had begun.

COEFFICIENT PLOT FOR THE EFFECTS OF TOWNSHIP LEVEL VARIABLES ON COMMUNITY RESISTANCE

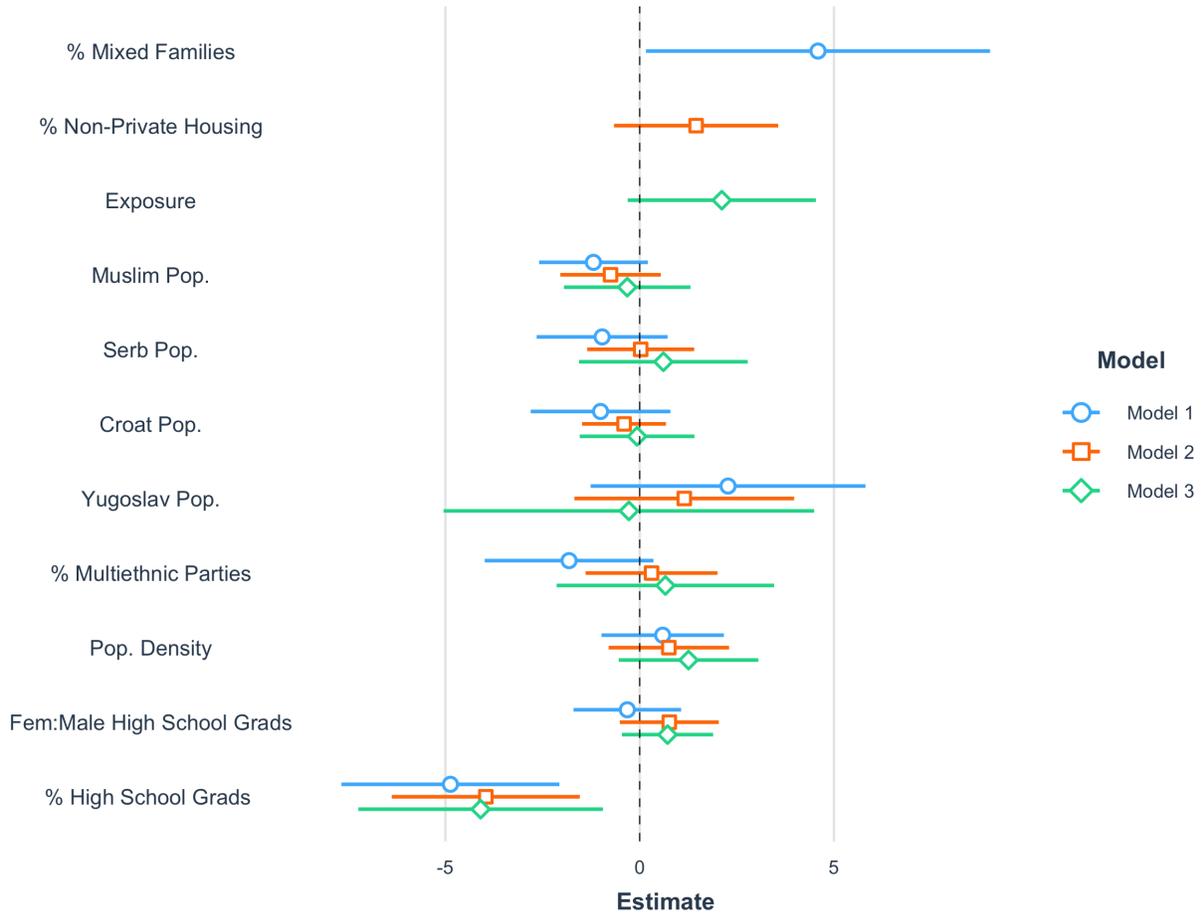


Figure 8: Results of three logistic regressions. Outcome variable is community resistance (survey) while predictors are all from the 1991 Yugoslav Census. Data limited to respondents who reported living in communities with multiple ethnic groups on the eve of the war. Estimates are standardized and 95% confidence intervals based on HC2 robust standard errors are shown.

other two measures of cross-ethnic network density, *non-private housing* and *exposure*, also have positive effects, though neither is significant at a $p < 0.05$ level, and the latter has a p-value of 0.09 in this model and dips below 0.05 in several of the robustness checks. Thus, we have moderate evidence to suggest that the degree-density hypothesis holds at the township level for community resistance and boundary crossing and at the individual level for outgroup assistance. This makes theoretical sense as well, since an individual's likelihood of helping a single persecutee should be more strongly influenced by the particular ties she has and those around her, whereas her likelihood of helping the whole community through boundary crossing or the community itself coming together to resist violence should be more sensitive to the structure community's overall network.¹⁰ The preponderance of evidence here suggests that communities possessing

¹⁰It is interesting to note that the percentage won by multiethnic parties in the 1990 municipal elections did not have a

efficient networks with a high density of cross-group ties were more likely to try to resist the onset of violence. This finding ironically parallels Petersen (1993)’s study showing strong communities were more likely to resist an authoritarian regime—through violence. Cross-group social capital, while effective at discouraging violence within the community, can unite communities to resist outsiders through violent or non-violent means. Individuals from such communities were also more likely to show their solidarity with members of another ethnic group by taking up arms alongside them. Thus, we see the ability of network structures and the social capital they help create to direct violent conflict both at the individual and community levels.

6.2 Boundary Crossing

COEFFICIENT PLOT FOR THE EFFECTS OF TOWNSHIP LEVEL VARIABLES ON BOUNDARY CROSSING

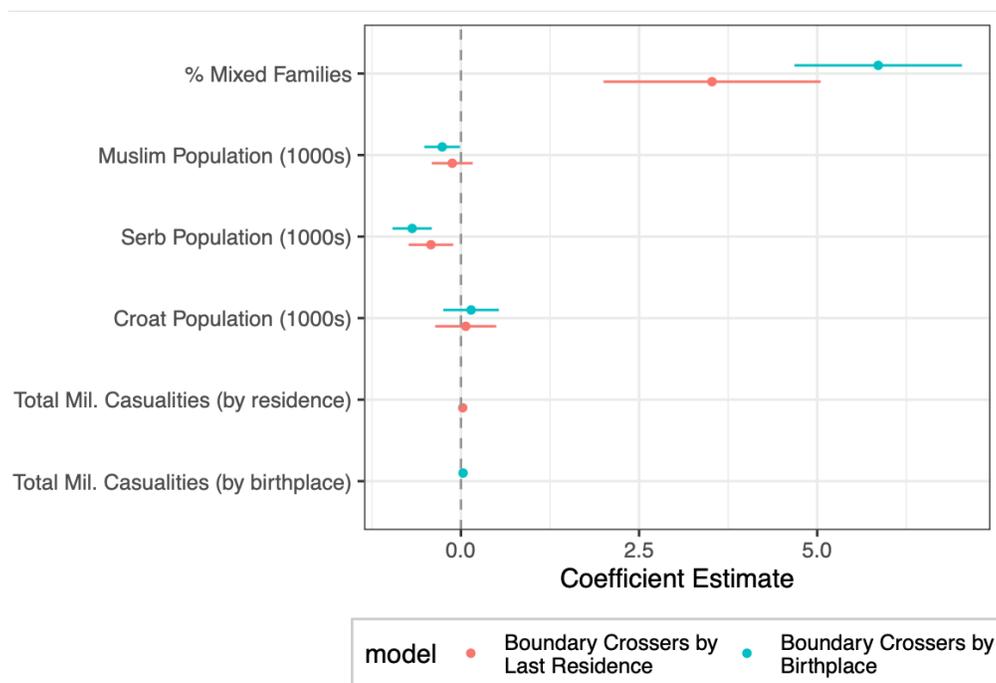


Figure 9: Coefficient plots for two linear regressions regressing *boundary crossers* on township demographics and fatalities. 95% confidence intervals shown.

Boundary crossing refers to a related set of cleavage-defying behaviors including joining the outgroup’s armed forces as a combatant (Kalyvas 2008), providing intelligence or logistical support to those forces (Lyll 2010; Staniland 2012a), deliberately choosing to remain in a place controlled by those forces and live among that group, and adopting that group’s identity as one’s own.¹¹ Such behavior is distinct from cross-group significant impact, perhaps because these parties only won control of three municipalities. The desire of a minority or even a majority of the population to avoid violence is often ineffective at preventing it if a tiny pro-violence minority seizes control of the state apparatus (see Valentino 2004).

¹¹I prefer the term “boundary crossing” to “ethnic defection” since a) the groups need not be ethnic, b) defection has strong

assistance in that it is not dyadic; while we can identify the individuals performing the service, they are providing a public good in a sense, so we cannot identify specific beneficiaries. However, the behavior is similar to cross-group assistance in that it defies the conflict cleavage and entails the actor incurring risk or cost to benefit non-coethnics and thus be more likely to arise in the presence of substantial cross-group social capital. Furthermore, casualty records from the war offers an independently verified source of data. I extracted from *The Bosnian Book of the Dead* the total number of fatalities of non-Croats serving in the HVO and HV, non-Serbs serving in the JNA and VRS, and non-Muslims serving in the ARBiH and APZB, the six major armed forces of the war. I refer to this variable as *boundary crossers* and aggregate it two different ways: by township of birth and township of last residence. To measure cross-group social capital, I rely on Bosnian census data at the township level.

Figure 9 shows that *Percent Mixed Families*, our intermarriage variable, strongly and robustly predicts boundary crosser fatalities. Since I have no a priori reason to assume the distribution of boundary crosser military fatalities should be substantially different from the distribution of boundary crossers serving in the military, I used the former as a proxy for the latter. Thus, the greater the density of cross-group ties in a community, as measured by mixed families, the more likely people were to join an army primarily composed of the outgroup. This reinforces the degree–density hypothesis and suggests that networks can promote other cleavage-defying behaviors besides cross-group assistance. Individual cross-group social capital makes less sense as an explanation in this context, since there is no one individual who is the recipient. However, cross-group social capital at the community level still has explanatory value. Individuals embedded in a dense web of mutual obligations and feelings of affection may feel pulled to serve the community as a whole through military service. At the same time, the fact that the percentage of mixed families in one’s birthplace has an even stronger effect than the percentage of mixed families in one’s place of last residence suggests there is something even stronger going on. Networks with high cross-group density, it appears, leave a lasting imprint on the minds of their members, even after those individuals have left the community and moved elsewhere. This suggests networks are operating through a willingness mechanism. The capacity of alters seems immaterial, but one’s feelings towards them—perhaps moderated by tie strength—have a durable impact on wartime behavior years or decades later.¹²

pejorative overtones, and c) individuals who find themselves fighting their coethnics may not so much have “defected” as simply remained a part of the multiethnic community and collective identity which their coethnics choose to secede from.

¹²Serb population is negatively correlated with boundary crossing in both models. One likely explanation is that the Serb separatist forces were less willing to take in recruits of other ethnicities than the Muslim-dominated Bosnian army or Croat HVO forces. Townships with a lot of Serbs rapidly fell under Serb army control and, thus, Muslims and Croats living there had fewer opportunities to become boundary crossers.

7 Conclusion

Despite widespread group-targeted violence including rape, looting, massacres, territorial cleansing, and concentration camps, a substantial portion of Bosnians of all ethnic groups continued to act on their cross-group relationships throughout the war. Those who were threatened sought help from those they knew, while those who were in a position to help offered what they could to their relatives, friends, colleagues and acquaintances. As a result, cross-group assistance was widespread, with somewhere on the order of 30% of Bosnians giving or receiving help from a member of the outgroup. Help could come through strong ties as well as weak ones or even higher-order alters whom the recipient did not know but was connected to through other helpers. Individuals whose ties to the outgroup tended to be stronger were no more likely to help than those with weaker ties. One probable reason for this non-finding is that strong neighborly norms of hospitality, reciprocity, and mutual assistance made Bosnians willing to help just about any neighbor they knew, regardless of how well they knew them. These neighborly norms were transferable when people fled their homes. Newly arrived displaced persons could draw on a common cultural expectation that neighbors were there to help, even if they lacked longstanding relationships with them. Thus, we see that cross-group social capital is a more suitable explanation for cross-group assistance than their mere presence or strength of dyadic ties. To understand how people get help during persecution, genocide, and civil war, one must go beyond individual relationships and examine the broader network.

In addition to documenting the ways in which networks mobilize cross-group assistance, this study serves as an invitation to scholars to investigate cleavage-defying behaviors more broadly. Although political scientists such as [Mueller \(2000\)](#) and [King \(2001\)](#) have long questioned whether so-called “ethnic” wars are really so different from non-ethnic ones, researchers have yet to investigate the full scope of behaviors through which individuals break out of that ethnic paradigm. [Wood \(2003\)](#) examines boundary crossing in a conflict where the boundary is defined by class, but scholars have yet to connect her work to the literature on so-called “ethnic defection” In drawing attention to the myriad ways by which people defy the master cleavage of a civil war, I hope to encourage other researchers to look at boundary crossing, cross-group assistance, and community resistance as part of a common framework of cleavage-defying behavior. Those who study civil wars, mass movements, repressive regimes, or ethnic and class divisions have much to gain from trying to understand why people break ranks with their group and what sorts of social structures make them more likely to do so.

Though it is tempting to take the results of this study as evidence for the efficacy of policies bringing together people of different groups, one needs to be cautious in doing so. Ethnic groups’ claims to legitimacy over a given territory are often driven by settlement patterns ([Toft 2010](#)), which residential integration can

undermine. As Woodward (1995) documents, Croat and Serb nationalists saw Bosnia's mixed communities as an obstacle to their aims of partition and thus embarked on a savage campaign of rape, torture, and massacres in order to achieve, what Toal and Dahlman (2011) dub the "unmixing" of Bosnia. As a result, the war in Bosnia was primarily one of territorial cleansing in which ethnic extremists concentrated violence in areas that were highly mixed. Therefore, any policy-maker seeking to foster cross-group harmony through networks needs to think carefully before promoting residential integration as a means to achieve it. The same mixed residential patterns that give rise to cross-ethnic assistance during conflict through neighborhood networks and neighborly norms can also attract violence entrepreneurs like a magnet if such mixing stands in the ways of their strategic or ideological aims. Nevertheless, if a community is already mixed, then promoting cross-group ties may be a good way to mitigate violence. Moreover, studying the pathways through which networks promote cross-group assistance can open the door to more nuanced policies. The non-effect of tie strength, for instance, suggests that peacebuilding funds might be best spent on programs that aim to foster weak ties between a large number of people rather than strong ties between a few. At the same time, the importance of neighborly norms suggests that such weak-tie focused programs may be far more effective if conducted locally and accompanied by efforts to increase community cohesion. At the very least, if the goal is to foster community resistance to violence or promote cross-group assistance, then such programs should focus on a single neighborhood or multiple neighborhoods in parallel. Even if the individuals within that neighborhood don't have the capacity to make a difference, so long as they have the willingness, they should be able to mobilize secondary helpers from outside the community. Thus, any policy aimed at diminishing violence ought to take into account not only the cross-group ties between participants, but the wider effects of cross-group social capital as it flows through the community's entire network.

References

- Balcells, Laia. 2017. *Rivalry and Revenge: The Politics of Violence during Civil War*. Cambridge University Press.
- Ball, Patrick, Ewa Tabeau and Philip Verwimp. 2007. The Bosnian Book of Dead: Assessment of the Database (Full Report). Technical Report 5 Households in Conflict Network.
- Bartrop, Paul R. 2016. *Resisting the Holocaust: Upstanders, Partisans, and Survivors*. ABC-CLIO.
- Bergholz, Max. 2016. *Violence as a Generative Force: Identity, Nationalism, and Memory in a Balkan Community*. Cornell University Press.
- Bjørnskov, Christian. 2015. "Social Trust Fosters an Ability to Help Those in Need: Jewish Refugees in the Nazi Era." *Political Studies* 63(4):951–974.
- Braun, Robert. 2019. *Protectors of Pluralism*. Cambridge University Press.
- Bringa, Tone. 1995. *Being Muslim the Bosnian Way: Identity and Community in a Central Bosnian Village*. Princeton University Press.

- Brown, Sara E. 2014. "Female Perpetrators of the Rwandan Genocide." *International Feminist Journal of Politics* 16(3):448–469.
- Broz, Svetlana. 2004. *Good People in an Evil Time: Portraits of Complicity and Resistance in the Bosnian War*. Other Press.
- Burg, Steven L. and Paul S. Shoup. 1999. *The War in Bosnia-Herzegovina: Ethnic Conflict and International Intervention*. M.E. Sharpe.
- Centola, Damon and Michael Macy. 2007. "Complex Contagions and the Weakness of Long Ties." *American Journal of Sociology* 113(3):702–734.
- Christia, Fotini. 2012. *Alliance Formation in Civil Wars*. Cambridge University Press.
- Coleman, James S. 1988. "Social Capital in the Creation of Human Capital." *American Journal of Sociology* 94:S95–S120.
- Dinesen, Peter Thisted. 2012. "Does Generalized (Dis)Trust Travel? Examining the Impact of Cultural Heritage and Destination-Country Environment on Trust of Immigrants." *Political Psychology* 33(4):495–511.
_eprint: <https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1467-9221.2012.00886.x>.
- Fagin-Jones, Stephanie and Elizabeth Midlarsky. 2007. "Courageous Altruism: Personal and Situational Correlates of Rescue during the Holocaust." *The Journal of Positive Psychology* 2(2):136–147.
- Finkel, Evgeny. 2017. *Ordinary Jews: Choice and Survival during the Holocaust*. Princeton University Press.
- Fogelman, Eva. 2011. *Conscience and Courage: Rescuers of Jews During the Holocaust*. Knopf Doubleday Publishing Group.
- Fox, Nicole and Hollie Nyseth Brehm. 2018. "'I Decided to Save Them': Factors That Shaped Participation in Rescue Efforts during Genocide in Rwanda." *Social Forces* .
- Fujii, Lee Ann. 2011. *Killing Neighbors: Webs of Violence in Rwanda*. Cornell University Press.
- Fujii, Lee Ann. 2017. *Interviewing in Social Science Research: A Relational Approach*. Routledge.
- Gohdes, Anita R. 2015. "Pulling the Plug: Network Disruptions and Violence in Civil Conflict." *Journal of Peace Research* 52(3):352–367.
- Granovetter, Mark S. 1973. "The Strength of Weak Ties." *American Journal of Sociology* 78(6):1360–1380.
- Gross, Michael L. 1994. "Jewish Rescue in Holland and France during the Second World War: Moral Cognition and Collective Action." *Social Forces* 73(2):463–496.
- Gushee, David P. 1993. "Many Paths to Righteousness: An Assessment of Research on Why Righteous Gentiles Helped Jews." *Holocaust and Genocide Studies* 7(3):372–401.
- Kalyvas, Stathis N. 2006. *The Logic of Violence in Civil War*. Cambridge University Press.
- Kalyvas, Stathis N. 2008. "Ethnic Defection in Civil War." *Comparative Political Studies* 41(8):1043–1068.
- Kaplan, Oliver. 2017. *Resisting War: How Communities Protect Themselves*. Cambridge University Press.
- King, Charles. 2001. "The Myth of Ethnic Warfare: Understanding Conflict in the Post-Cold War World." *Foreign Affairs* pp. 165–170.
- Larson, Jennifer M. 2016. "Interethnic Conflict and the Potential Dangers of Cross-Group Ties." *Journal of Peace Research* 53(3):459–471.
- Larson, Jennifer M. and Janet I. Lewis. 2016. "Ethnic Networks." *American Journal of Political Science* .
- Lewis, Janet Ingram. 2013. "How Rebellion Begins: Insurgent Group Formation and Viability in Uganda."

- Luft, Aliza. 2015a. "Genocide as Contentious Politics: Collective Action, Social Movements, and Genocide." *Sociology Compass* 9(10):897–909.
- Luft, Aliza. 2015b. "Toward a Dynamic Theory of Action at the Micro Level of Genocide: Killing, Desistance, and Saving in 1994 Rwanda." *Sociological Theory* 33(2):148–172.
- Lyll, Jason. 2010. "Are Coethnics More Effective Counterinsurgents? Evidence from the Second Chechen War." *American Political Science Review* 104(01):1.
- Marks, Zoe. 2019. "Gender, Social Networks and Conflict Processes." *feminists@law* 9(1).
- McAdam, Doug. 1986. "Recruitment to High-Risk Activism: The Case of Freedom Summer." *American Journal of Sociology* 92(1):64–90.
- McDoom, Omar Shahabudin. 2014. "Antisocial Capital A Profile of Rwandan Genocide Perpetrators' Social Networks." *Journal of Conflict Resolution* 58(5):865–893.
- Medic, Nevena. 2016. "It Was the Human Thing to Do": Mapping the Helping Hand across the Ethnic Divide: The Role of Komšiluk in Rescuing during the Bosnian Conflict PhD thesis Central European University. Master's Thesis.
- Mertus, Julie, Jasmina Tesanovic, Habiba Metikos, Rada Boric, Dubravka Ugrešić, Marieme Helie-Lucas and Judith Mayotte. 1997. *The Suitcase: Refugee Voices from Bosnia and Croatia*. University of California Press.
- Metternich, Nils W., Cassy Dorff, Max Gallop, Simon Weschle and Michael D. Ward. 2013. "Antigovernment Networks in Civil Conflicts: How Network Structures Affect Conflictual Behavior." *American Journal of Political Science* 57(4):892–911.
- Monroe, Kristen R., Michael C. Barton and Ute Klingemann. 1990. "Altruism and the Theory of Rational Action: Rescuers of Jews in Nazi Europe." *Ethics* 101(1):103–122.
- Monroe, Kristen Renwick. 1996. *The Heart of Altruism: Perceptions of a Common Humanity*. Princeton University Press.
- Mueller, John. 2000. "The Banality of "Ethnic War"." *International Security* 25(1):42–70.
- Oliner, Samuel P. and Pearl M. Oliner. 1988. *The Altruistic Personality: Rescuers of Jews in Nazi Europe*. Simon and Schuster.
- Paulsson, Gunnar S. 2002. *Secret City: The Hidden Jews of Warsaw, 1940-1945*. Yale University Press.
- Pedahzur, Ami and Arie Perliger. 2011. *Jewish Terrorism in Israel*. Columbia University Press.
- Perliger, Arie and Ami Pedahzur. 2011. "Social Network Analysis in the Study of Terrorism and Political Violence." *PS: Political Science & Politics* 44(01):45–50.
- Petersen, Roger D. 1993. "A Community-Based Theory of Rebellion." *European Journal of Sociology / Archives Européennes de Sociologie / Europäisches Archiv für Soziologie* 34(1):41–78.
- Petersen, Roger D. 2001. *Resistance and Rebellion: Lessons from Eastern Europe*. Cambridge University Press.
- Putnam, Robert D. 2000. *Bowling Alone: The Collapse and Revival of American Community*. Simon and Schuster.
- RDC. 2010. *Signalj Srca*. Sarajevo: Research and Documentation Center.
- Rice, Tom W. and Jan L. Feldman. 1997. "Civic Culture and Democracy from Europe to America." *The Journal of Politics* 59(4):1143–1172.

- Satyanath, Shanker, Nico Voigtländer and Hans-Joachim Voth. 2017. "Bowling for Fascism: Social Capital and the Rise of the Nazi Party." *Journal of Political Economy* 125(2):478–526.
- Scacco, Alexandra. 2008. "Who Riots? Explaining Individual Participation in Ethnic Violence." *Unpublished manuscript, New York University* .
- Sémelin, Jacques, Claire Andrieu and Sarah Gensburger. 2014. *Resisting Genocide: The Multiple Forms of Rescue*. Oxford University Press.
- Shesterinina, Anastasia. 2016. "Collective Threat Framing and Mobilization in Civil War." *American Political Science Review* 110(03):411–427.
- Soto, Christopher J. and Oliver P. John. 2017. "Short and Extra-Short Forms of the Big Five Inventory–2: The BFI-2-S and BFI-2-XS." *Journal of Research in Personality* 68:69–81.
- Staniland, P. 2012a. "Between a Rock and a Hard Place: Insurgent Fratricide, Ethnic Defection, and the Rise of Pro-State Paramilitaries." *Journal of Conflict Resolution* 56(1):16–40.
- Staniland, Paul. 2012b. "States, Insurgents, and Wartime Political Orders." *Perspectives on Politics* 10(02):243–264.
- Staub, Ervin. 1993. "The Psychology of Bystanders, Perpetrators, and Heroic Helpers." *International Journal of Intercultural Relations* 17(3):315–341.
- Tammes, Peter. 2007. "Survival of Jews during the Holocaust: The Importance of Different Types of Social Resources." *International Journal of Epidemiology* 36(2):330–335.
- Tec, Nechama. 1986. *When Light Pierced the Darkness: Christian Rescue of Jews in Nazi-Occupied Poland*. Oxford University Press.
- Toal, Gerard and Carl T. Dahlman. 2011. *Bosnia Remade: Ethnic Cleansing and Its Reversal*. Oxford University Press.
- Toft, Monica Duffy. 2010. *The Geography of Ethnic Violence: Identity, Interests, and the Indivisibility of Territory*. Princeton University Press.
- Tokača, Mirsad. 2012. *Bosanska knjiga mrtvih/The Bosnian Book of the Dead*. Sarajevo: Istraživačko dokumentacioni centar Sarajevo.
- Valentino, Benjamin A. 2004. *Final Solutions: Mass Killing and Genocide in the 20th Century*. Cornell University Press.
- Varese, Federico and Meir Yaish. 2000. "The Importance of Being Asked: The Rescue of Jews in Nazi Europe." *Rationality and Society* 12(3):307–334.
- Weidmann, Nils B. 2015. "On the Accuracy of Media-Based Conflict Event Data." *Journal of Conflict Resolution* 59(6):1129–1149.
- Wellman, Barry and Scot Wortley. 1990. "Different Strokes from Different Folks: Community Ties and Social Support." *American Journal of Sociology* 96(3):558–588.
- Wood, Elisabeth Jean. 2003. *Insurgent Collective Action and Civil War in El Salvador*. Cambridge Studies in Comparative Politics New York: Cambridge University Press.
- Wood, Elisabeth Jean. 2008. "The Social Processes of Civil War: The Wartime Transformation of Social Networks." *Annu. Rev. Polit. Sci.* 11:539–561.
- Woodward, Susan L. 1995. *Balkan Tragedy: Chaos and Dissolution after the Cold War*. Brookings Institution Press.
- Zech, Steven T. and Michael Gabbay. 2016. "Social Network Analysis in the Study of Terrorism and Insurgency: From Organization to Politics." *International Studies Review* 18(2):214–243.