

Geopolitics, History, and International Relations 9(1) 2017, pp. 128–175, ISSN 1948-9145, eISSN 2374-4383

DIVIDED BY MEMORIES? BELIEFS ABOUT THE PAST, ETHNIC BOUNDARIES, AND TRUST IN NORTHERN IRAQ

JENS RYDGREN

jens.rydgren@sociology.su.se Department of Sociology, Stockholm University (corresponding author) DANA SOFI Department of Sociology, Stockholm University MARTIN HÄLLSTEN Department of Sociology, Stockholm University

ABSTRACT. This paper examines beliefs about the past across ethnic groups in conflict ridden Northern Iraq, and the extent to which such beliefs are associated with interethnic trust and political trust. Using individual-level survey data (N=1,440) collected in 2010 and 2011 in the cities of Erbil and Kirkuk, our quantitative analyses show that beliefs about the past are strongly structured by ethnicity, but that the ethnic composition of friendship networks is an important moderating factor. We tended to find stronger group-specific uniformities in beliefs in the more violent and polarized Kirkuk, where group boundaries are more pronounced both in a cultural and a structural sense. Our results also indicate that beliefs about the past play a significant role in interethnic trust as beliefs about the past connected to particular ethnic groups are often associated with trust in these groups. Beliefs about the past are also shown to be associated with trust in political institutions.

Keywords: belief; past; ethnic boundary; trust; Northern Iraq

How to cite: Rydgren, Jens, Dana Sofi, and Martin Hällsten (2017), "Divided by Memories? Beliefs about the Past, Ethnic Boundaries, and Trust in Northern Iraq," *Geopolitics, History, and International Relations* 9(1): 128–175.

Received 19 August 2016 • Received in revised form 5 September 2016 Accepted 6 September 2016 • Available online 25 September 2016

Introduction

Different groups in a society often have opposing interpretations of history, which can create conflict, in particular when they are associated with claims about the legitimate distribution of rights, resources, and status, or when outgroups are blamed for negative events. There is an abundance of examples showing how majority groups suppress minorities' collective memories, and a significant part of identity politics is about claiming recognition of group-specific interpretations of historical events that run counter to the hegemonic version of history. For this reason, beliefs about the past are important for the study of cohesion versus conflict.

The concept of collective memory describes the process of how groups remember together (Halbwachs 1992; see Olick and Robbins 1998 for a discussion about definitions). In its broadest definition, collective memory includes commemorations such as public celebrations and rituals, the production of knowledge about history (through, e.g., school curricula and mass media), the canonization of literature and other cultural artifacts, and informal memory work going on in personal networks. It is generally argued that collective memories operate as a unifying force in human societies (Durkheim 1995), creating solidarity and cohesion within groups. In this paper, we focus on a smaller subset of collective memory: beliefs about past events and how such beliefs are structured by ethnicity and social network compositions. As other beliefs, beliefs about the past are a strong and immediate precondition for action (Rydgren 2007; 2009), and as such they may be highly consequential for intergroup relations.

The case in question involves the two cities Erbil and Kirkuk in Northern Iraq. In this context, ethnicity is the most salient group classification. Party politics and civil society are organized along ethnic lines (e.g., Wimmer 2002; Rydgren & Sofi 2011). Ethnic group belonging is an important determinant of the allocation of risks and resources. Historically, different groups have held the upper hand in the area during different periods. The four major ethnic groups in the area are the Kurds, Arabs, Turkmens, and Assyrians, and each has had a Golden Age of their own that only rarely overlaps with that of the others.

In both cities under study here, interethnic relations have been highly conflict-ridden and, in Kirkuk in particular, often violent since the fall of the Baath regime in 2003. Previous studies have revealed that interethnic trust and outgroup tolerance are relatively low in both cities, and especially so in the more violent and polarized Kirkuk (Rydgren et al. 2013). As will be further discussed below, beliefs about the past may be important for understanding trust and tolerance, especially in heterogeneous settings (e.g., Rothstein 2000; Rydgren 2007). Trust is usually based on perceived trustworthiness (e.g., Hardin 2002), which is often assessed through the lens of memories of, or

beliefs about, individual or collective behavior in the past. To the extent that ingroups hold negative beliefs about outgroups, blaming them for negative events in the past, intergroup trust may be difficult to achieve. As a consequence, ethnic reconciliation may be more difficult to attain since ethnic conflict in such situations is more likely to be recapitulated and to persist over generations.

Relying on individual-level survey data collected in 2010 and 2011 in Erbil and Kirkuk, we will map differences and similarities in attitudes toward historical events in order to further our understanding of social cohesion in the Northern Iraqi society. In the first half of the paper we will briefly outline why we expect to find group-specific uniformities in beliefs about the past, why ethnicity is a relevant group classification to consider in our area of study, and why we may expect larger differences in the interpretation of history across groups in a more violent and polarized context. We then discuss why beliefs about the past may be important for understanding interethnic trust in a multiethnic society. Based on the theoretical section, we formulate five hypotheses, which are tested in the second half of the paper, in which we discuss data and methods and present and discuss the results.

Collective Memory and Beliefs about the Past

Research on collective memory has since Maurice Halbwachs (1980; 1992), a student of Durkheim, been based on a few basic presumptions: (1) that memory is always "socially framed since groups determine what is 'memorable' and how it will be remembered" (Halbwachs 1992: 182), indicating (2) that there are systematic differences between groups in how they recall the past; (3) that it is the beliefs, interests, and aspirations of *the present* that shape content and form a groups' collective memories (Halbwachs 1992; see also, e.g., Coser 1992; Devine-Wright 2003); and (4) that collective memories are of fundamental importance for the cohesion and collective identity of groups (see, e.g., Saito 2006: 353).

For the purpose of this paper, it is important to emphasize that persons as well as groups have a tendency to modify memories and beliefs about the past in ways that increase their own self-esteem. At a group level there is also pressure to remember and interpret past events in such a way "as to show [the group's] continuity, ... distinctiveness, efficacy, and cohesion" (Roe & Cairn 2003: 66). Often this is done by glorifying the group's past, in order to increase the sense of "ethnic honor" (Weber 1978: 390) that members derive from membership in exclusive ethnic groups; both by selecting events that emphasize positive accomplishments in the past and by embellishing them (Baumeister & Hastings 1997: 283). Yet, when other groups do the same, conflict over how the past should be remembered is likely to flare up.

Before we turn to our empirical case, we will briefly discuss (1) under what conditions we may expect strong group-specific uniformities in beliefs about the past and (2) the ways in which beliefs about the past affect the likelihood for intergroup trust and trust in political institutions.

Group-specific Uniformities in Beliefs about the Past

Group-specific uniformities in memories and beliefs about the past across groups is likely to be affected by culture, social networks, and the salience of social category belonging. Each of these factors varies depending on context, and group-specific uniformities in memories and beliefs about the past also hinge on the extent to which they overlap or constitute cross-cutting dimensions.

Cultures provide collective memory sites that instruct people's beliefs about the past by indicating which events are worth remembering and how they should be interpreted and viewed. For families, for instance, the family photo album and amateur video archive constitute important collective memory sites, as do family traditions, anniversaries, etc. (see Zerubavel 1996: 293). For larger groups (including ethnic groups), commemorations, literature, art, museums, and archives, play the same role. To commemorate a particular event is to constitute it as "an objective fact of the world," to mark it out as a true historical event - as a significant event (Schwartz et al. 1986: 148). Commemoration also serves a legitimizing function by signaling to people that it is legitimate to remember and express this memory in certain fashions. The educational system and the mass media, television in particular, also instruct people's beliefs about the past in patterned ways (Irwin-Zarecka 1994: 155). We may thus assume that we will find stronger group-specific uniformities in memories and beliefs about the past in settings in which ethnic groups, for example, have separate schools and ethnic-specific mass media.

There has been an almost single-minded focus on culture in the sociological literature on collective memory. To be sure, culture is an important factor in creating intersubjective uniformities in memories and other beliefs about the past, but it is far from the only one. We argue that the extent to which groups share similar memories and beliefs about the past is also contingent on the configuration of social networks and the salience of social categories. We may observe belief congruence – including memory congruence – in social networks, because people in a social network tend to share the same information, because of peer effects (i.e., that people influence one another), and because of homophily (i.e., that people who share similar beliefs are more likely to form relationships with one another) (see, e.g., Bar-Tal 1990; Burt 2005; Huckfeldt & Sprague 1995; Zuckerman 1996). Social networks tend to be ethnically homogeneous (e.g., McPherson et al. 2001), and, in general, homogeneous social networks reinforce group-specific uniformities in collective memories and beliefs about the past. However, in ethnically heterogeneous social networks, beliefs about the past are likely to be less structured by ethnicity. When a large proportion of an individual's friends are from a specific ethnic outgroup, we might even expect their memories and beliefs about the past to be more similar to the typical memories within that group than to the typical ingroup memories.

Social category belonging is important primarily because it is a vector for social identity and because it influences the ways in which information is validated. Because people's social identities largely derive from their social category membership, people tend to view such membership positively to enhance their self-esteem (Taifel 1981). The extent to which social category belonging promotes intersubjective uniformities in beliefs about the past depends on two main factors: first, the extent to which social category members belong to crosscutting social categories or overlapping social categories (cf. Simmel 1955). When two people are similar across one or two social categories but dissimilar across several others, the intersubjectivity will presumably be rather limited and weak, whereas it will be strong and extensive when two people are similar across a large variety of social categories (cf. Bar-Tal 1990). As will be discussed below, there are reasons to assume relatively few crosscutting social categories in Northern Iraq, the partial exception being religion: civil society is strongly structured along ethnic lines in Northern Iraq, and neighborhood segregation and labor market segmentation are relatively extensive, particularly in Kirkuk (see Rydgren & Sofi 2011). Second, the extent to which social category belonging promotes intersubjective beliefs about the past depends on how salient the social category is for the people involved. Salient social categories are likely to yield stronger identity and therefore stronger and more extensive intersubjectivity. Social categories that have crystallized "around markers that have systematic implications for people's welfare" (Hechter 2000: 98), or are at least believed to have such implications, can be assumed to be of higher salience than other social categories, as are social categories that are difficult to wish away mostly ascribed rather than achieved social categories, that is, social categories one was born into such as ethnic or racial belonging.

Trust and Beliefs about the Past

As discussed above, beliefs about the past are an important factor binding ethnic groups together by facilitating internal cohesion and demarcating ethnic group boundaries. Large differences between groups in an area may undermine the overall cohesiveness of a multiethnic society. As will be discussed, previous research has argued that beliefs about the past may also influence social trust and interethnic social trust.

As has been demonstrated in previous research, people usually trust coethnics more than they trust ethnic outsiders. In this paper, social trust will be defined as "trust in unknown people, that is, people about whom we do not have any information about their trustworthiness" (Herreros 2004: 13). Social trust is strongly influenced by social category belonging (cat) and social network (net), and can be assumed to be particularly strong within catnets (i.e., homogenous networks). To put it in other terms, social trust tends to be considerably stronger within groups than across groups. There is a tendency for people to view unknown others with whom they share social category belonging as more trustworthy than unknown others belonging to outgroups. In other words, shared category belonging is a basis for social, depersonalized trust (Brewer 1979; Kramer 1999; Macy & Skvoretz 1998; Yuki et al. 2005). People also tend to trust unknown others if they know or believe that they are indirectly linked in a social network through mutual friendship or acquaintances (Coleman 1990; Yuki et al. 2005). The reason is that trust is based on predictions about the future based on a person's actions in the past (Hardin 2002), and people tend to have better information about the past actions of those with whom they are interrelated in a social network. The likelihood is thus lower that a person will trust ethnic outgroups than co-ethnics (e.g., Fearon & Laitin 1996), but the probability of this is contingent on how decoupled ethnic groups are (that is, if there are many or few network contacts crossing ethnic boundaries) and how salient ethnic categorization is.

We expect beliefs about the past to be of importance for social trust, interethnic trust in particular. Beliefs about how a particular outgroup acted in the past, as a collectivity, may be mobilized as a proxy, influencing the assessment of trustworthiness of the outgroup in the present (see, e.g., Rydgren 2007; Rothstein 2000). Hence, an important implication is that when one or several ethnic groups dominate political institutions, locally or nationally, beliefs about the past may also influence political trust.

Several factors that may potentially decrease interethnic trust and lower the chance of ethnic reconciliation may interfere with this process (see Rydgren 2007). For one thing, there is the problem of selection bias. For historical events with which to compare the present, people tend to select events that are easily available to memory (Khong 1992: 35; cf. Tversky and Kahneman 1982). Previous studies have shown that vivid information is better remembered and is more accessible than pallid information (Nisbett & Ross 1980: 44–45). Events that are unique and unexpected and that provoke emotional reactions are more easily remembered than other events, in particular morally negative events (Hastie & Dawes 2001: 88). This is important for understanding interethnic social trust and the possibility to ethnic reconciliation in conflict areas, since periods of ethnic conflict are more vivid and hence more likely to be remembered and to enter into the assessment of how to predict the behavior of outgroups in the present than are periods of peace. This holds particularly true for traumatic events, which often conjure up vivid and intrusive memories (Roe & Cairns 2003: 178). Second, as a result of people's (and groups') innate tendency to view their ingroup membership positively, they tend to select beliefs that deny ingroup responsibility for negative events – often by attributing blame to the outgroup – while taking credit for positive events (e.g., Bar-Tal 2000: 78). Hence, groups have an innate tendency to select events that overestimate the occurrence of previous conflict with the outgroup(s), and to interpret (remember) these events in a way that puts blame on the outgroup(s). Needless to say, this may make the emergence of mutual interethnic social trust more difficult and may be a factor that works against ethnic reconciliation in conflict areas.

Polarization

Past and recent history provides several examples of ethnic groups becoming increasingly decoupled from one another during violent conflicts. As noted already by Coleman (1956: 12), as "controversy develops, associations flourish within each group, but whither between persons on opposing sides. People break off long-standing relationships, stop speaking to former friends who have been drawn to the opposition, but proliferate their associations with fellow-partisans." In other words, "homophily becomes more important to tie activation during times of crisis or trouble" (McPherson et al. 2001: 436). Two key mechanisms are pressure from the ingroup on its members to show group loyalty and the risk of being the victim of collective liability by the actions of outgroup members. Hence, in polarized situations, cross-cutting ties may be difficult to sustain because fewer individuals will bridge the gap separating the groups. Even at an early stage of violent conflict, ethnicity is likely to have increasingly acute implications for people's welfare, which means that it is likely to become more salient vis-à-vis other social categorizations. As a result, social relations are likely to become increasingly ethnicized, which is likely to further escalate the conflict. In polarized situations ethnicity is of higher salience and there are fewer network ties crossing ethnic boundaries. For that reason we believe that trust and tolerance will be more tightly linked to beliefs about the past in polarized settings. Polarization also creates a larger information asymmetry between ingroup and outgroup, making it more difficult to assess the trustworthiness of outgroups.

Study Context

Our study is situated in Northern Iraq, in the cities of Erbil and Kirkuk. This region has a long history of complex ethnic relations, and we expect strong group-specific uniformities in memories and beliefs about the past across ethnic groups. Ethnic groups have separate schools (and school curricula) and widely distributed ethnicity-specific mass media, even though the ethnic separation of mass media and the educational system are more pronounced in Kirkuk than in Erbil (Sofi 2009).

The two cities Erbil and Kirkuk, however, also differ significantly with respect to the level of ethnic polarization. During the years since the fall of the Baath regime, political institutions have worked less effectively in Kirkuk than in Erbil, and ethnic relations have been considerably more violent. More than 1,850 people were killed in Kirkuk (population about 850,000) between 2004 and 2008, and more than 6,000 persons were injured in various terrorist actions during the same time period. Many of these attacks were explicitly aimed at ethnic outgroups. In only one year (2005) there were more than 5,000 bombings in Kirkuk, and many of these were explicitly aimed at ethnic outgroups. Moreover, between 2004 and 2008, almost 500 persons were kidnapped, and 149 demonstrations took place (data collected from Kirkuk police force and the Provincial Joint Coordination Centre, PJCC). Not all of these violent acts were ethnically motivated, but the people concerned often interpreted them as interethnic hostility (Sofi 2009). Although the situation improved slightly after 2008, ethnic relations were still violent: between 2009 and November 2012, 199 people were killed in terrorist actions in Kirkuk, over 1000 bombings took place, there were 215 kidnappings, and 264 demonstrations, most of them having ethnic motifs (data collected from the Kirkuk Provincial Joint Coordination Centre, PJCC 2012-11-6).

By contrast, in Erbil (population about 1.5 million) between 2004 and 2008, only about 350 people were killed, about half of them in various terrorist attacks (data collected from the Erbil police force; see also Sofi 2009: Ch. 4). Bombings, missile attacks, and the like were rare in Erbil compared to Kirkuk during the first years after the fall of the Baath regime, as were ethnic demonstrations. Between 2009 and 2012 there were almost no terrorist actions in Erbil, and very little crime related to interethnic tension (interview with the chairman of the Interior and Security Committee in the Iraqi Kurdistan parliament, 2012-10-10).¹

Hence, Kirkuk and Erbil constitute two very different cases. Although both cities are witness to violent conflict between ethnic groups, the situation is much graver in Kirkuk. Because of this, we would expect that ethnicity is more salient in Kirkuk, and that ethnic groups display more closure there, that is, that they are less integrated at the interpersonal level (see Rydgren et al. 2013). All together this suggests that beliefs about the past will differ

more markedly across ethnic groups in Kirkuk than in Erbil and that beliefs about the past will be more strongly associated with interethnic trust. It should also be emphasized that Erbil and Kirkuk differ substantially in demographic composition. In Erbil, Kurds are the dominant majority, with approximately 85% of the population, and there are several minorities (approximately 5% Turkmens, 5% Assyrians, and 5% Arabs and other minorities). In Kirkuk, on the other hand, none of the ethnic groups comprise an absolute majority: the Kurds are the largest group in Kirkuk, accounting for approximately 40–45% of the population; Arabs are the second largest group with approximately 30–35% of the population; Turkmens account for 20–25%, and 1–2% are Assyrians.

To sum up, therefore, there are good reasons to believe that ethnic categorization is generally of high salience in Northern Iraq, but especially so in Kirkuk, which means that we would expect to find ethnically structured beliefs about the past in this context.

Hypotheses

Based on the discussion above, we have formulated two sets of hypotheses (five in total) that will be tested in the coming sections. The first set contains hypotheses related to the question of whether memories and other beliefs about the past differ systematically among the four ethnic groups residing in Erbil and Kirkuk.

H1a. There are mean differences in beliefs about the past across groups.

H1b. Ethnic groups explain a substantial part of variation in beliefs about the past.

H2. Due to the higher level of intergroup tension and violence in Kirkuk, mean differences are more marked and explained variance of ethnic groups is higher there.

H3. Individuals with a high proportion of outgroup friends will have beliefs more similar to those of the specific outgroup.

The second set contains hypotheses that relate to the question of whether beliefs about the past are linked to interethnic social trust.

H4. Beliefs about the past are associated with interethnic social trust. H5. For events that are related to Kurds and Arabs (which dominate political institutions locally or nationally), there is an association between contested beliefs about the past and political trust.

Data and Methods

To study beliefs about the past and their role in interethnic trust, we used a survey design aimed specifically at measuring beliefs about the past. As Schwartz and Schuman (2005: 183) noted, "Collective memory scholarship stands at a turning point. Will the field continue to move in its present direction, emphasizing only 'sites' of memory and their cultural meanings, or will it break free to a new level of inquiry, one that includes individuals' beliefs about the past?" With this study we hope to contribute to the relatively small literature on collective memories/beliefs about the past that builds on individual-level data. More specifically, our questionnaire was inspired by Howard Schuman's (1991) study of collective memories in the Detroit area. Our context of study, Northern Iraq, lacks credible population registers and much infrastructure that we take for granted in Western societies, on which modern survey methods are based. The only viable means to do survey research in such a context is to use a systematic (yet nonrandom) sample, and to distribute questionnaires in person. We developed a paper-and-pen questionnaire adapted to the circumstances, which means that simplicity and parsimony were an absolute necessity. The modus of the data collecting process is not uncomplicated and will be further discussed below, but before that we proceed with a description of the questionnaire.

Measuring beliefs

Beliefs about the past were measured by presenting respondents with a list of pre-specified events. We asked about how important they judged the event or person to be (ranging from not at all important to very important), and whether they viewed the event or person as negative or positive. For the list, we selected events that marked important turning points in Iraq's history, and in particular events for which meaning and significance are likely to be contested. In total, we queried for 20 events (and 20 historical persons, which we will analyze elsewhere). We also asked open-ended questions about the three most pivotal events in Northern Iraq (and in the world) over the past 100 years, which we can use as a reliability test of our list of events. By simple comparison, we found that our choice of events/persons captured most events nominated in the open questions. This is reassuring since open-ended and closed-ended questions about important events tend to produce different response patterns (Schuman & Scott 1987). Importantly, the open-ended questions preceded the closed-ended questions, and so we can expect that priming effects are small (but of course, since the questionnaire is a paperand-pen questionnaire, respondents were able to jump between sections at their own discretion). We can thus rule out the risk that we missed events that really matter. The events can briefly be described as follows:

The dissolution of the Assyrian Empire. The Assyrian Empire was centered in Mesopotamia, at the Tigris, in what today is Northern Iraq. It was established approximately 2000 BCE and ended in 612 BCE. In Assyrian mythology, this period symbolizes the "golden past," and the fall of the Assyrian Empire constitutes a negative turning point in the history of Assyrians (Yana 2008; Minahan 2002: 205–210).

The Muslim invasion: The Islamization of Mesopotamia started in the 7th century CE. In 656, the Muslim Arabs took control of the Sassanid Empire, and in 762, Caliph Abu Jafar Al-Mansur moved the caliphate to the newly founded city of Baghdad. Baghdad remained the center of the Muslim Arab world until the city was destroyed by the Mongols in 1258. (Polk 2005: Ch. 2).

The dissolution of the Ottoman Empire: In 1534, the Ottomans took control of Baghdad, and Turks ruled the area until the end of the First World War, when Great Britain gained control over what is today Iraq, which marked the end of the Ottoman Empire. For Turkmens, the Ottoman Empire represents the "golden past," where they had a privileged position.

The formation of Iraq: Iraq was formed in 1921 out of the two old Ottoman *vilayets* (provinces) of Basra and Baghdad. The Mosul *vilayet* (i.e., the part of Northern Iraq we are studying in this paper) was incorporated in 1926. Iraq was under British mandate until 1932, after which it was declared sovereign but remained in an alliance with the British until 1958. The formation of Iraq is a critical event. Turkmens lost the privileged position they had during the Ottoman Empire, and Kurds lost the relative autonomy they had through their emirates during Ottoman rule (cf. Ciment 1996: 39). Also, the incorporation of the Mosul *vilayet* is a source of ethnic conflict between different ethnic groups, particularly between Kurds and Arabs, which remains unresolved to the present day. Christian Assyrians and Chaldeans, who had been exposed to persecution under Ottoman rule, were relatively positive in their view of the formation of Iraq (see, e.g., McDowall 1997: 146; Atarodi 2003; Marr: 2004: 34–36). Arabs, however, clearly gained the most from the formation of Iraq.

The fall of the Monarchy: The Iraqi Monarchy was overthrown in a military coup in 1958, in which King Faisal II was killed. Iraq became a republic under the rule of Abd al-Karim Quasim, an Iraqi nationalist (Ciment 1996: 77; Marr 2004: 81–86). Although Arabs tended to be favored in public life under the Monarchy, non-Arab groups were represented in Iraq's various authorities and political institutions. Non-Arab groups might therefore romanticize the Monarchy period and to see its fall as a negative turning point (Samanchi 1999: 155, 164; McDowall 1997).

The conflict between the Communist Party and the Turkmens in Kirkuk, 1959: In July 1959 the Iraqi Communist Party, allied with Abd al-Karim Quasim, targeted Turkmens in Kirkuk. In Kirkuk, Kurds dominated the Communist Party, giving the conflict an ethnic charge. Some ten thousands of Turkmens died in the conflict, which was called "massacre" by Turkmens and an "event" by Kurds (Samanchi 1999: 165–173; McDowall 1997: 299, 305, 329–330; Marr 2004: 91–94, Makiya 1998: 237–238). The conflict in 1959 has become a symbol of the victimization of Turkmens in Northern Iraq and is still a source of suspicion for Turkmens in relation to Kurds (Güclü 2007: 77; Samanchi 1999; Özoglu 2004).

The Baath Party comes to power: In 1968 the (pan-)Arab nationalist Baath Party gained power in Iraq through a military coup. Non-Arabic groups and Kurds in particular experienced shrinking degrees of autonomy (Marr 2004: 134–139; Ciment 1996: 59–63). After Saddam Hussein came to power in 1979, (Sunni) Arab nationalism intensified (Marr 2004: Ch. 8).

The Iragi-Kurdish autonomy agreement in 1970–1974: Between 1961 and 1970 Kurds, under the leadership of Mustafa Barzini, waged guerilla war against the Iraqi state with the purpose of establishing an independent Kurdish state. The outcome of the first Kurdish-Iraqi war was the autonomy agreement in 1970, as a result of which an autonomous region consisting of three provinces in Northern Iraq with a Kurdish majority was to be formed within four years (Middle East Watch 1993: 44, 77-78; McDowall 1997: 329-340; Marr 2004: 154–158). The peace plan failed, however, on the contested status of Kirkuk – which the Kurds saw as the capital city in the autonomous region, but which the Baath regime wanted to keep outside of the autonomous region altogether - and on the fact that the Baath regime intensified implementation of the Arabization process described below (Marr 2004: 155; see even Manafy 2005: 87-89). The breakdown of the autonomy agreement in 1974 led to the second Kurdish-Iraqi war, ending in 1975 with total capitulation of the Kurdish side, which forced the KDP into exile in Iran (Polk 2005: 121-122; McDowall 1997: 337; Marr 2004: 157; Manafy 2005: 91-92).

The Arabization process: The Arabization process started in the 1930s but intensified dramatically in the 1980s and 1990s during Saddam Hussein's rule. The purpose of this policy was to establish an Arab majority population in the strategic, oil-rich areas around Kirkuk. Non-Arab peoples were forced to leave their homes, and Arabs took their place (Muhammad 2003: 27; Statistics Iraq 1957, 1977). In total, from 1963 and throughout the 1990s, more than 200,000 Kurds, Turkmens and Assyrians were forced to leave Kirkuk (Human Rights Watch 1993; 2004; Muhammad 2003: 38–48).

The Anfal campaign: The Arabization process reached its peak in the socalled Anfal campaign in 1987 and 1988, when tens of thousands of mostly Kurds, Turkmens, and Assyrians/Chaldeans were killed, and many more were forced to move (Makiya 1993: Ch. 5; cf. Gurr & Harff 1994: 28–30). Anfal is commemorated annually with public ceremonies (Sofi 2009).

The First Gulf War in 1991: After the Iraq-Iran war (1980–1988), Iraq was deeply encumbered with debt, and invaded Kuwait in 1990. The motive was not only to get access to its rich neighbor's resources, but also a nationalist

wish to reincorporate Kuwait, which had been separated from the Basra *vilayet* in 1921 by the British authorities. After diplomatic negotiations failed, an international coalition of troops, led by the US, freed Kuwait from Iraqi forces in 1991.

The popular uprising (Intifada) in 1991: In the aftermath of the First Gulf War, which weakened the Baath regime, Shiite Arabs in the south of Iraq and Kurds in Northern Iraq (organized by the two major parties Patriotic Union of Kurdistan [PUK] and Kurdistan Democratic Party [KDP]) rebelled against the Iraqi government. Although successful at the start, the rebellion was beaten back by the Iraqi army, forcing more than a million people to flee, many of them to Iran and Turkey (Rudd 2004: 29–31; Marr 2004: 241–259). To protect the refugees, the UN created a no-fly zone and "safe haven" in Northern Iraq (*UNSCR* 688, 5 April 1991; Middle East Watch 1993: 24, 28; McDowall 1997: 373–376; Makiya 1998: xxi–xxii; see also Rudd 2004).

The formation of autonomous political institutions in Kurdistan: The protection offered by the UN gave the residents in the no fly zone some autonomy from the Bagdad government. A regional parliament and government dominated by Kurds were created in 1992, located in Erbil. Kirkuk was excluded from the no fly zone, and the question whether it should be included or not in Kurdistan has been highly contested (Anderson & Stansfield 2009; Natali 2005: 163–168). For Arabs it marked the beginning of a process by which they turned from a majority group nationally into a minority group regionally.

Civil war between the PUK and KDP, 1994–1996: Conflict between the two major Kurdish parties, the PUK and KDP, escalated into open violence in 1994. The PUK was building alliance with Iran, leading the KDP to ask for help from Saddam Hussein and the Iraqi Army, which intervened with troops (Ciment 1996: 5; McDowall 1997).

Strategic agreement between the KDP and PUK: In 1998 the KDP and PUK signed the US-mediated Washington Agreement. The parties agreed to share power and to allow neither foreign involvement (Iran, PKK) nor Iraqi troops into the region. However, it took several years until the two parties could cooperate relatively peacefully (Human Rights Watch 2004: 36; Sofi 2009: 21; Makiya 1998: xvi, xvii; Marr 2004: 280). Nonetheless, the Washington Agreement marks the end of open conflict, and is also associated with the lifting of the embargo (the Oil-for-Food Program), which improved the standard of living in the area (*UNSCR* 986, 14.04.1995; Marr 2004: 281–283).

The fall of Saddam Hussein: The US-led invasion of Iraq started on March 20, 2003, and three weeks later Baghdad fell. Saddam Hussein fled but was found eight months later. In December 2006 he was found guilty of crimes against the humanity and was sentenced to death. Saddam was executed a few weeks later (Polk 2005: 169–172; Philips 2005: 133). Some groups lost their privileged position as a result of this event, Sunni Arabs in particular.

Variable definitions and coding

Table 1 summarizes key items in our data; it includes the definition of variables and, when applicable, the wordings of the survey questions they are based on. The events were coded both to variables measuring attitude toward the event (on a five step scale -2 to 2; from negative to positive) and importance of the event (on a similar five step scale -2 to 2; from unimportant to important). Neutral is coded as zero in both these measures.

We measured ethnic network closure based on straightforward questions about the number of friends belonging to ethnic outgroups. From this information, we calculated the proportion of outgroup friends separately for each of the four ethnic groups of Kurds, Arabs, Assyrians-Chaldeans and Turkmens. Ethnic trust is measured as whether the respondent trusted each of the four ethnic groups present in the local context. We measured political trust using multiple items about variety of political and legal institutions, regionally and nationally, as displayed in Table 1. The items are highly correlated, and for that reason we computed additive indexes, which displayed high reliability (Cronbach's $\alpha > .8$).

The survey design also includes standard socioeconomic control variables. Respondents were queried for their occupation in an open-ended question, which was later coded to social class with approximation of the Erikson– Goldthorpe–Portocarero social class scheme (EGP, see Erikson and Goldthorpe 1992). Education was reported in a closed-ended question with four categories. Individuals with missing information on education and social class have been given dedicated missing categories and are included in the analyses. We also query for gender and age, and ethnic categories relevant to Erbil and Kirkuk, as discussed above. To control for age is important as individuals are most susceptible to exposure in adolescence and early adulthood, what Schuman & Scott (1989) call generational imprinting.

Data Collection

The data were collected in Erbil and Kirkuk between September 2010 and June 2011 as a part of ten months of fieldwork in the region. The data collection was led by the second author, who was born in Northern Iraq (from where he emigrated in the early 1990s at the age of 25) and who is fluent in both Arabic and Kurdish and has a working knowledge of other local languages and dialects. In addition to the second author, six other persons were involved in the data collection (two Kurds and one Turkmen in Erbil, and two Kurds and one Arab in Kirkuk). All of them had knowledge of both Arabic and Kurdish. The questionnaire included 82 questions and took approximately 30 minutes to finish. We distributed the questionnaire both in Arabic and Kurdish. The respondents filled out the questionnaires themselves. The interviewer waited in the background and collected questionnaires upon leaving.

As noted above, it was impossible to identify and use a strictly randomized sample as reliable population registers do not exist. For this reason we chose to use a combination of strategic and systematic sampling by distributing the questionnaires at people's homes. The total sample consists of 1,440 completed questionnaires. Of the total sample, 704 were collected in Erbil and 736 in Kirkuk. Since we do not have a sampling frame, we cannot estimate response rates, which consist of not-at-home non-responses and refusals. We only have an indication of the size of the latter factor. We distributed 1,650 questionnaires, and 1,440 of them were returned, which is indicative of a low refusal rate. It is also reassuring that the refusal rate did not differ dramatically across cities: in Erbil 704 of 800 questionnaires were returned, and in Kirkuk it was 736 out of 850.

The selection of distribution venues for the questionnaires was based on knowledge acquired during this and previous fieldworks, and we followed the strategy laid out in Rydgren et al. 2013 in order to achieve as high an overall representativeness as possible with regard to ethnicity and socioeconomic status. More specifically, in Erbil we divided the city into five districts: north (Shorsh, Sefin, and Kani), south (Azadi, Zanvari, Rasti, and Rizgary), east (Setagan, Mamostayan, Runaki, and Badawe), west (Newroz, Tureq, and Nishtiman), and the central part (Tairawe and Bazar). None of these districts are strongly ethnically skewed, in comparison to the composition of ethnic groups in the city in large – which is true for almost all districts in Erbil - but were selected to cover both richer and poorer neighborhoods, as well as central and suburban districts. In addition, we included Ankawe, which is dominated by Assyrians/Chaldeans (officially Ankawe is a separate municipality, but it has become integrated as a city district of Erbil). The questionnaires were distributed in these districts by knocking on people's doors. Most people live in privately owned townhouses or small houses, and apartment blocks are uncommon. The selection of streets or blocks, and within them the selection of houses, was systematic, for example every 2nd, 3rd, or every 4th street/block/house depending on the size of the neighborhood. Systematic sampling is a good way to proxy randomness in settings without a sampling frame, the only caveat being whether the decision rule correlates with some underlying characteristic of the population (which we have no reason to suspect in this case).

In Kirkuk, city districts dominated by one particular group are more common: the northern parts of the city tend to be dominated by Kurds and the southern parts by Arabs, whereas the central parts are more mixed (but occasionally with neighborhoods dominated by Turkmens, Kurds, or Assyrians/Chaldeans). To cover these differences, we distributed questionnaires in all of these areas: north (Rehimawe, Azadi, and Hemam Eli Beg), south (Hey al-wasity, Hey al-qadisiye, Al-urubeh, and Dour al-Amn), and central (Shorije, Imam Qasm, Begler, Almas, Arafa, Domiz, and Al-Tisein). In so doing, we also covered both richer and poorer neighborhoods as well as central and suburban areas. As in Erbil, questionnaires were distributed by knocking on people's doors (in Kirkuk as well, most people live in privately owned townhouses or small houses).

Methods

specific uniformities.

We assess the degree of group-specific uniformities in beliefs about the past across ethnic groups by comparing means in attitudes, but also by the intraclass correlation (ICC) of ethnic variation in beliefs. This is a decomposition of the variance in memories within and between ethnic groups, formally:

 $ICC = \frac{\sigma_{ethnicity}^2}{\sigma_{ethnicity}^2 + \sigma_{individual}^2}$. If the variance is largely within groups, there are small group-specific uniformities. If variance is largely between groups, ethnic groups strongly structure beliefs about the past and there are large group-

We also use regression models to control for confoundedness, to test for network effects on mean attitudes, and to analyze how networks and beliefs about the past are associated with ethnic and political trust. Attitudes are measured with a 5-step Likert scale, and ethnic trust with a 4-category ordinal scale, and so we use ordinal logit regression and present average marginal effects on the highest ranked outcome (most positive attitude or most trusting category). We have conducted Brant tests of the parallel slopes assumptions, and we find minor violations here and there, meaning that coefficient strength varies with levels of the variable, and these violations are concentrated either at higher or lower levels (available from authors on request). However, we find virtually no strong violations (i.e., shifts in effects, effects only present for some levels, or results that would change our conclusions). Political trust is measured as an index of several underlying items scaled 0-10 (see Table 1), and we therefore use OLS regression (under the equidistance assumption, but we also test for varying effects over its distribution). We will present indications of statistical significance, but since we do not have a random sample, these are only indicative.

We should also note that the cross-sectional data cannot be used to assess causality. The results below should be understood as statistical associations rather than effects.² From our theoretical vantage point, however, causality is less important for this study. For example, it makes sense to think about the relationship between contested beliefs about the past and (dis)trust in terms of vicious or beneficial circles that may reinforce one another. If outgroupnegative beliefs about the past are nested in low interethnic trust, for example, ethnic reconciliation may be more difficult to arrive at, since ethnic conflict or tension in such situations is more likely to become reinforced and persist over generations.

Results

Group-specific uniformities in beliefs about the past

Table 2 shows average *attitudes* across ethnic groups in a scale from negative to positive (-2 to +2) for our 20 historical events as well as the ICC (which measures the strengths of group-specific patterns). Table 3 shows the corresponding table, but for the respondents' judged *importance* of the event. The raw data is also displayed in supplementary Table S1. When we describe the results in the following text, these are the sources for our claims, but we will avoid referencing for readability concerns.

As expected, Assyrians view the *dissolution of the Assyrian Empire* much more negatively than do the other groups: 67% of Assyrians view it as a negative event, compared to between 15 and 17% of the other three groups. They also tend to remember it as a more important event. Arabs and Turkmens are most positive about the *Muslim invasion*, whereas Assyrians tend to have a negative view. However, Assyrians also see this as a less important event than do the three other groups. Turkmens are considerably more negative on average toward the *dissolution of the Ottoman Empire*, even though they are not more likely than other groups to remember this as a particularly important event.

Arabs view the *formation of Iraq* much more positively than do the other groups, with Kurds being least positive (but still more positive than negative). Arabs also remember the formation of Iraq as a more important event than do the other groups. When it comes to the *fall of the Monarchy*, there are very small differences across the four groups. All groups are also internally divided: for Turkmens and Assyrians, there are approximately as many who remember this as a positive event as there are who remember it as a negative one. For Kurds, more are positive than negative, but for Arabs it is the opposite. All groups remember it as a relatively important event.

All four groups remember the *conflict between the Communist Party and the Turkmens in Kirkuk* as a negative event, although Turkmens and Assyrians tend to remember it as more negative than the others. Turkmens also view it as a more important event. All four groups remember the *Baath Party coming to power* as a negative event, especially the Kurds and Assyrians. Arabs as a group are significantly less negative compared to the others, but still more negative than positive. More specifically, 19% of Arabs remember this as a positive event, whereas 58% view it as a negative one. There is a tendency for Shiite Arabs to be more negative than Sunni Arabs, but as further divisions make very small group sizes, this is uncertain. For Arabs in general, this event is also significantly more important compared to other groups.

The Iraqi-Kurdish autonomy agreement in 1970–1974 is an event with small differences in attitudes across the four groups. Surprisingly, there is a

tendency on the part of Assyrians to remember it as a more positive event than do the other three groups (even compared to Kurds). It is also generally viewed as an important event. The *Arabization process* is viewed as an extremely negative event by Kurds and Assyrians. Arabs were the least negative, but are still dominantly negative: only 11% of Arabs viewed this as a positive event. The Arabization process, which culminated in the *Anfal Campaign*, is also remembered as a negative event, and here, too, Kurds and Assyrians report considerably more negative attitudes. As for Arabization, only a minority of Arabs and Turkmens remember this as a positive event. However, neither the Arabization process nor the Anfal campaign is viewed as among the more important events.

The *First Gulf War in 1991* is an important, negative event with small differences across groups. A more polarizing event is the *popular uprising* (Intifada) *in 1991*. Kurds in particular, but also Assyrians, view this as strongly positive. Arabs, but also Turkmens were divided on this issue. 34% of Arabs remember it as a positive event, whereas 26% remember it as a negative event. Kurds were more inclined to remember it as an important event; for Kurds this was seen as the most important event on the list.

The formation of autonomous political institutions in Kurdistan is viewed by most as a positive event. As expected, Kurds and Assyrians viewed it most positively. Only 10% of Arabs and 14% of Turkmens viewed this event negatively. The *civil war between the PUK and KDP*, 1994–1996 is remembered as a negative event, something that is particularly strong among Assyrians and Kurds. Somewhat surprisingly, these two groups remember the civil war as a less important event, compared to Arabs and Turkmens. The *strategic agreement between the KDP and PUK* is associated with positive attitudes. There are small differences across the four groups, and the agreement is also deemed to be quite important.

Finally, the *fall of Saddam Hussein* is associated with polarized attitudes. Kurds in particular, but also Assyrians, remember this as a strongly positive event, whereas Arabs in particular but also Turkmens are less positive and much more internally divided. Even though 42% of Arabs remember the fall of Saddam Hussein as a positive event, as many as 35% remember it as a negative one, which indicates that there were groups within the Arab community that lost privilege when his regime was toppled. When we look at Shiite and Sunni Muslims separately, we find that Shiites are more positive, and that Sunni Muslims are very heterogeneous in their attitudes toward the fall of Saddam (not shown). It is also interesting that among Arabs and Turkmens, it is more common to view the fall of Saddam Hussein as a very negative event than as a somewhat negative event, which further strengthens the impression that this is a highly polarized memory.

In sum, given that the 20 events carry inherent ethnic meanings, the ethnic pattern in attitudes that individuals display make sense. Few events come out

unexpectedly. We can see a tendency for clustering in attitudes with Assyrians and Kurds on the one hand, and Turkmen and Arabs on the other holding similar beliefs about the past. This is mainly the case for events related to the Arab majority and Baath party politics (for example the *Muslim invasion*, the *Arabization Process*, the *Anfal Campaign*, the *fall of Saddam Hussein*), but also for events related to Kurdish politics (e.g., the *formation of autonomous political institutions in Kurdistan* and the *civil war between the PUK and KDP*, 1994–1996). There are also events where the Turkmen and Assyrian minority hold similar views (e.g., the *conflict between the Communist Party and the Turkmens in Kirkuk*).

We also find substantial polarization in attitudes (as measured by the ICC), while the degree of polarization regarding the stated importance of events is generally low. There is thus less ethnic group disagreement on which events are important; the disagreement lies mostly in whether the event was good or bad. Table A3 ranks the events by ethnic polarization. We see that two events score 0.2 or higher, and 12 events score 0.1 or higher on the ICC measure. The three most polarized events lay in the distant past and are connected to core identities of specific groups (the Ottoman Empire, the Assyrian Empire, the Islamic invasion). Among the more recent events with high ICC, we found the strongest group-specific uniformities for the Intifada, the fall of Saddam Hussein, the Arabization process, and the civil war. To return to our hypothesized relations, we thus find support for Hypothesis H1.

Tables 2 and 3 also present the intraclass correlations separately for Erbil and Kirkuk, which demonstrates important differences between the cities. For attitudes, we find considerably higher ICC scores for Kirkuk than for Erbil when considering relatively recent events. *The Baath Party coming to power* (0.05 in Erbil vs. 0.19 in Kirkuk), the *Arabization process* (0.08 vs. 0.17), the *formation of political institutions in Kurdistan* (0.05 vs. 0.29), and the *fall of Saddam Hussein in 2003* (0.04 vs. 0.24) are examples of memories that are relatively uncontested in Erbil but highly contested in Kirkuk. However, for two of the very distant events, the dissolution of the Assyrian Empire and the Islamic invasion in the 600s, we find considerably stronger ICC scores for Erbil than for Kirkuk.³

Moreover, when we look at Table 3, we find, with few exceptions, considerably stronger ethnic-specific differences in Kirkuk in the importance ascribed to specific historic events as well. This was certainly the case for events such as the *Baath Party coming to power* (0.02 in Erbil vs. 0.12 in Kirkuk), the *Intifada* (0.11 vs. 0.21), the *formation of political institutions in Kurdistan* (0.02 vs. 0.25), and the *fall of Saddam Hussein* (0.03 vs. 0.19). Therefore, we contend that Hypothesis H2 is also supported: overall, beliefs about the past are more polarized along ethnic lines in Kirkuk than in Erbil.

Table 1 Variable definitions

Variable	Definition
Beliefs about the Past	The respondent is asked to state attitudes and importance of a list of pre-specified events and historical persons. ^a
Attitude toward event #a	Very positive (2), pretty positive (1), neither positive nor negative (0), pretty negative (-1), very negative (-2)
Importance of event # ^a	Very important (2), pretty important (1), neither important nor unimportant (0), rather unimportant (-1), Totally unimportant (-2)
Social Relations	
Proportion outgroup friends	Percentage of friends not belonging to one's own ethnic group, based on own ethnic group and the following items:
	- How many friends do you have, approximately?
	- How many [Kurdish/Arab/Assyrian-Chaldean/Turkmen] friends do you have, approximately?
Proportion outgroup [ethnic] friends	Percentage of friends not belonging to one's own ethnic group – separated by ethnicity of outgroup friends.
Trust and ethnic relations	
Trust in Kurds/Arabs/Assyrian-	In general, can you trust [ethnic group]?
Chaldéans/Turkmen	0 "No, not at all," 1 "No, not always," 2 "Yes, partly" 3 "Yes, entirely"
Trust in National Political	Additive scale (a=.82) of the following statements: How much confidence do you have in the Iraqi
Institutions	Parliament, Iraqi government, and How satisfied are you with the way democracy works in Iraq? Response scale is from 0 to 10.
Trust in Regional Political Institutions	Additive scale (α =.89) of the following statements: How much confidence do you have in the Kurdistan' Parliament, Kurdistan's regional government, Provincial Office in Erbil/Kirkuk, County Council in Erbil/Kirkuk, legal system in Erbil/Kirkuk, police in Erbil/Kirkuk, politicians in Erbil/Kirkuk and How satisfied are you with the way democracy works in Erbil/Kirkuk, Kurdistan Response scale is from 0 to 10.
Background variables	-
City	Kirkuk=1 and Erbil=0
Ethnic group	Kurds (reference), Arabs, Assyrians/Chaldeans, Turkmens
Age	In years
Gender	Female=1, Male=0 (reference)

Social classEducation is missingSocial classHigher-grade professionals, administrators, and officials Lower-grade professionals, administrators, and officials Self-employed Qualified workers (reference) Unqualified workers Students Pensioners Unemployed Social class is missingReligiosityHow religious are you? Very religious (2), not very religious (1), not at all religious (0)	Education	No education, Elementary education (reference), Secondary education, and Post-secondary education,
Lower-grade professionals, administrators, and officialsSelf-employedQualified workers (reference)Unqualified workersStudentsPensionersUnemployedSocial class is missingReligiosityHow religious are you?Very religious (3), pretty religious (2), not very religious (1), not at all religious (0)		Education is missing
Self-employedQualified workers (reference)Unqualified workersStudentsPensionersUnemployedSocial class is missingReligiosityHow religious are you?Very religious (3), pretty religious (2), not very religious (1), not at all religious (0)	Social class	Higher-grade professionals, administrators, and officials
Qualified workers (reference) Unqualified workers Students Pensioners Unemployed Social class is missing How religious are you? Very religious (3), pretty religious (2), not very religious (1), not at all religious (0)		Lower-grade professionals, administrators, and officials
Unqualified workersStudentsPensionersUnemployedSocial class is missingReligiosityHow religious are you?Very religious (3), pretty religious (2), not very religious (1), not at all religious (0)		Self-employed
Yensioners Pensioners Unemployed Social class is missing Religiosity How religious are you? Very religious (3), pretty religious (2), not very religious (1), not at all religious (0)		Qualified workers (reference)
Pensioners Unemployed Social class is missing Religiosity How religious are you? Very religious (3), pretty religious (2), not very religious (1), not at all religious (0)		Unqualified workers
Unemployed Social class is missing Religiosity How religious are you? Very religious (3), pretty religious (2), not very religious (1), not at all religious (0)		Students
ReligiositySocial class is missing How religious are you? Very religious (3), pretty religious (2), not very religious (1), not at all religious (0)		Pensioners
ReligiosityHow religious are you?Very religious (3), pretty religious (2), not very religious (1), not at all religious (0)		Unemployed
Very religious (3), pretty religious (2), not very religious (1), not at all religious (0)		Social class is missing
	Religiosity	How religious are you?
		Very religious (3), pretty religious (2), not very religious (1), not at all religious (0)
Religion What religion do you practice? Christian, Islam (Sunni) Islam (Shiite), Other	Religion	What religion do you practice? Christian, Islam (Sunni) Islam (Shiite), Other
- used only as dummy for Shiite due to collinearity with ethnicity.		- used only as dummy for Shiite due to collinearity with ethnicity.

Note: See Table A1 for descriptive statistics. ^a see Table A2 for complete listing

	Mean attitudes (scale: negative -2 to positive +2)								
	Ethnic group				Context		ICC (ethnicity) by contex		oy context
				Assyrians/					
	Kurds	Arab	Turkmens	Chaldeans	Erbil	Kirkuk	All	Erbil	Kirkuk
Dissolution of the Assyrian Empire	0.20	0.06	0.19	-0.99	0.04	0.07	0.19	0.26	0.12
Islamic invasion in 600s	0.89	1.44	1.36	-0.49	0.57	1.12	0.24	0.29	0.14
Dissolution of the Ottoman Empire	0.66	0.34	-0.73	0.89	0.42	0.53	0.20	0.15	0.27
Formation of Iraq	0.36	1.39	0.84	0.89	0.42	0.74	0.10	0.06	0.12
Fall of monarchy	0.22	-0.13	0.04	0.01	0.16	0.12	0.01	0.02	0.01
Communist Party-Turkmen conflict in Kirkuk	-0.44	-0.28	-0.90	-0.94	-0.47	-0.61	0.06	0.06	0.07
Baath Party came to power	-1.53	-0.58	-1.05	-1.41	-1.42	-1.31	0.13	0.05	0.19
Saddam Hussein came to power	-1.53	-0.65	-0.99	-1.57	-1.46	-1.30	0.12	0.06	0.14
Autonomy agreement	0.67	0.61	0.53	1.27	0.73	0.69	0.05	0.11	0.01
Arabization process	-1.54	-0.58	-1.10	-1.55	-1.51	-1.28	0.14	0.08	0.17
Anfal campaign 1987–1988	-1.61	-0.79	-1.17	-1.73	-1.58	-1.40	0.12	0.06	0.13
Gulf War 1990	-0.44	-0.72	-0.64	-0.62	-0.50	-0.52	0.01	0.03	0.01
Popular rebellion (Intifada)	1.31	0.12	0.43	1.18	1.34	0.81	0.18	0.06	0.25
Formation of Kurdistan parliament and government	1.39	0.63	0.68	1.47	1.32	1.16	0.13	0.05	0.29
Civil War 1994–1996	-1.51	-0.60	-0.92	-1.64	-1.55	-1.18	0.14	0.11	0.15
Strategic agreement between KDP/PUK 1998	0.88	0.42	0.33	1.06	0.65	0.91	0.06	0.05	0.18
Saddam Hussein's fall 2003	1.36	0.15	0.48	1.05	1.22	0.98	0.16	0.04	0.24

Table 2 Stated Attitude to Given Historical Events by Ethnicity and City

Note: ICC refers to the fraction of variance in attitudes due to ethnicity:

ICC = $\frac{\sigma^2 \text{ ethnicity}}{(\sigma^2 \text{ individual } + \sigma^2 \text{ ethnicity})}$

	Mean attitudes (scale: unimportant -2 to important +2)								
	Ethnic group Context						ICC (ethnicity) by context		
		Assyrians/							
	Kurds	Arab	Turkmens	Chaldeans	Erbil	Kirkuk	All	Erbil	Kirkuk
Dissolution of the Assyrian Empire	0.52	0.78	0.51	0.86	0.74	0.43	0.02	0.04	0.01
Islamic invasion in 600s	1.38	1.62	1.51	0.64	1.22	1.44	0.09	0.06	0.13
Dissolution of the Ottoman Empire	1.16	0.81	0.74	0.58	1.07	0.96	0.06	0.10	0.04
Formation of Iraq	1.11	1.66	1.45	1.21	1.21	1.23	0.04	0.01	0.10
Fall of monarchy	0.96	1.00	1.11	0.76	1.11	0.82	0.01	0.01	0.02
Communist Party-Turkmen conflict in Kirkuk	0.17	0.47	0.77	0.12	0.18	0.36	0.05	0.02	0.08
Baath Party came to power	-0.05	0.95	0.44	0.05	0.13	0.12	0.06	0.02	0.12
Saddam Hussein came to power	-0.07	0.89	0.35	-0.26	0.07	0.04	0.06	0.03	0.10
Autonomy agreement	1.10	0.95	1.04	1.30	1.21	0.99	0.01	0.04	0.01
Arabization process	0.08	0.52	0.54	-0.22	0.16	0.14	0.03	0.04	0.04
Anfal campaign 1987–1988	0.21	0.79	0.69	-0.09	0.26	0.34	0.04	0.03	0.06
Gulf War 1990	0.61	1.00	0.92	0.39	0.70	0.63	0.02	0.01	0.06
Popular rebellion (Intifada)	1.71	1.07	1.07	1.26	1.67	1.37	0.15	0.11	0.21
Formation of Kurdistan parliament and									
government	1.68	1.09	1.33	1.37	1.64	1.44	0.08	0.02	0.25
Civil war 1994–1996	-0.11	0.53	0.49	-0.16	0.02	0.03	0.04	0.03	0.07
Strategic agreement between KDP/PUK 1998	1.23	0.68	1.04	0.89	1.04	1.18	0.04	0.01	0.13
Saddam Hussein's fall 2003	1.66	1.10	1.00	1.16	1.53	1.40	0.10	0.03	0.19

Table 3 Stated Importance to Given Historical Events by Ethnicity and City

Note: ICC refers to the fraction of variance in attitudes due to ethnicity:

ICC = $\frac{\sigma^2 \text{ ethnicity}}{(\sigma^2 \text{ individual } + \sigma^2 \text{ ethnicity})}$

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	The Islamic invasion in 600s	Dissolution of the Ottoman domination	Dissolution of the Assyrian Empire	Formation of Iraq	Anfal campaign 1987-1988	Formation of Kurdistan parliament and government	Popular rebellion (Intifada)	Saddam Hussein's fall 2003
Arab ^a	0.131*	-0.143**	0.043	0.351***	0.090***	-0.415***	-0.415***	-0.418***
Turkmen ^a	0.164***	-0.452***	0.038	0.154**	0.054***	-0.425***	-0.308***	-0.306***
Chaldean-Syriac-Assyrian ^a	-0.356***	0.028	-0.247***	0.135**	0.005	-0.103*	-0.115**	-0.168***
Shiite Muslim	0.038	-0.077	0.003	-0.043	0.001	-0.025	0.044	0.022
Arab × Born outside Erbil/Kirkuk	0.07	-0.078	-0.063	0.023	-0.007	0.036	-0.056	0.102
Kirkuk (ref = Erbil)	0.112***	0.095***	-0.022	0.076**	-0.002	-0.016	-0.141***	-0.005
Born outside Erbil/Kirkuk	0.004	0.119***	-0.050*	0.042	-0.008	-0.021	0.064	0.026
Religiosity (0, 3)	0.078***	-0.015	0.008	0.023	0.001	0.032*	-0.002	0.006
Social Relations								
Proportion outgroup Kurdish								
friends	-0.042	0.170*	-0.128**	0.034	-0.034	0.417***	0.117	0.132
Proportion outgroup Arabic								
friends	0.023	-0.081	0.079	0.369***	0.061**	-0.062	-0.351***	-0.069
Proportion outgroup Turkmen								
friends	-0.038	-0.185	-0.001	-0.042	-0.012	-0.032	-0.032	-0.183
friends Proportion outgroup Arabic friends Proportion outgroup Turkmen	0.023	-0.081	0.079	0.369***	0.061**	-0.062	-0.351***	-0.069

Table 4 Ordinal Logistic Regression of Attitudes to Selected Collective Memories on Ethnicity and Social Relations

Proportion outgroup								
Chaldean/Assyrian fr.	-0.411***	0.117	-0.019	-0.212	-0.024	0.189	0.009	-0.08
Age, Gender	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Education	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Occupation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ν	1,328	1,328	1,328	1,328	1,328	1,328	1,328	1,328
\mathbf{R}^2	0.095	0.062	0.062	0.039	0.067	0.062	0.078	0.056
ΔR^2 of Social Relations	0.004	0.003	0.003	0.006	0.006	0.009	0.006	0.003

Note: coefficients describe the average marginal effect that Pr(dependent variable = max); dependent variable is scaled in five steps from negative to positive.

* p<0.05, ** p<0.01, *** p<0.001

^aReference group is Kurds.

Historical Events, Ethnicity, and Social Networks

We now use multivariate analyses first to scrutinize whether the observed ethnic differences are subject to confounding due to city (Erbil vs. Kirkuk), birth place, religiosity, and standard socioeconomic characteristics, and second, to what extent the composition of friendship networks influences beliefs about the past, as is suggested in Hypothesis 3. We also include measures of ethnic outgroup friends separated by specific ethnicity. A supplementary analysis in Table S2 shows that Kurds have the lowest share of outgroup friends, which is natural since they are the largest group (cf. Blau 1977). Individuals in Kirkuk have slightly more ethnically homogeneous friendship networks, and so have individuals born outside of the region. Religious individuals also tend to have more ethnically homogeneous friendship networks (see Table S2).

For the analyses, we have chosen eight selected events with ICC scores above 0.1 (see Table A3). Generally, the ethnic group differences displayed in Table 2 are confirmed in Table 4. With controls, the same ethnic pattern emerges. We now examine network associations with beliefs about the past.

The first column in Table 4 analyses the evaluation of the *Islamic invasion*. Arabs and Turkmens were the most positive about this event, whereas Assyrians-Chaldeans were very negative. For the networks, non-Assyrians with many Assyrian friends display a similarly negative attitude. We also see that religiosity is positively associated with the evaluation of the Islamic invasion, and that individuals residing in Kirkuk tend to remember this event in more positive ways.

Turkmens are the most negative about *The Dissolution of the Ottoman Empire*, but having many Turkmen friends is not associated with a more negative attitude (even though the coefficient is negative, it would not have been significant in a random sample). Instead, having many outgroup Kurdish friends is associated with a more positive attitude. Assyrians are most negative about the *dissolution of Assyrian Empire*. Here, too, we find social network associations, even if it is the proportion of Kurdish friends among non-Kurds that seems to matter.

Also for the *formation of Iraq* we find important network associations: the higher the proportion of Arabic friends among non-Arabs, the more positively they remember the formation of Iraq. In addition, individuals residing in Kirkuk tend to remember the formation of Iraq more positively. In the fifth column, we find strong network associations in that non-Arabs with a high proportion of Arabic friends remember the *Anfal Campaign* less negatively. Arabs and Turkmens are the least positive about the *formation of political institutions in Kurdistan*, but non-Kurds with a high proportion of Kurdish friends remember this more positively.

Arabs and Turkmens are also the least positive about the *Intifada*, and non-Arabs with a high proportion of Arab friends remember the Intifada considerable less positively. We also find that individuals living in Kirkuk are less positive to the Intifada.

Finally, in the last column, all except the Arabs were *very* positive about the *fall of Saddam Hussein in 2003* (also see Table S1). Here we find no influence of network properties, which indicates that variation in the evaluation of this event mainly falls along ethnic lines.⁴

To summarize the findings in Table 4, we see that the ways in which important historic events are remembered and viewed are structured by ethnicity, and we also find strong support for Hypothesis H3: friendship network composition is highly related to uniformities in beliefs about the past. Having a high proportion of friends within a specific ethnic outgroup is often associated with a greater likelihood for memory congruency with that particular group. Our structural variables explain up to 20% of the variation in attitudes toward the events. Social relations account for a smaller part of this structure, with up to 10% of the explained variance. Strong ethnic differences contribute most to explained variance.

Trust in Northern Iraq and Beliefs about the Past

Next, we study the effect of beliefs about the past on interethnic trust. Since several of the historical events that we will use as independent variables have high intercorrelations, we have collapsed them into simple additive scales. The upper panel of Table A4 shows the resulting (synthetic) events; the lower panels show components and their intercorrelations. Attitudes toward the Anfal campaign and the civil war were highly correlated, as were attitudes toward the formation of political institutions in Kurdistan, the popular rebellion, and the fall of Saddam Hussein in 2003. The scale reliability coefficients are fair: 0.69 and 0.65.

We regressed trust in each of the four ethnic groups on the same independent variables as in Table 4, with the addition of beliefs about the past. Table 5 shows that Arabs and Turkmens report less trust in Kurds than do the other two groups. We also find significant associations between beliefs about the past and trust in Kurds. All other factors being equal, those who view the formation of political institutions in Kurdistan, the Intifada, and the fall of Saddam Hussein as positive events are more trusting of Kurds, as are those who remember the Islamic invasion in the 600s as a positive event. In line with previous research (Rydgren et al. 2013), we also find strong positive associations between having Kurdish friends and trusting Kurds.

	Trust in Kurds	Trust in Arabs	Trust in Turkmens	Trust in Assyrians/ Chaldeans
Arab ^a	-0.227***	0.191***	0.126***	0.024
Turkmen ^a	-0.176**	0.134***	0.294***	0.077*
Chaldean-Syriac-Assyrian ^a	-0.033	0.123***	0.108***	0.297***
Shiite Muslim	-0.026	0.026	0.006	-0.029
Arab × Born outside Erbil/Kirkuk	0.062	0.007	-0.012	0.019
Kirkuk (Ref = Erbil)	0.068*	-0.002	-0.045***	0.098***
Born outside Erbil/Kirkuk	-0.069	-0.007	-0.01	-0.001
Religiosity (0, 3)	0.017	-0.008	0.001	0.005
Beliefs about the Past				
Islamic invasion in 600s	0.029**	0.014***	0.007	-0.008
Dissolution of Ottoman Empire	0.004	-0.008*	-0.008*	0
Dissolution of the Assyrian Empire	0.002	-0.002	-0.002	-0.007
Formation of Iraq	0.005	0.006	-0.002	-0.002
Anfal, civil war (a=0.69)	-0.001	0.009	0.011*	-0.020*
Parlament, Intifada, Saddamfall (a=0.65)	0.088 * * *	0.007	0.002	0.031**
Social Relations				
Proportion outgroup Kurdish friends	0.284**	-0.012	-0.111**	0.024
Proportion outgroup Arabic friends	-0.061	0.090*	-0.033	-0.008
Proportion outgroup Turkmen friends	0.026	0.048	0.183***	-0.066
Proportion outgroup Chaldean/Assyrian				
fr.	0.142	0.008	0.033	0.383***
Age, Gender	Yes	Yes	Yes	Yes
Education	Yes	Yes	Yes	Yes
Occupation	Yes	Yes	Yes	Yes
N	1,295	1,291	1,293	1,278
Pseudo-R ²	0.051	0.107	0.121	0.079
ΔR^2 of Beliefs about the Past	0.02	0.008	0.004	0.008

 Table 5 Ordinal Logistic Regression of Ethnic-Specific Trust on Ethnicity, Social Relations and Beliefs about the Past

Note: coefficients describe the average marginal effect that Pr(dependent variable = max); dependent variable is scaled in four steps of trust: 0 "No, not at all," 1 "No, not always," 2 "Yes, partly" 3 "Yes, entirely."

* p<0.05, ** p<0.01, *** p<0.001 ^a Reference group is Kurds.

Kurds are significantly less trusting of Arabs than are the other groups, and Turkmens and Assyrians trust Arabs less than they trust Kurds. Here we also find significant associations between beliefs about the past and interethnic trust. Those who have a positive attitude toward the Islamic invasion are more trusting of Arabs, as are those who are negative about the dissolution of the Ottoman Empire. In addition, we found that individuals with many outgroup friends are more trusting of Arabs.

Kurds are the least trusting of Turkmens, and Arabs and Assyrians report less trust in Turkmens than Turkmens do themselves. Those who feel positively about the dissolution of the Ottoman Empire put less trust in Turkmens, whereas those who are less negative toward the Anfal campaign and the civil war are more trusting of Turkmens. In addition, a high proportion of Turkmen friends is positively associated with trust in Turkmens and, interestingly, a high proportion of Kurdish friends correlates with a negative association, indicating real tension between the groups.

Finally, all other groups except Arabs are less trusting of Assyrians than Assyrians are themselves, and there are no significant differences across the non-Assyrian groups in this respect. Here as well, we find some associations between beliefs about the past and interethnic trust: those who remember the Anfal campaign and the civil war as positive events are less trusting of Assyrians, and a more positive evaluation of the formation of political institutions in Kurdistan, the Intifada, and the fall of Saddam Hussein, is positively associated with trust in Assyrians. Moreover, a high proportion of Assyrian friends is associated with more trust in Assyrians.

To summarize, we have seen that beliefs about the past seem to play a role in interethnic trust, at least at the margin, and that social relations also matter, even though we tend to find relatively small associations in terms of regression coefficients. There is a weak association between events with connotations for specific ethnic groups and trust in that group. It should also be noted that the association between trust and network, and trust and collective memory is largely independent; their regression coefficients virtually change not at all when any of the other factors is included/excluded (not shown). When we analyze the explained variance across models with and without beliefs about the past (\mathbb{R}^2), we see that beliefs about the past explain a great deal of the trust in Kurds (2 percentage points or half of the explained variance), but more moderate levels of trust in other ethnic groups. We thus conclude that Hypothesis H4 is at least weakly supported.

Political Trust and Beliefs about the Past

Table 6 analyzes trust in political institutions. We make a distinction between national and regional political institutions. It is interesting that these are relatively separate dimensions (with a correlation of 0.5). Assyrians tend to place higher trust than the other groups in regional political institutions, and Assyrians and Turkmens are also most trusting of national political institutions. We see important differences across the national and regional dimensions. Individuals in Kirkuk are more trusting of national institutions than those in Erbil, but there is no city difference in terms of regional political trust. We also see differences by beliefs. Those who view the Islamic invasion in the 600s positively are somewhat less trusting of national political institutions, whereas those who view the dissolution of the Assyrian Empire more positively report somewhat more trust in those institutions. However, these two events are not associated with trust in regional political institutions. Rather, we find a relatively strong positive association between a positive view of the formation of Iraq and trust in regional political institutions. The composite factor of formation of political institutions in Kurdistan, the

Intifada, and the fall of Saddam Hussein is associated with trust in both dimensions. In terms of the contribution to explained variance, memories of historical events play an important role, contributing some 1–4 percentage points (up to 45% of explained variance).

Hence, beliefs about the past evidently play a role in trust in political institutions, both regionally and nationally, and we contend that Hypothesis H5 receives at least some limited support. To be sure, a positive view of the formation of political institutions in Kurdistan, the Intifada, and the fall of Saddam Hussein – a set of memories that are clearly related to Kurds (i.e., the ethnic group that dominates regional political institutions) – shows the expected association with trust in regional political institutions. However, from Hypothesis H5 we would have expected a negative association between the formation of Iraq and trust in regional political institutions, not the observed positive association.

	Trust in	
	National	Regional
	Political	Political
	Institutions	Institutions
Arab	-0.019	0.271
Turkmen	0.880**	0.243
Chaldean-Syriac-Assyrian	0.801**	1.319***
Shiite Muslim	0.701*	-0.065
Arab × Born outside Erbil/Kirkuk	0.521	0.216
Kirkuk	0.629***	-0.23
Born outside Erbil/Kirkuk	0.006	0
Religiosity (0, 3)	0.109	0.057
Beliefs about the Past		
Islamic invasion in 600s	-0.195***	0.043
Dissolution of the Ottoman Empire	-0.101	-0.024
Dissolution of the Assyrian Empire	0.163**	0.032
The formation of Iraq	0.095	0.173***
Anfal, Civil war (a=0.69)	-0.012	-0.003
Parliament, Intifada, Saddam's fall (a=0.65)	0.183*	0.439***
Social Relations		
Proportion outgroup Kurdish friends	-0.476	0.002
Proportion outgroup Arabic friends	0.173	0.535
Proportion outgroup Turkmen friends	0.637	0.528
Proportion outgroup Chaldean/Assyrian fr.	-0.287	0.412
Age, Gender	Yes	Yes
Education	Yes	Yes
Occupation	Yes	Yes
N	1,299	1,300
\mathbf{R}^2	0.048	0.090
ΔR^2 of Beliefs about the Past	0.015	0.039

Table 6 Linear Regression of Indices of Political Trust and Quality of

 Ethnic Relations Ethnicity, Social Relations and Beliefs about the Past

Note: Dependent variable is an index based on a scale from 0 to 10. The national and regional dimensions correlate 0.508.

* p<0.05, ** p<0.01, *** p<0.001

Discussion

In this study, we combine the literature on collective memory and the literature on interethnic relations and trust formation. We show that beliefs about the past are ethnically structured in a conflict-ridden multiethnic society, but also that memories of past events are associated with intergroup network relations, and interethnic trust and trust in political institutions. Our research utilizes a quantitative survey to capture variation in beliefs about the past and demonstrates a way to expand studies of collective memory into unexplored fields to shed new light on contested topics. This quantitative approach has rarely been applied before (i.e., Schuman's 1991 study of collective memories in the Detroit area), but our findings indicate that components of collective memory may be measured and can be useful in understanding other quantifiable social phenomena. In this way, collective memory can be incorporated as a general explanatory factor in studies of conflict and social relations, social cohesion, discrimination, and related topics, that is, in situations where we expect belief structures to be important.

Generally, beliefs about the past were relatively strongly structured by ethnicity in both Erbil and Kirkuk. As expected, we tended to find stronger group-specific uniformities in beliefs in the more violent and polarized Kirkuk, where group boundaries are more pronounced both in a cultural and a structural sense. Not the least, structural closure turned out to be highly important. Ethnically homogeneous friendship networks seemed to reinforce group-specific uniformities in memories and beliefs about the past, whereas ethnically heterogeneous networks worked in the opposite direction. Interestingly, our results clearly indicate that having a high proportion of friends belonging to a particular outgroup is often associated with sharing beliefs about the past that are more similar to the memories of that outgroup than to those of the ingroup. Since we work with observational cross-sectional data, we cannot rule out selection effects, that is, that there is something special about individuals who associate with outgroup members, which makes them more open to ethnically non-conforming perceptions about the past. But even an explanation in terms of selection has important implications, because it identifies important variations in how individuals form beliefs about the past. The proportion of outgroup friends in our sample is 34%, which, if openness were the cause, points to a substantial incidence of this reflexive trait. This would then imply that large portions of the population are receptive to altering or accepting different (ethnically non-conforming) beliefs about the past; that is, that there is ground for reconciliation over beliefs about the past. Most likely, however, not all interethnic friendship relations are due to personality traits, such as openness: the composition of the opportunity structure, that is, the degree of ethnic heterogeneity in relevant interaction spaces,

will also play a large role; and it is fair to assume that at least some of the friendship patterns are exogenous.

The finding that network composition is associated with interpretations and evaluations of beliefs implies a potentially dynamic process. Shared understandings of the past can ease intergroup tie formation, and intergroup ties provide a ground for reconciliation over history. This process is likely to operate like any diffusion process, with reinforcement of behavior, tipping points, but can likely go both ways. During stressful times, withdrawal from interethnic relations can create larger discrepancies in beliefs, which may fuel further withdrawal and may devolve into a vicious circle. Likewise, such a model would predict that a sudden increase in interethnic relations or common interpretations of history is likely to spur a positive circle. Our study does not identify what factors drive such processes. Drawing on Rydgren et al.'s (2013) study, we suggest that ethnically heterogonous interaction spaces, which influence interethnic tie formation because they structure interaction patterns, may be particularly important. Not only do they influence interethnic trust by providing contact opportunity, but potentially also by influencing beliefs about the past. Moreover, while beliefs about the past operate at the micro levels, in individual's minds and social interactions, discourse is important, and so collective memory is also a tool that elites, for example, can use. In this way, changes in elite propaganda or other kinds of political mobilization may spur negative circles. But how positive circles come about is less clear. The interaction between networks and belief structures may be "social multipliers" with important implications for trust. The identification of such driving forces of beliefs and social relation is warranted not only for these processes in their own right, but for a whole dynamic system.

From the perspective of group relations and trust formation, this study indicates that beliefs about the past play a significant role in interethnic trust. Historical events with a strong connotation to particular ethnic groups often have an association with trust in these groups. Although beliefs about the past generally contribute relatively modestly to the explained variance in interethnic trust, its explanatory value is approximately the same as that of the contact hypothesis, that is, the proportion of outgroup friends. This indicates the fruitfulness of complementing structural explanations of interethnic trust with cultural factors such as collective memories and beliefs about the past. Beliefs about the past are also shown to be associated with trust in political institutions, especially at the regional level. Taken together, therefore, the results of this study lead us to conclude that we need to take collective memories and beliefs about the past into account in order to more fully understand interethnic relations in multiethnic areas, and to assess the possibility to peaceful coexistence. To be sure, we observed significant and often substantial group-specific uniformities in collective memories across ethnic groups, but there were also substantial overlaps between the groups as

indicated by the variance *not* explained by ethnic groups. Seen in this light, cohesion is actually larger than the fragmentation in the two local communities. In fact, some controversial events tend to divide rather than unite, including wars or conflicts that are lost with high causalities. Wagner-Pacifici and Schwartz (1991) discuss how US commemorations of the Vietnam War are affected by such controversy. The effect could be that the group subject of the event is weakened due to loss of identity or cohesion, or in the more extreme form that the group is split into smaller subgroups. To study this would require a dynamic approach with repeated measurements at a time close to the event. Our approach would be able to capture some of the feedback processes by the association between attitudes toward events and ingroup trust. This requires that the sample be split by ethnic group, which would result in a dramatic drop in sample size and power. We nonetheless find some evidence that among Kurds, positive attitudes toward the Anfal Campaign, the Civil war, the formation of the regional parliament, the Intifada, and the fall of Saddam are correlated with ingroup trust (not shown). For Arabs, Turkmens, and Assyrians, the sample size was too small to facilitate any meaningful analysis.

Beliefs about the past are one of several mechanisms that may explain trust formation. It should be emphasized, however, that we may underestimate the role of beliefs. Only a smaller fluid subset of beliefs may be open to analysis. To the degree that beliefs are fixed, no statistical method (and hardly any method) could grasp them. Beliefs about the past may have crystallized as group identities, which means that they are collinear with ethnic categories. What we grasp is thus what Wimmer (2008: 1009) would call "stabilizing and transformative feedbacks" in his process theory of ethnicity. To unravel the full dynamics of collective memory, we would need to go back in history to capture how ethnic groups evolved. Analyzing a snapshot in the present cannot capture the dynamic role that beliefs have played in group formation and in the process of defining group boundaries throughout history. Beliefs about the past are also only one subset of collective memory, and with the full breadth of the concept, including commemoration, effects might be much more structured by ethnicity and be much more correlated with ethnic and political trust. In light of this, the finding that beliefs about the past are associated with ethnic trust in our recent and cross-sectional data is mainly likely to capture the *reinforcing* role that beliefs play, not the total thrust that beliefs about the past have.

NOTES

1. There are important historical, economic, and demographic differences between the two cities, which at least partly explain why developments have been more problematic in Kirkuk than in Erbil (see Rydgren et al. 2013).

2. For several reasons, a strict panel design, which would have allowed us to address causality more accurately, was not possible to use in the two cities that we study here. Most important, the lack of reliable population registers would have made it extremely difficult to keep track of people.

3. We have conducted a series of simulations to rule out the possibility that the higher ICC scores found in Kirkuk reflect only differences in ethnic group composition in the two cities, with fewer Arabs in Erbil. These simulations consistently show that ethnic group size differences may in the worst cases produce a 50 percent under- or overestimate of the city differences, but the differences we find are much larger than that. In addition, in most cases, the biases are small. These analyses are documented and can be obtained from the authors on request.

4. Ethnic groups also differ systematically in the weight they place on historical events. Table S3 analyses the general importance individuals give to historical events (summarized by an index of stated importance to all listed events), and we find that Arabs followed by Turkmens place the greatest weight on historical events. We also find that individuals born outside the region give them less importance. Interestingly, individuals with many outgroup friends place more weight on historical events – likely because history is much more contested in heterogeneous contact spaces – but non-Kurds with a lot of Kurdish friends place less weight on historical events.

REFERENCES

- Andersen, L., and G. Stansfield (2009), Crisis in Kirkuk: The Ethnopolitics of Conflict and Compromise. Philadelphia, PA: University of Pennsylvania Press.
- Atarodi, H. (2003), Great Powers, Oil and the Kurds in Mosul: Southern Kurdistan/ Northern Iraq, 1910–1925. Lanham, MD: University Press of America.
- Bar-Tal, D. (1990), Group Beliefs: A Conception for Analyzing Group Structure, Processes, and Behavior. New York: Springer.
- Bar-Tal, D. (2000), *Shared Beliefs in a Society: Social Psychological Analysis*. London: Sage.
- Bartlett, F. C. (1995), Remembering: A Study in Experimental Social Psychology. Cambridge: Cambridge University Press.
- Baumeister, R. F., and S. Hastings (1997), "Distortions of Collective Memory: How Groups Flatter and Deceive Themselves," in J. W. Pennebaker, D. Paez, and B. Rimé (eds.), *Collective Memory of Political Events: Social Psychological Perspectives*. Mahwah, NJ: Lawrence Erlbaum, 277–293.
- Belli, R. E., and H. Schuman (1996), "The Complexity of Ignorance," *Qualitative Sociology* 19(3): 423–430.
- Blau, P. M. (1977), *Inequality and Heterogeneity: A Primitive Theory of Social Structure*. New York: Free Press.

- Brewer, M. B. (1979), "Ingroup Bias in the Minimal Intergroup Situation: A Cognitive-motivational Analysis," *Psychological Bulletin* 86(2): 307–324.
- Burt, R. S. (2005), *Brokerage & Closure: An Introduction to Social Capital*. Oxford: Oxford University Press.
- Ciment, J. (1996), *The Kurds: State and Minority in Turkey, Iraq and Iran.* New York: Facts on File.
- Coleman, J. S. (1956), Community Conflict. New York: The Free Press.
- Coleman, J. S. (1990), *Foundations of Social Theory*. Cambridge, MA: Harvard University Press.
- Coser, L. A. (1992), "Introduction," in M. Halbwachs, *On Collective Memory*. Chicago, IL: University of Chicago Press, 1–36.
- Devine-Wright, P. (2003), "A Theoretical Overview of Memory and Conflict" in E. Cairns and M. Roe (eds.), *The Role of Memory in Ethnic Conflict*. Basingstoke: Palgrave.
- Durkheim, E. (1995), *The Elementary Forms of Religious Life*. New York: The Free Press.
- Erikson, R., and J. H. Goldthorpe (1992), *The Constant Flux: A Study of Class Mobility in Industrial Societies*. Oxford: Oxford University Press.
- Fearon, J. S., and D. D. Laitin (1996), "Explaining Interethnic Cooperation," American Political Science Review 90(4): 715–735.
- Fentress, J., and C. Wickham (1992), Social Memory. Oxford: Blackwell.
- Güclü, Y. (2007), The Turcomans and Kirkuk. Xlibris.
- Gurr, T. R., and B. Harff (1994), *Ethnic Conflict in World Politics*. Oxford: Westview Press.
- Halbwachs, M. (1980), The Collective Memory. New York: Harper Colophon Books.
- Halbwachs, M. (1992), On Collective Memory. Chicago: University of Chicago Press.
- Hardin, R. (2002), Trust and Trustworthiness. New York: Russell Sage Foundation.
- Hastie, R., and R. M. Dawes (2001), *Rational Choice in an Uncertain World: The Psychology of Judgment and Decision Making*. London: Sage.
- Hechter, M. (2000), Containing Nationalism. Oxford: Oxford University Press.
- Herreros, F. (2004), *The Problem of Forming Social Capital: Why Trust?* New York: Palgrave.
- Huckfeldt, R., and J. Sprague (1995), *Citizens, Politics, and Social Communication: Information and Influence in an Electoral Campaign*. Cambridge: Cambridge University Press.
- Human Rights Watch (2004), Al-tathir al-erqi fi Kurdistan al-Iraq wa tashih atharihi. Sulemani: PUK Press Bureau.
- Iraq Principal Bureau of Statistics (1987), Statistical Abstracts 1987. Baghdad.
- Irwin-Zarecka, I. (1994), Frames of Remembrance: The Dynamics of Collective Memory. New Brunswick, NJ: Transaction Publishers.
- Khong, Y. F. (1992), Analogies at War: Korea, Munich, Dien Bien Phu, and the Vietnam Decisions of 1965. Princeton, NJ: Princeton University Press.
- Kramer, R. M. (1999), "Trust and Distrust in Organizations: Emerging Perspectives, Enduring Questions," *Annual Review of Psychology* 50(1): 569–598.
- Macy, M. W., and J. Skvoretz (1998), "The Evolution of Trust and Cooperation between Strangers: A Computational Model," *American Sociological Review* 63(5): 638–660.

Marr, P. (2004), The Modern History of Iraq. Boulder, CO: Westview Press.

- Makiya, K. (1998), *Republic of Fear. The Politics of Modern Iraq.* Berkeley, LA, and London: University of California Press.
- Manafy, A. (2005), *The Kurdish Political Struggles in Iran, Iraq and Turkey: A Critical Analysis.* Lanham, MD: University Press of America.
- McDowall, D. (1997), A Modern History of the Kurds. London and New York: I.B. Tauris.
- McPherson, M., L. Smith-Lovin, and J. C. Cook (2001), "Birds of a Feather: Homophily in Social Networks," *Annual Review of Sociology* 27: 415–444.
- Middle East Watch/ Human Rights Watch (1993), *Genocide in Iraq: The Anfal Campaign against the Kurds*. New York: Human Rights Watch.
- Minahan, J. (2002), *Encyclopedia of the Stateless Nations. Ethnic and National Groups around the World.* Vol. I. London: Greenwood Press.
- Muhammad, K. I. (2003), *Muashirat siyasat al-ta'rib wa al-tahjir fī eqlim Kurdistan al-Irāq*. Sulaimaniyah: Maktab al-fikr wa al-taw'iyya.
- Natali, D. (2005), *The Kurds and the State. Evolving National Identity in Iraq, Turkey, and Iran.* New York: Syracuse University Press.
- Nisbett, R., and L. Ross (1980), *Human Inference: Strategies and Shortcomings of Social Judgement*. Englewood Cliffs, NJ: Prentice-Hall.
- Olick, J. K., and J. Robbins (1998), "Social Memory Studies: From 'Collective Memory' to the Historical Sociology of Mnemonic Practices," *Annual Review of Sociology* 24: 105–140.
- Özoglu, H. (2004), Kurdish Notables and the Ottoman State. Evolving Identities, Competing Loyalties, and Shifting Boundaries. Albany, NY: State University of New York Press.
- Philips, D. L. (2005), Losing Iraq. Inside The Postwar Reconstruction Fiasco. New York: Basic Books.
- Polk, William R. (2005), Understanding Iraq. New York: Harper Perennial.
- Rothstein, B. (2000), "Trust, Social Dilemmas, and Collective Memory," *Journal of Theoretical Politics* 12(4): 477–501.
- Rudd, Gordon W. (2004), *Humanitarian Intervention: Assisting the Iraqi Kurds in Operation Provide Comfort, 1991.* Washington, D.C.: Department of the Army.
- Roe, E., and M. Cairn (2003), *The Role of Memory in Ethnic Conflict*. London: Palgrave.
- Rydgren, J. (2007), "The Power of the Past: A Contribution to a Cognitive Sociology of Ethnic Conflict," *Sociological Theory* 25(3): 225–244.
- Rydgren, J. (2009), "Beliefs," in P. Hedström and P. Bearman (eds.), *The Oxford Handbook of Analytical Sociology*. Oxford: Oxford University Press, 72–93.
- Rydgren, J., and D. Sofi (2011), "Interethnic Relations in Northern Iraq: Brokerage, Social Capital, and the Potential for Reconciliation," *International Sociology* 26(1): 25–49.
- Rydgren, J., D. Sofi, and M. Hällsten (2013), "Interethnic Friendship, Trust, and Tolerance: Findings from Two Northern Iraqi Cities," *American Journal of Sociology* 118(6): 1650–1694.
- Saito, H. (2006), "Reiterated Commemoration: Hiroshima as a National Trauma," Sociological Theory 24(4): 353–376.

- Samanchi, E. Qadir (1999), Al-tarikh al-siyasi li-turkman al-Iraq. Bayrut: Dar Alsaqi.
- Schuman, H. (1991), *Detroit Area Study, 1991: Collective Memories*. ICPSR02160v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research.
- Schuman, H., and J. Scott (1987), "Problems in the Use of Survey Questions to Measure Public Opinion," *Science* 236: 957–959.
- Schuman, H., and J. Scott (1989), "Generations and Collective Memories," American Sociological Review 54: 359–381.
- Schwartz, B., and H. Schuman (2005), "History, Commemoration, and Belief: Abraham Lincoln in American Memory, 1945–2001," *American Sociological Review* 70(2): 183–203.
- Schwartz, B., Y. Zerubavel, and B. Barnett (1986), "The Recovery of the Masada: A Study in Collective Memory," *Sociological Quarterly* 27(2): 147–164.
- Simmel, G. (1955), *Conflict and the Web of Group-Affiliations*. New York: The Free Press.
- Smith, A. D. (1986), The Ethnic Origins of Nations. Oxford: Blackwell.
- Sofi, D. (2009), Interetnisk konflikt eller samförstånd. En studie om etnopolitik i Kurdistan/Irak. Stockholm: Stockholm Studies in Sociology 35.
- Tajfel, H. (1981), *Human Groups and Social Categories: Studies in Social Psychology*. Cambridge: Cambridge University Press.
- Tversky, A., and D. Kahneman (1982), "Judgment under Uncertainty: Heuristics and Biases," in D. Kahneman, P. Slovic, and A. Tversky (eds.), *Judgment under Uncertainty: Heuristics and Biases.* Cambridge: Cambridge University Press, 3–20.
- UNSCR 986, 14 April 1995.
- UNSCR 688, 5 April 1991.
- Wagner-Pacifici, R., and B. Schwartz (1991), "The Vietnam Veterans Memorial: Commemorating a Difficult Past," *American Journal of Sociology* 97(2): 376–420.
- Weber, M. (1978), *Economy and Society: An Outline of Interpretative Sociology*. Los Angeles, CA: University of California Press.
- Wimmer, A. (2002), *Nationalist Exclusion and Ethnic Conflict: Shadows of Modernity*. Cambridge: Cambridge University Press.
- Wimmer, A. (2008), "The Making and Unmaking of Ethnic Boundaries: A Multilevel Process Theory," *American Journal of Sociology* 113(4): 970–1022.
- Yana, George V. (2008), Ancient and Modern Assyrians. Bloomington: Xlibris.
- Yuki, M., W. W. Maddux, M. B. Brewer, and K. Takemura (2005), "Cross-Cultural Differences in Relationship- and Group-Based Trust," *Personality and Social Psychology Bulletin* 31(1): 48–62.
- Zerubavel, E. (1996), "Social Memories: Steps to a Sociology of the Past," *Qualitative Sociology* 19(3): 283–300.
- Zuckerman, A. S. (ed.) (1996), *The Social Logic of Politics: Personal Networks as Contexts for Political Behavior*. Philadelphia, PA: Temple University Press.

Appendix A

Table A1 Descriptive Statistics

	All	Kurds	Arabs	Turkmens	Assyrians /Chaldeans	Erbil	Kirkuk
Kurd	0.66					0.68	0.64
Arab	0.10					0.04	0.15
Furkmen	0.13					0.13	0.13
Chaldean-Syriac-Assyrian	0.11					0.15	0.08
Kirkuk	0.52						
Proportion outgroup friends	0.42	0.34	0.62	0.65	0.50	0.43	0.42
Proportion outgroup Kurdish friends	0.10	(0)	0.26	0.34	0.23	0.10	0.09
Proportion outgroup Arabic friends	0.09	0.10	(0)	0.12	0.12	0.08	0.10
Proportion outgroup Turkmen friends	0.07	0.08	0.11	(0)	0.06	0.07	0.07
Proportion outgroup Chaldean/Assyrian fr.	0.04	0.05	0.05	0.06	(0)	0.05	0.04
Frust in Kurds (0, 3)	2.21	2.27	2.01	2.07	2.23	2.16	2.27
Frust in Arabs (0, 3)	1.43	1.16	2.23	1.98	1.74	1.37	1.49
Frust in Turkmens (0, 3)	1.31	1.03	1.61	2.37	1.50	1.42	1.21
Frust in Chaldean-Syriacs-Assyrians (0, 3)	1.75	1.63	1.69	1.79	2.50	1.66	1.84
Frust in national political institutions (0, 10)	3.42	3.23	3.40	3.99	3.89	3.18	3.64
Frust in regional political institutions (0, 10)	4.93	4.78	4.73	4.85	6.06	5.13	4.74
Female	0.35	0.34	0.31	0.43	0.34	0.36	0.33
Age	32.33	31.35	33.03	34.13	35.49	32.51	32.16
No education	0.04	0.04	0.05	0.06	0.00	0.02	0.05
ow education	0.19	0.19	0.26	0.16	0.13	0.12	0.25
Aiddle education	0.28	0.25	0.30	0.34	0.39	0.24	0.33

Higher education	0.46	0.49	0.34	0.37	0.45	0.59	0.33
Missing information on education	0.04	0.03	0.05	0.06	0.04	0.03	0.04
Higher- and middle officials	0.06	0.05	0.13	0.06	0.03	0.06	0.06
Lower official	0.20	0.22	0.10	0.22	0.17	0.27	0.14
Self-employed	0.16	0.15	0.29	0.13	0.13	0.09	0.22
Qualified workers	0.10	0.10	0.05	0.06	0.18	0.13	0.07
Unqualified workers	0.03	0.04	0.02	0.01	0.01	0.04	0.02
Student	0.22	0.26	0.12	0.14	0.12	0.22	0.21
Pensioner	0.03	0.02	0.02	0.02	0.07	0.02	0.03
The unemployed and housewives	0.06	0.05	0.05	0.05	0.12	0.05	0.06
Missing information on occupation	0.15	0.11	0.22	0.32	0.16	0.12	0.19
Born outside Erbil/Kirkuk	0.18	0.17	0.32	0.03	0.27	0.25	0.11
Shiite Muslim	0.06	0.03	0.28	0.10	0.00	0.03	0.09
Religiosity (0, 3)	2.01	2.04	1.86	2.04	1.90	2.08	1.94

Table A2 Complete listings of Collective Memory events and Historical Persons

Events ^a
Anfall campaign 1987–1988
Arabization process
Autonomy agreement
Baath party came to power
Civil war 1994–1996
Dissolution of the Assyrian Empire
Dissolution of the Medes domination
Dissolution of the Ottoman Empire
Gulf War 1990
Fall of monarchy
Popular rebellion (Intifada)
Saddam Hussein came to power
Saddam Hussein's fall 2003
Seifo-Seyfo 1914–1924
Strategic agreement between KDP-PUK 1998
The Islamic invasion in 600s The conflict between Communist party and the Turkmens
Formation of Iraq
Formation of Political inst. in Kurdistan
Formation of the Ottoman Empire

Note: ^a item wording: Below follows a list of important events for Iraq and for this region. Please mark how important the event was, and whether it was positive or negative.

Attitudes follow the scale "very positive" (2), "pretty positive" (1), "neither positive nor negative" (0), "pretty negative" (-1), "very negative" (-2) and importance follow the scale "very important" (2), "pretty important" (1), "neither important nor unimportant" (0), "rather unimportant" (-1), "totally unimportant" (-2).

Event	ICC (ethnicity)
The Islamic invasion in 600s	0.24
Dissolution of the Ottoman Empire	0.20
Dissolution of the Assyrian Empire	0.19
Popular rebellion (Intifada)	0.18
Saddam Hussein's fall 2003	0.16
Arabization process	0.14
Civil war 1994–1996	0.14
Baath party came to power	0.13
Formation of Kurdistan parliament and government	0.13
Saddam Hussein came to power	0.12
Anfal campaign 1987–1988	0.12
Formation of Iraq	0.10
Communist Party-Turkmen conflict in Kirkuk	0.06
Strategic agreement between KDP/PUK 1998	0.06
Autonomy agreement	0.05
Fall of monarchy	0.01
Gulf War 1990	0.01

Table A3 Historical Events Ranked by Ethnic Disagreement

Note: This information originates in Table 2. ^a Ethnic disagreement is measured as to the fraction of variance in attitudes due to ethnicity:

ICC =
$$\frac{\sigma^2 \text{ ethnicity}}{(\sigma^2 \text{ individual } + \sigma^2 \text{ ethnicity})}$$

Table A4 Correlations across Events

	(1)	(2)	(3)	(4)	(5)	(6)
Attitude (-2, 2): The Islamic invasion in 600s	1					
Attitude (-2, 2): Dissolution of Ottoman Empire	-0.1	1				
Attitude (-2, 2): Dissolution of the Assyrian Empire	0.18	0.02	1			
Attitude (-2, 2): Formation of Iraq	0.28	0.02	0.02	1		
Attitude (-2, 2): Anfal, civil war (a=0.69) ^a	0.06	-0.15	0.02	0.06	1	
Attitude (-2, 2): Parliament, Intifada, Saddam's fall (a=0.65) ^b	-0.04	0.29	0.04	-0.11	-0.35	1
^a Attitude (-2, 2): Anfal campaign 1987–1988	1					
Attitude (-2, 2): Civil war 1994–1996	0.53	1				
^b Attitude (-2, 2): Formation of Kurdistan parliament and government	1					
Attitude (-2, 2): Popular rebellion (Intifada)	0.4	1				
Attitude (-2, 2): Saddam Hussein's fall 2003	0.37	0.38	1			

Note: ^{a b} index formed by events displayed in lower panel due to high intercorrelations and high variance inflation (VIF) in regression models. Scale of variables is negative -2 to positive +2.

Supplementary Tables

Table S1

		Prop	ortions	-	Counts						
Name	Ethnic group	Positive	Negative	Balance (Positive/ negative)	SD (×100)	Very Negative	Negative	Indifferent	Positive	Very Positive	
Dissolution of the Assyrian Empire	Arab	16.9	15.4	1.1	100.9	12	8	88	4	18	
	Kurd	27.4	14.9	1.8	101.2	60	71	507	113	128	
	Turkmen	26.9	17.0	1.6	110.2	15	14	96	15	31	
	Chaldean- Syriac-										
	Assy	11.5	66.9	0.2	126.9	77	22	32	5	12	
Dissolution of the Medes Empire	Arab	13.1	9.2	1.4	81.3	7	5	101	5	12	
	Kurd	16.7	37.5	0.4	126.4	263	67	402	54	93	
	Turkmen	20.5	21.1	1.0	101.6	21	15	100	21	14	
	Chaldean- Syriac-										
	Assy	13.5	24.3	0.6	105.6	21	15	92	4	16	
Islamic invasion in 600s	Arab	80.0	1.5	52.0	89.8	2	0	24	17	87	
	Kurd	62.9	15.2	4.1	134.9	86	48	192	102	451	
	Turkmen Chaldean- Syriac-	77.2	4.1	18.9	99.9	4	3	32	20	112	
	Assy	20.3	43.2	0.5	122.6	46	18	54	22	8	
Formation of the Ottoman Empire	Arab	23.1	13.1	1.8	97.6	11	6	83	15	15	
	Kurd	17.7	54.7	0.3	133.0	377	104	242	79	77	
	Turkmen	64.9	7.0	9.3	115.5	8	4	48	19	92	
	Chaldean- Syriac-										
	Assy	12.2	57.4	0.2	125.2	71	14	45	9	9	
Dissolution of the Ottoman Empire	Arab	34.6	14.6	2.4	108.2	8	11	66	19	26	
	Kurd	52.4	17.3	3.0	134.0	90	62	266	104	357	
	Turkmen	16.4	54.4	0.3	133.7	75	18	50	12	16	

	Chaldean- Syriac-									
	Assy	61.5	10.8	5.7	124.0	11	5	41	23	68
Seifo-Seyfo 1914–1924	Arab	2.3	16.2	0.1	62.6	11	10	106	3	0
-	Kurd	10.1	14.2	0.7	79.9	74	51	665	46	43
	Turkmen	9.4	23.4	0.4	89.9	29	11	115	13	3
	Chaldean-									
	Syriac-									
	Assy	4.7	26.4	0.2	88.0	30	9	102	6	1
Formation of Iraq	Arab	80.8	4.6	17.5	97.6	3	3	19	21	84
*	Kurd	48.5	26.1	1.9	144.3	154	75	224	150	276
	Turkmen	65.5	18.1	3.6	138.2	19	12	28	30	82
	Chaldean-									
	Syriac-									
	Assy	67.6	17.6	3.8	129.9	11	15	22	31	69
Fall of monarchy	Arab	26.2	39.2	0.7	130.8	23	28	45	11	23
·	Kurd	40.3	26.4	1.5	141.2	165	67	293	116	238
	Turkmen	33.9	33.3	1.0	141.3	35	22	56	18	40
	Chaldean-									
	Syriac-									
	Assy	41.9	39.2	1.1	150.5	37	21	28	28	34
The conflict between Communist Party										
and	Arab	13.1	30.0	0.4	109.2	25	14	74	6	11
	Kurd	14.9	41.0	0.4	118.9	232	128	388	56	75
	Turkmen	10.5	59.1	0.2	121.7	80	21	52	8	10
	Chaldean-									
	Syriac-									
	Assy	8.8	67.6	0.1	108.9	58	42	35	7	6
Baath party came to power	Arab	19.2	57.7	0.3	121.9	35	40	30	15	10
	Kurd	7.2	82.9	0.1	105.0	710	19	87	30	33
	Turkmen	14.0	70.2	0.2	129.1	96	24	27	11	13
	Chaldean-	1		•	/	20			••	
	Syriac-									
	-	5.4	79.7	0.1	95.4	100	18	22	7	1
	Assy	5.4	17.1	0.1	93.4	100	10	22	1	1

Saddam Hussein came to power	Arab	20.8	59.2	0.4	135.1	48	29	26	13	14
	Kurd	7.7	84.5	0.1	106.5	707	36	68	29	39
	Turkmen	15.8	67.3	0.2	138.4	99	16	29	9	18
	Chaldean-									
	Syriac-									
	Assy	4.7	87.8	0.1	87.4	112	18	11	5	2
Autonomy agreement	Arab	46.9	7.7	6.1	107.4	7	3	59	26	35
	Kurd	54.7	14.6	3.8	130.4	96	32	270	151	330
	Turkmen	46.2	14.6	3.2	119.4	13	12	67	30	49
	Chaldean-									
	Syriac-									
	Assy	75.7	4.1	18.7	96.6	2	4	30	28	84
Arabization process	Arab	10.8	46.9	0.2	112.6	36	25	55	6	8
-	Kurd	5.5	84.2	0.1	99.8	692	48	91	17	31
	Turkmen	9.4	68.4	0.1	117.6	95	22	38	8	8
	Chaldean-									
	Syriac-									
	Assy	5.4	85.1	0.1	87.5	112	14	14	8	0
Anfal campaign 1987–1988	Arab	13.1	56.9	0.2	129.9	57	17	39	5	12
	Kurd	5.8	86.8	0.1	100.4	740	23	65	11	40
	Turkmen	12.3	72.5	0.2	125.5	108	16	26	10	11
	Chaldean-									
	Syriac-									
	Assy	1.4	89.9	0.0	67.6	125	8	13	2	0
				0.0						
Gulf War 1990	Arab	16.2	58.5	0.3	125.8	48	28	33	11	10
Gulf War 1990		16.2 24.2				48 325	28 87	33 254	11 71	10 142
Gulf War 1990	Arab		58.5	0.3	125.8					
Gulf War 1990	Arab Kurd	24.2	58.5 46.9	0.3 0.5	125.8 145.5	325	87	254	71	142
Gulf War 1990	Arab Kurd Turkmen	24.2 17.5	58.5 46.9	0.3 0.5	125.8 145.5	325	87	254	71	142 19
Gulf War 1990	Arab Kurd Turkmen Chaldean-	24.2	58.5 46.9	0.3 0.5	125.8 145.5	325	87	254	71	142
Gulf War 1990 Popular rebellion (Intifada)	Arab Kurd Turkmen Chaldean- Syriac-	24.2 17.5	58.5 46.9 54.4	0.3 0.5 0.3	125.8 145.5 134.0	325 65	87 28	254 48	71 11	142 19
	Arab Kurd Turkmen Chaldean- Syriac- Assy	24.2 17.5 29.7	58.5 46.9 54.4 58.1	0.3 0.5 0.3 0.5	125.8 145.5 134.0 156.2	325 65 72	87 28 14	254 48 18	71 11 21	142 19 23

	Chaldean-									
	Syriac-	= 4.0	0.1	0.0	111.0			24	20	00
	Assy	74.3	8.1	9.2	111.0	6	6	26	28	82
Formation of the Kurdistan Region's	Arab	49.2	10.0	4.9	113.5	8	5	53	25	39
	Kurd	81.5	6.5	12.6	109.7	49	8	106	104	612
	Turkmen	54.4	14.0	3.9	130.0	18	6	54	28	65
	Chaldean-									
	Syriac-									
	Assy	86.5	1.4	64.0	76.0	0	2	18	36	92
Civil war 1994–1996	Arab	9.2	43.8	0.2	116.5	42	15	61	3	9
	Kurd	6.6	83.0	0.1	108.3	704	26	91	11	47
	Turkmen	12.9	62.6	0.2	128.0	85	22	42	9	13
	Chaldean-									
	Syriac-									
	Assy	0.7	87.8	0.0	71.1	113	17	17	1	0
Strategic agreement between KDP-										
PUK 1998	Arab	36.2	8.5	4.3	104.0	8	3	72	20	27
	Kurd	64.8	14.3	4.5	133.7	95	31	183	148	422
	Turkmen	45.0	21.1	2.1	133.7	27	9	58	34	43
	Chaldean-									
	Syriac-									
	Assy	68.9	2.7	25.5	93.5	2	2	42	41	61
Saddam Hussein's fall 2003	Arab	42.3	35.4	1.2	144.3	23	23	29	21	34
	Kurd	80.2	10.0	8.0	123.0	71	17	86	52	653
	Turkmen	56.7	29.8	1.9	167.0	43	8	23	18	79
	Chaldean-									
	Syriac-									
	Assy	73.0	16.9	4.3	138.6	16	9	15	20	88
	Syriac- Assy	73.0	16.9	4.3	138.6	16	9	15	20	88

	(1)	(2)	(3)
Arab	0.292***	0.276***	0.296***
Turkmen	0.300***	0.277***	0.278***
Chaldean-Syriac-Assyrian	0.163***	0.150***	0.149***
Shiite Muslim	0.058	0.055	0.055
Kirkuk	-0.056**	-0.047*	-0.048*
Born outside Erbil/Kirkuk	-0.084***	-0.082***	-0.073**
Religiosity (0, 3)	-0.043***	-0.042***	-0.042***
Arab × Born outside Erbil/Kirkuk			-0.064
Constant	0.464***	0.411***	0.408^{***}
Age, Gender	No	Yes	Yes
Education	No	Yes	Yes
Occupation	No	Yes	Yes
N	1,294	1,294	1,294
Pseudo R-squared	0.156	0.173	0.173

Table S2 Regression of Proportion of Outgroup Friends on Ethnicity and City

Note: * p<0.05, ** p<0.01, *** p<0.001

Table S3 Regression of Index of Stated Importance of Collective Memory Events on Ethnicity and City

	(1)	(2)	(3)	(4)
Arab	0.303**	0.343***	0.267**	0.493***
Turkmen	0.136*	0.111	0.026	0.288**
Chaldean-Syriac-Assyrian	-0.104	-0.153*	-0.200**	-0.04
Shiite Muslim	0.028	0.053	0.034	0.009
Arab × Born outside Erbil/Kirkuk	0.371*	0.283	0.282	0.234
Kirkuk	-0.021	0.043	0.04	0.038
Born outside Erbil/Kirkuk	-0.218***	-0.200**	-0.171**	-0.189**
Religiosity (0, 3)	-0.04	-0.046	-0.029	-0.049*
Social Relations				
Proportion outgroup friends			0.326***	
Proportion outgroup Kurdish friends				-0.469**
Proportion outgroup Arabic friends				0.09
Proportion outgroup Turkmen friends				0.162
Proportion outgroup Chaldean/				
Assyrian fr.				0.115
Constant	1.004***	0.085	-0.034	0.092
Age, Gender	No	Yes	Yes	Yes
Education	No	Yes	Yes	Yes
Occupation	No	Yes	Yes	Yes
N	1,279	1,279	1,246	1,279
Pseudo R-squared	0.037	0.082	0.102	0.087

Note: Index of Stated Importance has a scale reliability $\alpha = .86$.

Table S4 Events ranked by average attitudes and importance Event	Average
Attitudes ^a	
Anfal campaign 1987–1988	-1.48
Arabization process	-1.39
Saddam Hussein came to power	-1.38
Baath party came to power	-1.36
Civil war 1994–1996	-1.36
Communist party–Turkmen conflict in Kirkuk	-0.54
Gulf War 1990	-0.51
Formation of the Ottoman Empire	-0.42
Dissolution of the Medes domination	-0.28
Seyfo 1914–1924	-0.16
Dissolution of the Assyrian Empire	0.05
Fall of monarchy	0.14
Dissolution of the Ottoman domination	0.47
Formation of Iraq	0.58
Autonomy agreement	0.71
Strategic agreement between KDP/PUK 1998	0.78
The Islamic invasion in 600s	0.85
Popular rebellion (Intifada)	1.07
Saddam Hussein's fall 2003	1.10
Formation of Kurdistan parliament and government	1.23
Importance ^b	
Civil War 1994–1996	0.02
Seyfo 1914–1924	0.04
Saddam Hussein came to Power	0.05
Baath Party came to power	0.12
Arabization Process	0.15
Communist Party–Turkmen conflict in Kirkuk	0.27
Anfal Campaign 1987–1988	0.30
Formation of the Ottoman empire	0.39
Dissolution of the Medes domination	0.48
Dissolution of the Assyrian Empire	0.58
Gulf War 1990	0.66
Monarchy fall	0.96
Dissolution of the Ottoman domination	1.01
Autonomy Agreement	1.10
Strategic Agreement between KDP/PUK 1998	1.11
The formation of Iraq	1.22
The Islamic invasion in 600s	1.34
Saddam Hussein's fall 2003	1.47
Popular rebellion (Intifada)	1.51
Formation of Kurdistan parliament and government	1.54

Table S4 Events ranked by average attitudes and importance

Note: ^a scale: negative -2 to positive +2, ^b scale: unimportant -2 to important +2.