Folk Theories of Religious Identity: Evidence from Palestine and the United States

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Abstract

How do people understand what makes a person Muslim, Hindu, or Christian? Social categories are sometimes viewed as natural kinds, where category membership is believed to derive from an underlying biological essence. Current theorizing posits this tendency to be motivated by contextual features such as saliency of categories, or quality of intergroup relations. Accordingly, along with categories such as ethnicity or gender, religious categories may be susceptible to essentialism in contexts of violent conflict along religious lines. An alternative perspective, drawn from the literature that links the spread of aspects of religious cognition to the growth of large-scale cooperative societies, is that religious category membership could be perceived as especially transformable by context and practice. We investigated essentialist reasoning about religious categories heavily implicated in intergroup conflicts in two populations: Palestinians living in the West Bank and Gaza, and citizens of the United States. In four experiments ($N = 2578$), we employed variations of the adoption task to compare how people reason about membership in religious and national categories. Results show that people are less likely to believe that one's religion (compared to one's nationality) is passed on through some type of biological mechanism and so is "fixed at birth". Thus, religious categories seem particularly resistant to essentialist reasoning, even when the social context appears to motivate such reasoning. Implications for understanding essentialist reasoning and the role of religion in intergroup conflict are discussed.

Keywords: intergroup perception, ethnic & religious categories, intergroup conflict, essentialism

Significance Statement

Folk theories of social identities are context-sensitive, varying in the degree to which group membership is essentialized, and viewed as fixed at birth and immutable. Essentialism can have its most pernicious effect in the context of violent intergroup conflict, where people are killed because of who they are rather than what they have done. Here we show that even within the context of a protracted conflict that falls along religious lines, social categories of religion and nationality are essentialized to varying degrees. Specifically, religious categories seem resistant to essentialist reasoning, even when the social context appears to motivate such reasoning. These results have implications for understanding intergroup perceptions in conflict settings, and for developing resolution strategies and designing interventions.

“From the moment of its conception, every fetus permanently carries with it the moral attributes - in the case of the Marranos, the moral depravity - of its parents”

- The inquisitor of Llerena (Goldstein, 2009)

Introduction

For much of the human population, religion plays an important role in determining who they are, their sense of self and collective identity (Atran & Ginges, 2012). Given the importance of religion in the lives of most people around the world, and its implication in intergroup relations, it is important to understand folk theories of religion. how people understand what makes someone, Hindu, Muslim, or Christian? The above quote, describing the way Jewish converts to Christianity (“Marranos”) were viewed during the Spanish and Portuguese Inquisitions, suggests one perspective: that religious identity is caused by some hidden essence passed between parents and their offspring. Indeed, since Allport noted that “a belief in essence” often accompanies categorization of people into ethnic and religious groups (1954), there has been speculation that people essentialize religious social categories, treating them as natural kinds, as they might essentialize ethnicity, race or gender (Chalik, Leslie, & Rhodes, 2017). In this paper we report experiments carried with Palestinians and Americans, investigating the extent to which people use essentialist reasoning when thinking about transformation of religious identity. In doing so we hope to contribute to our understanding of the way religion may be implicated in violent intergroup conflicts and to build on prior work investigating the circumstances under which social categories are more essentialized.

The term “essentialism” has been used to refer to slightly different although overlapping psychological phenomena (Susan A. Gelman & Hirschfeld, 1999). Here the terms refers to a belief that members of a category have a shared nature or essence that is fixed at birth, gives the category its identity, and is responsible for the characteristics of the

members of that category (S. A. Gelman, 2004; Haslam, Rothschild, & Ernst, 2000; Medin & Ortony, 1989; Rothbart & Taylor, 1992). Studies into essentialist beliefs about social categories focus on the stability of characteristics of category members, and the stability of their category membership (Halperin, Russell, Trzesniewski, Gross, & Dweck, 2011; Wohl et al., 2015). We focus on the latter, on the belief that once someone is born an X they will always be an X, and thus the properties of being an X are passed on from parents to offspring by some type of biological mechanism such as “blood” or genes (Dar-Nimrod & Heine, 2011). This type of belief is particularly relevant to intergroup conflict because it implies that members of groups are fundamentally different from each other in deep and unalterable ways. Consequently, even if outgroup members change in their distinctive features and behavior, this is only superficial and temporary, and they will return to their true nature. Moreover, if another group is stereotyped as violent or immoral, a person born to a member of that group will be similarly violent or immoral. Both of these can hinder progress in conflict resolution efforts.

Although essentialist beliefs about biological categories develop from early childhood (S. A. Gelman & Wellman, 1991), there is substantial cultural variation in the type and degree to which social categories become subject to essentialism. Factors ranging from cultural diversity and language to parental beliefs and ideologies influence the type of groups that become targets of these beliefs (Diesendruck & HaLevi, 2006; Kinzler, Shutts, & Correll, 2010; Mandalaywala, Amodio, & Rhodes, 2018; Rhodes & Gelman, 2009; Rhodes, Leslie, & Tworek, 2012). In general, motivational influences are hypothesized to facilitate essentialist reasoning about specific social categories. The need to explain an important aspect of one’s social environment, or justify existing social hierarchies might motivate essentialist reasoning about social categories. For example, Indians from upper social classes are more likely to view class in essentialist terms compared to Indians from lower classes

(Mahalingam, 2003). That is, even though both groups might similarly view their society as hierarchically structured, their relative placement on the social hierarchy causes them to view members of different high and low classes in more or less essentialist terms. When people are motivated to explain culturally relevant observable phenomena, such as power relations between groups or intergroup conflict, repeated explanations that link the phenomena in question to social categories may lead to a belief that members of those social categories share a hidden essence and can be treated as natural kinds (Prentice & Miller, 2007; Rhodes et al., 2012).

Based on such theorizing, one would expect that religious social categories would be good candidates for essentializing. Religious differences can be extremely salient, involving beliefs that seem absurd or offensive to non-believers. These types of differences demand explanation, and such explanations may involve the use of generic “us and them” language that facilitates essentialist reasoning. The motivational account would suggest that religious social categories would be more likely to be essentialized in the context of violent conflict where antagonists are divided along religious lines. Violent intergroup conflicts are often correlated with religious differences, as in the Northern Ireland, the Bosnian war, conflicts in Palestine/Israel or in the Levant, and Muslim/Buddhist disputes in Myanmar.

An alternative proposal comes from research on the role of religion in expansion of large-scale cooperative societies (Henrich et al., 2010). Rather than tending to view religious categories as fixed and immutable natural kinds, people may perceive religion as a relatively flexible identity. Throughout human history religions, particularly universalist religions, have often facilitated the emergence of superordinate identities where people from different tribes or ethnicities become a single group united by their faith. Ethnographic and archeological evidence suggests that religious belief and ritual may have played important roles in assisting the growth of complex society, unifying sub-groups into larger entities (Atran & Ginges,

2012; Norenzayan et al., 2016; Purzycki et al., 2016). Islam and Christianity, religions that believe in a universal, moralizing God, and which have traditions of conversion, may have spread because they offered means of establishing trust and cooperation over previously divided groups by creating new superordinate identities (Cohen, 1971; Rothman, 2006). According to this argument, we might predict that people are relatively unlikely to essentialize religious categories even in the context of violent conflict.

Current empirical evidence does not allow us to distinguish between these two proposals. In one study, Haslam et al. surveyed a sample of 40 undergraduates ($M_{age} = 19.3$) in a conservative midwestern American college, investigating their beliefs about 40 different social categories including two religious ones, ‘Catholics’ and ‘Jews’ (2000). This paper is notable for the empirical demonstration of the need to distinguish between different aspects of essentialist beliefs (i.e., *entitativity*, or a belief that one can make rich inferences about individuals based on category membership and *natural kind-ness*, the degree to which category membership is viewed as natural, relatively stable and immutable). Perhaps because of the restricted sample, the authors avoided making general statements about the extent to which people essentialize specific social categories. Nevertheless, ‘Jews’ are not a particularly salient outgroup involved in conflict with ‘Catholics’, and thus not a good candidate to investigate how conflict might motivate essentialist reasoning about religious categories. In another study, Toosi and Ambady (Toosi & Ambady, 2011) adopted a similar approach, but used eight religious groups in their design. In a sample of 55 undergraduates at Tufts University, they showed that religious categories tended to be regarded as natural kinds (albeit less so than ethnic groups). Still the specific and small sample, and the lack of intense intergroup conflict render the results unfit for testing the two competing hypotheses outlined above.

Three other prior studies offer mixed evidence for the religious transformation argument, although the design of these studies makes it difficult to form firm conclusions. One reports research carried out with Muslim Indonesian students at four different boarding schools (Atran, Magouirk, & Ginges, 2008). All schools were religious but one was notable because of its association with Jemaah Islamiyah (JA), a violent extremist group. Participants were given two versions of the “switched-at-birth” task to measure essentialist beliefs. In one they asked to imagine a child born to Muslim parent but became orphaned, and was adopted by a religious Jewish family. They were asked what the child would be when it grew up - Muslim, Jewish, or something else. The second task was identical but about a child born to Jewish parents but raised by a religious Muslim family. Essentialism here is indicated by the belief that the child would retain the religious identity of its birth parents. Students at the non-JA school typically said that children would obtain the identity of their adoptive parents, but students at the JA-affiliated school tended to believe religion was fixed at birth. This study however, did not compare essentialism of religion with other categories. Thus, while across all schools the level of essentialism was low, this could be due to low levels of essentialist reasoning about social categories in general, rather than about religious categories per se. Yet, the study demonstrated the relevance of biological essentialism to intergroup relations. Essentialist beliefs about religious identity were correlated with beliefs that people deserved to be killed because of their identity or beliefs, and with belief in a duty to fight and kill people of other religions.

Another study examined change of religious affiliation using two types of stories, finding that Israeli participants believed that changing religious identity (‘Jewish’ $\rightarrow$ ‘Christian’) was more likely as a result of environmental changes (when a child was switched at birth) than biological changes (as a result of organ transplants) (Segev, Bergman, & Diesendruck, 2012). Several aspects of this study limit our ability to clearly interpret these

results with respect to our hypotheses. First, stories depicting biological and environmental changes also differed in their believability and familiarity, making it difficult to draw clear inferences. The study involved a relatively benign outgroup category ('Christian' instead of the more contextually relevant 'Muslim'), and it did not compare essentialism of religious categories with other forms of social categorization.

Finally, Chelik, Leslie, and Rhodes (2017) used the switched at birth paradigm to study to study essentialist reasoning about novel and real religious groups (Jews and Christians) among Jewish and Christian 5 and 10 year olds in New York City, and adults on MTurk. They found that 5 year olds in both groups tended to essentialize religions, and the essentialism tended to decrease with age, more markedly for Christians than Jews. They interpreted the cultural distinction in terms of theological differences between Judaism and Christianity, although other explanations are possible (e.g., religious differences may be more salient for minority religions). While this interesting paper suggests that religious categories are good candidates for essentialist reasoning, with contextual inputs translating this potential into essentialist beliefs in adults, the paper again did not compare essentialism of religious categories with non-religious categories. Thus we cannot know whether these two cultural groups differed in terms of their general tendency to essentialize social categories. Perhaps more importantly for our purposes, the benign context does not allow us to address our question of whether people tend to use essentialist reasoning about religious categories in the context of extreme intergroup conflict.

In sum, prior work is limited, in terms of answering our research question, by either the use of small samples, contexts where religious differences may not have been salient or important to an ongoing conflict (Haslam et al., 2000; 2012; Toosi & Ambady, 2011), or the lack of comparisons with other social categories or between ingroup and outgroup categories (Atran et al., 2008; Segev et al., 2012).

The current research extends our knowledge by addressing the research question in the following ways. First, to investigate essentialist beliefs about religious category membership, we compared such beliefs with a similar type of social category: nationality. Like religion, nationality is an inferentially powerful form of social categorization that leads people to acts of self-sacrifice. Indeed, religion and nationality are often treated as analogous phenomena, with nationalism often being described as a type of religion (Brubaker, 2012). Moreover, prior work shows that Indians and Americans both regard nationality to be to a moderate degree fixed at birth (Rad & Ginges, 2018). Second, we studied essentialist beliefs about religious categories heavily implicated in intergroup conflict in two populations: Palestinians living in the West Bank and Gaza, and citizens of the United States.

We were interested in within-population variability in essentialist reasoning about religious versus national categories implicated in intergroup conflict. We used variants of the switched-at-birth task ([Gelman 2004](#); [Atran et al. 2008](#)) which is a categorization task that has the advantages of not requiring awareness of, or the ability to articulate, essentialist beliefs. Instead, it taps subjective category membership by asking subjects to provide a weighted assessment. It is also intuitive and simple, which facilitates its use in cross-cultural field research. Primarily used in studies with children, it has been successfully used with adult populations too (Astuti, Solomon, & Carey, 2004; Atran et al., 2008; Gil-White, 2001; Rad & Ginges, 2018), with studies showing variability in essentialist reasoning using this task. In studies in Mongolia for example, between 59% and 76% of Torguuds respondents believed that a child born to Khazakh parents would retain the identity of its birth parents even if adopted by a Mongol family at under a year old (2001). Conversely, in studies with Vezo adults in Madagascar, participants believed an adopted child would obtain the identity of its adoptive parents and gave nurture justifications for this belief (Astuti et al., 2004). These varying results using the switched-at-birth task with adults reinforce the notion that

essentialist reasoning about social groups is constrained by culture and probably motivated by different social needs (such as to reify existing power relations, or to explain conflict).

In the following we report the results of four experiments using the switched-at-birth task comparing essentialist beliefs about nationality and religion. We begin in Study 1 with an experiment carried out in the West Bank and Gaza, which compared the essentialist beliefs in three with types of switched at birth scenarios that varied in the extent to which they emphasized religious (Jewish/Muslim) category membership. We follow up the results with three experiments in the United States which used a number of different variants of the switched at birth task to compare essentialism of religious and national social categories.

Study 1

In our first study, we investigated essentialist beliefs in Palestinians living in the West Bank and Gaza, focusing on religious categories implicated in that conflict: Jews/Muslims. While we do not regard religion as the cause of the Palestine-Israel dispute, the conflict is divided along religious lines and many violent actors on both sides are religious. Indeed, Israelis and Palestinians seem partly motivated by attachment to sacred lands and sites. For example, two periods of Palestinian violence against Jews (in 1928 and 2001) were sparked by Palestinian concerns about violations of their religious rights in Jerusalem. Palestinians have coped with persistent exposure to violence between Jewish-Israelis and predominantly Muslim-Palestinians for the last century, and have lived under Israeli occupation since 1967. This is an apt setting to examine how essentialist reasoning about religious categories interacts with intergroup conflict.

Method

Design and procedure. We randomly assigned participants to one of three conditions: “Jewish-Muslim”, “Jewish Israeli-Palestinian”, or “Iranian-Palestinian”. In the

“Jewish-Muslim” condition, questions were asked about children moving between the social categories, “Jewish” and “Muslim”. In the “Jewish Israeli-Palestinian” condition, questions were asked about children moving between the social categories, “Jewish Israeli” and “Palestinian”. In the “Iranian-Palestinian” condition, questions were asked about children moving between the social categories, “Iranian” and “Palestinian”. In each condition, we gave participants two scenarios that varied the direction: Ingroup to Outgroup (e.g., a baby born of Muslim parents adopted by Jewish parents) and Outgroup to Ingroup (e.g., a baby born of Jewish parents adopted by Muslim parents). In sum, this study had a 3 Category (religion, mixed, nationality) X 2 Direction (ingroup to outgroup, outgroup to ingroup) mixed model design, with Category as a between-subject factor and Direction as a within-subject factor.

We note that the categories of religion, nation, and ethnicity are somewhat conflated in each condition. It is possible that asking Palestinians to think about the category “Jewish”, would have activated the category “Jewish Israeli”. It is also possible that category “Iranian”, may have activated the category “Shi’a”, as Palestinian Muslims are predominantly Sunni whereas Iranians are Shi’a. Nonetheless, the conditions can be clearly ordered by their linguistic emphasis on religious identity: “Jewish-Muslim” > “Jewish Israeli-Palestinian” > “Iranian-Palestinian”. If people think of religious and national identities as similarly fixed, we would expect essentialism across different conditions to be about the same.

Participants. We embedded our experiment in a survey of a representative sample of 1268 Palestinians (52% female, median age 38) in the West Bank (64% of the sample) and Gaza (36% of the sample). Forty-six percent of respondents were refugees and 52% identified with Hamas or Palestinian Islamic Jihad. The sample of the experiment was determined by the large size of the sample of the survey which was run by the Palestinians Center for Survey and Policy Research. Data analysis began only after data collection was complete.

Task. Participants were told about a newborn child who is orphaned at birth and adopted by another family after one day. The birth parents and the adoptive family belong to different categories (e.g., Jewish or Muslim). Next, participants were asked whether the grown-up child is more likely to belong to the birth parents' category or that of the adoptive parents. For example:

“Suppose a child was born of Muslim parents but became orphaned at birth. When the child was one day old, the child was adopted and raised by a religious Jewish-Israeli family and was never told about its origins. When the child grows up, will the person more likely turn out to be Muslim or Jewish?”

Participants could choose the birth parents' category, the adoptive parents' category, or indicate that they were unsure. Participants responded to two adoption scenarios; the first described an ingroup to outgroup identity transformation (as above), and the second described an outgroup to ingroup identity transformation. We gave participants an essentialism score of “0” if they said the child would have the same identity as the adoptive parents, “.5” if they answered that the child would be neither this nor that or both, and a score of “1” if they answered that the child would have the identity of the birth parents.

Results and Discussion

A mixed model analysis showed a main effect of Category, $F(2, 1185) = 12.463$, $P < 0.0001$, $\eta^2_{\text{partial}} = 0.021$). The more religion was emphasized, the less likely people were to essentialize in the adoption task (See Figure 1). Essentialism scores were lowest for participants thinking about religious identity (Jewish $\leftrightarrow$ Muslim), greater for participants thinking about nationality with religious identity emphasized (Jewish-Israeli $\leftrightarrow$ Palestinian), and highest for participants thinking of transformations in national identity where religion was not highlighted (Iranian $\leftrightarrow$ Palestinian). A planned linear contrast was significant:

$t(954.03) = 4.784, P < 0.0001$, Cohen's $d = .31$. That is, as the emphasis on religion decreased, essentialism increased.

Figure 1. Average essentialism scores of Palestinian participants by experimental condition and direction of transformation. Error bars represent standard errors of mean.

Palestinians showed less essentialism when thinking about the religious identity of a child in the Jewish $\leftrightarrow$ Muslim condition, than when thinking about the nationality of a child in either the Jewish-Israeli $\leftrightarrow$ Palestinian condition ($t(796.52) = 3.12, P = 0.002, d = .22$), or the Iranian $\leftrightarrow$ Palestinian condition ($t(729.32) = 4.92, P < 0.0001, d = .36$). We also found a main effect of Direction, $F(1, 1185) = 7.628, P = 0.006, \eta^2_{\text{partial}} = 0.01$, and a Category x Direction interaction, $F(2, 1185) = 3.497, P = 0.031, \eta^2_{\text{partial}} = 0.006$. As shown in Figure 1, participants tended to give higher essentialism scores when considering ingroup to outgroup adoptions in both nationality conditions but not in the religion condition.

We note that all conditions involved movement between groups that differed in their religious sect, their language, nationality, and ethnicity. What was varied experimentally was the emphasis on religion or nationality in each case. In this sample, people used essentialist reasoning less when thinking about religious transformations than transformations of nationality.

Study 2

In Study 2 we attempted to replicate and extend the findings of Study 1 in the United States. This is a relevant context due to the United States' history of involvement in protracted violent conflict with groups separated along religious lines. Since 2001, the United States has been engaged in conflict against groups like Al Qaida and ISIS, and has embarked on military actions against Muslim majority countries. In the 2016 presidential election campaign, front runners in the Republican primaries (Ted Cruz and Donald Trump) argued for policies such as intensive police scrutiny of "Muslim neighborhoods" and barring non-American Muslims from entering the United States. This provides a suitable setting to empirically examine essentialism of religious categories implicated in intergroup conflict.

Method

Design. We compared responses to the adoption tasks describing transformations in either religion (Christian $\leftrightarrow$ Muslim) or nationality (American $\leftrightarrow$ Pakistani), using a between subjects design. In the Religion condition, we ask about children moving between the social categories "Christian" and "Muslim". In the Nationality condition, we asked about children moving between the social categories "American" and "Pakistani".

Participants. A power analysis showed that to detect a small effect size of $\eta^2_{\text{partial}} = 0.03$ at $\beta = 90\%$ we needed a sample size of 346. Three hundred and fifty participants (169 females, $M_{\text{age}} = 30$) were recruited via MTurk and received a compensation of \$0.50.

Measures and procedure. Participants were invited to participate in a ‘*Short survey on what makes people who they are*’ and responded to two stories using the switched-at-birth paradigm. The scenarios and the response categories were similar to those described in Study 1. In one story participants were told about a child born to outgroup parents (either Pakistani or Muslim depending on the condition) and adopted by an ingroup family (described either as American or Christian) and were asked to indicate whether the child would belong to the birth parents’ category when he grew up, the adoptive parents’ category, or whether they were unsure. In a second story the positions were reversed: participants were asked to decide the identity of a child born to ingroup parents and adopted by an outgroup family. For each question, participants were asked to explain their answer. Although we specifically, asked people ‘do **you** think this is...’, this additional step allowed us to ensure participants in the nationality condition were not interpreting the main question of the study as one about nationality rights and laws of citizenship.

Participants then filled out a questionnaire which asked them to indicate their religion (45% Christian, 40% Atheist or Agnostic, 15% Other), how religious they considered themselves on a 1 (*not at all*) to 7 (*very*) scale ($M = 3.04$, $SD = 2.157$), how often they prayed and attended places of worship on a 1 (*Never*) to 8 (*Once a day*) scale (pray: $M = 3.58$, $SD = 2.64$; attendance: $M = 2.40$, $SD = 1.67$), their level of fusion with their religious ($M = 2.57$, $SD = 1.54$) and national identities ($M = 3.30$, $SD = 1.21$) using the pictorial task (Swann, Gómez, Seyle, Morales, & Huici, 2009); with responses given a score between 1 (separate identities) and 5 (strongly fused identities). We also asked participants to indicate their political party affiliation (41% Democratic, 15% Republican, 44% independent/other), their political ideology on a 1 (*liberal*) to 7 (*conservative*) scale ($M = 3.34$, $SD = 1.62$).

Results and Discussion

Participants were more likely to essentialize nationality than religion (Figure 2). A mixed model analysis with Social Category type (nationality, religion) as the between subject variable and Direction (ingroup to outgroup, outgroup to ingroup) as the within subject variable showed a main effect of Social Category type, $F(1, 346) = 9.872$, $P = 0.0018$, $\eta^2_{\text{partial}} = 0.029$, such that essentialism scores were lower for participants considering religious transformations than for those thinking about transformations of nationality. Neither the main effect of Direction, nor the interaction with Social category type were significant ($F_s < 1$). Measures of fusion with religion, attending a place of worship, frequency of prayers and overall religiosity showed high reliability ($\alpha = 0.89$) and were combined into an overall score of religiosity. This score did not moderate the effect of social category type on essentialist responses, nor did it improve model fit ($F < 1$).

We also conducted a content analysis of justifications for responses to see whether participants were making judgments about the identity of the child, or whether they interpreted the question as one about citizenship of the child. We identified justifications which alluded to citizenship, legal matters or country of residence and migration into a 'Legal/Formal' category. Both authors analyzed responses separately and resolved minor disagreements. Less than 5% of 668 total justifications referred to the formal or legal identity of the children. Responses clearly indicated that participants were making judgments about the child's inner identity.

Figure 2. Average essentialism scores of US participants by experimental condition and direction of transformation. Error bars represent standard errors of mean.

Study 3

The first two studies show similar results: that religion is less likely to be essentialized than nationality, even in the context of longstanding conflict. In both of these studies we used categorical dependent variables and compared the proportion of subjects that viewed membership in categories of nationality or religion as *entirely* fixed at birth. In Study 3, recognizing that people may essentialize to varying degrees, we used a continuous measure that was more sensitive to essentialist beliefs. We also sought to obtain greater clarity about how participants are reasoning about the task. Studies 1 and 2 did not tell us whether religion was less essentialized than nationality due to a belief that one is more fixed at birth than the other, or that religion is more malleable than nationality. Rad & Ginges (2018) report studies showing that across a series of cross-cultural experiments, participants believed that people were able to readily obtain the nationality of parents who adopted them at one day, but also retained a significant amount of the nationality of parents they were born to. In the current

study we tested whether people believe that religion and nationality differ in the extent to which children inherit the identity of birth parents, and the extent to which they may acquire the identity of adoptive parents.

Method

Design. We used the same adoption scenarios as in Study 2, but altered two aspects of the study design. We used a continuous scale to measure degrees of essentialism, and we separated the degree to which category membership was retained from the degree to it was acquired. That is, we varied between subjects whether participants were asked about the extent to which the child would have the identity of the birth parents (measuring the extent to which is fixed at birth and retained in life), or the extent to which the child would have the identity of the adoptive parents (measuring the extent to which the identity is flexible and acquired). As in previous studies, we also varied the direction of the transformation (from or towards the ingroup) between subjects. Thus, the study was a 2 Target Social Category (nationality, religion) x 2 Frame (retain, acquire) x 2 Direction (ingroup to outgroup, outgroup to ingroup) between-subject design.

Participants. Power analysis showed that a sample size of 510 would allow us to detect a small effect size of $\eta^2_{\text{partial}} = 0.02$ (based conservatively on results of Study 2) in a 2 X 2 X 2 design with 90% power at $\alpha = 0.05$. We collected a total of 514 responses of which 505 were analyzable (excluding non-Americans). Subjects were Amazon MTurk workers in the United States (288 female, 5 Other, $M_{\text{age}} = 35.8$) invited to complete ‘*a short survey about what makes people who they are*’ in return for \$0.50.

Measures and procedure. Participants were randomly assigned to one of the conditions in the design described above. We used the same adoption scenario as Study 2, including Muslim/Christian for religious category and Pakistani/American for nationality category. In this study each participant responded to only one version of the scenario,

meaning they read about a child who was born to parents of one category and adopted by parents from another category. They were asked to think about the ways in which they thought the child would be a member of adoptive parents category (e.g., American) or birth parent category (e.g., Pakistani) and type in their thoughts. The goal of this step was to ensure participants spent some time thinking about the scenario. They were then asked, ‘*All things considered to what extent do you think the adopted child is American?*’ and respond on a continuous scale with 0% (e.g., Not American at all) and 100% (e.g., Completely American) on the opposing poles. Demographics (religion, age and gender) and attention check questions concluded the survey.

Results and Discussion

Participants believed that new religious and national identities are both strongly acquirable to a similar degree, but showed a belief that religious identity is far less fixed at birth than is nationality. We tested an ANOVA with 2 Target Social Category (nationality, religion) x 2 Frame (retain, acquire) x 2 Direction (ingroup to outgroup, outgroup to ingroup) interaction term as predictor, and ratings of category membership as response variable (scores in the acquire frames were reversed). A significant two-way Target Social Category by Frame interaction ($F(1,497) = 37.404, P < 0.0001, \eta^2_{\text{partial}} = 0.07$) showed that the degree to which the child was believed to acquire the identity of adoptive parents was similar for religion and nationality ($M_{\text{diff}} = 6.25\%, 95\% \text{CI}[-13.76, 13.88], P = 0.15$). Conversely, the degree to which the child was believed to retain the identity of the birth parents is significantly higher for nationality than for religion ($M_{\text{diff}} = 19.43\%, 95\% \text{CI}[-27.12, 11.75], P < 0.0001$). See Figure 3.

Figure 3. Rating of nationality and religious identity in Study 3, separated by target social category, direction of transformation, and frame. Errors bars are standard errors of mean.

Direction of transformation did not influence the degree to which nationality and religion were retained or acquired, evident by the non-significant three-way interaction ($P > 0.14$). However, Direction of transformation did interact with Target Social Category, ($F(1,497) = 9.738$, $P = 0.0019$, $\eta^2_{\text{partial}} = 0.02$). A post hoc Tukey test showed that for nationality, the direction of transformation mattered ($M_{\text{diff}} = 12.77\%$, $95\% \text{CI}[5.21, 20.33]$, $P < 0.0001$) but not for religion, ($M_{\text{diff}} = 3.36\%$, $95\% \text{CI}[-8.09, 7.41]$, $P > 0.99$). Ingroup nationality was more acquirable than outgroup nationality ($M_{\text{diff}} = 17.99\%$, $95\% \text{CI}[5.34, 30.64]$, $P < 0.001$), but the two were similarly retained, ($M_{\text{diff}} = 7.73\%$, $95\% \text{CI}[-4.86, 20.33]$, $P > 0.5$). Direction of transformation did not influence the degree to which religious identity was retained or acquired ($P_s > 0.99$).

Finally, almost our entire sample identified themselves Americans with a handful of exceptions. However, only 51% of our respondents identified as Christians. We created a dichotomous variable with responses to this item and tested whether identification with Christianity moderate the degree to which people viewed religion or nationality fixed at birth.

Results showed a significant Target Social Category X Frame interaction, ($F(1,489)=$, $P < 0.0001$), and a non-significant four-way interaction ($P = 0.07$).

Study 3 demonstrates that while people believe that nationality and religious category membership are similarly acquirable, they also believe that the religious identity of birth parents is more easily lost than the nationality of birth parents. Thus this study tells us why, in dichotomous measures, people are more likely to assign children the adoptive parents identity when it comes to religion than nationality. There seems a greater belief that nationality, compared to religion, is fixed at birth via some type of biological mechanism.

Study 4

Knowing someone's nationality often gives us stronger information about their probable religious identity, than the reverse. For example, knowing someone is Pakistani allows us to reasonably infer they are also likely to be Muslim. Yet knowing someone is Muslim tells us little about their likely nationality. A possible counter explanation of Studies 2 and 3 is that thinking about a nationality (e.g., "Pakistani") is more likely to bring to mind a specific religious identity (e.g., "Muslim") than thinking about a religious identity (e.g., "Muslim") brings a specific nationality to mind. This suggest that higher essentialism of nationality condition may be an experimental confound. To rule out this explanation, in Study 4 we explicitly included information about the religious and national identity of birth and adoptive parents in both experimental conditions. All that differed in this experiment is whether participants were asked to make decisions about that nationality or religious identity of the child.

Method

Design. We used similar material and design as in study 3, except, in the condition asking about religious identity we made explicit reference to the nationality of birth and

adoptive parents, and in the condition asking about nationality identity, we made explicit reference to the religion of birth and adoptive parent. This was a 2 Target Social Category (nationality, religion) x 2 Frame (retain, acquire) x 2 Direction (ingroup to outgroup, outgroup to ingroup) design.

Participants. We used the same power analysis as in Study 3, and obtained 484 reliable responses from the Amazon Mechanical Turk subject pool from the United States (207 female and 6 Other, $M_{age} = 33.8$) to complete a survey in return for \$0.50.

Measures and procedure. We modified the methods from Study 3, using both nationality *and* religious categories (i.e., Christian-American or Muslim-Pakistani) to describe the parents in the switched-at-birth task. We then randomly asked participant to determine the religion or nationality of this child. Participants in this study all read identical scenarios in different directions, and the target social category they were asked about (religion or nationality) was randomized between subjects and used different frames. If conflation of religion and nationality explain our results, using both religion and nationality should attenuate or diminish the differences in the degree to which the two categories are viewed as fixed-at-birth.

Results and Discussion

As in Study 3, we used an ANOVA with 2 Target Social Category (nationality, religion) x 2 Frame (retain, acquire) x 2 Direction (ingroup to outgroup, outgroup to ingroup) interaction term as predictor, and ratings of category membership as response variable. We tested our hypothesis by examining the Target Social Category by Frame interaction, which was significant ($F(1,476) = 30.213$, $P < 0.0001$, $\eta^2_{\text{partial}} = 0.06$). As in Study 3, we find that the degree to which the child will obtain the identity of adoptive parent is similar for religion and nationality ($M_{diff} = 7.13\%$, $95\%CI[-8.85, 7.42]$, $P > 0.99$). However, retained category membership is higher for nationality than religion, ($M_{diff} = 25.51\%$, $95\%[-33.83, -17.20]$, $P <$

0.0001). This results then rules out the counter explanation of an experimental confound. Even when explicitly noting that birth and adoptive parents differed in their nationality and in their religion, participants still viewed nationality as more fixed at birth than religion.

Again, we examined direction effects. In contrast to Study 3, here the three-way interaction was significant, ($F(1,476) = 5.361$, $P = 0.0210$, $\eta^2_{\text{partial}} = 0.019$). A post hoc Tukey test showed that in the religion condition, results were comparable to Study 3, and there was no effect of Direction (retain: $M_{\text{diff}} = 1.68\%$, $95\%CI[-12.29, 15.66]$, $P > 0.99$; acquire: $M_{\text{diff}} = 7.39\%$, $95\%CI[-12.83, 14.31]$, $P > 0.99$). However, Direction did not affect the extent to which nationality was acquired ($M_{\text{diff}} = 12.16\%$, $95\%CI[-1.4, 25.78]$, $P = 0.12$) or retained ($M_{\text{diff}} = 7.80\%$, $95\%CI[-21.59, 5.99]$, $P = 0.61$). To recall, in Study 3 we found that nationality of ingroup was more acquirable by the outgroup-born child than the outgroup nationality was acquirable by the ingroup-born child. Here where we had explicitly mentioned the religious category membership of parents, the intergroup asymmetry had disappeared. In terms of our main question, we again find that religious identity is seen as less fixed at birth than is nationality.

General Discussion

In four studies across two different cultural, political and linguistic contexts, we find that people are relatively less likely to believe that religious identity is fixed at birth. Like nationality, religious identity is seen as being acquirable via cultural transmission. However, religious identity is much less seen as being passed on through some type of biological mechanism from parents to offspring. Despite the similarity between these two social categories then, folk beliefs hold religious identity to be more easily transformed than nationality. This is even the case in contexts of extreme and chronic conflict between groups divided along religious boundaries. This evidence suggests that rather than racializing religion, people view religious identities as transformable. Not only can we acquire new

religious identities but, compared to similar social categories, we can also “lose” the religious identity we are born into.

In addition to demonstrating that people tend not to think of religions like Islam, Christianity, and Judaism as natural kinds and fixed at birth, our findings have a number of novel and theoretically important implications. First, they suggest that some social categories may be resistant to essentialist reasoning, even when the motivation to engage in essentialism appears high. Prior explanations of different levels of essentialism of social categories has focused on motivational and developmental factors. Essentialist beliefs may be motivated by a need to explain and reinforce power relations between groups, to differentiate between groups, and to explain salient intergroup differences (Mahalingam, 2003; McGarty, Yzerbyt, & Spears, 2002). We agree that such motivational factors are important, but suggest they are not sufficient to explain variations in essentialist reasoning about social categories. Our findings demonstrate that prior lay theories of social categories interact with motivations to influence essentialist beliefs. In the case of religious identity, we speculate that people may intuitively place more weight on public costly signals of religious identity than they do on hidden essences to explain religious identity.

Second, our findings also contribute to the literature on the role of religion in the emergence of large-scale societies. Religion is hypothesized as a tool for subsuming ethnic, tribal and kin differences into a broader superordinate category encouraging intragroup cooperation (Henrich et al., 2010; Norenzayan & Shariff, 2008). Our participants seemed ready to believe that individual religious identities could be readily transformed, and that religious transformation would facilitate transformation of social identities commonly associated with religious categories. This reinforces theories that propose important roles for religion in assisting the expansion of human interactions beyond local networks of kin.

Third, our findings add to our understanding of the role of religion in the violent conflict. As we note earlier in this paper, religion is often implicated in violent and intractable intergroup conflict which seemingly makes religion a good candidate for essentialist reasoning. Essentialist reasoning is thought to play an important role in promoting conflict (Yzerbyt, Judd, & Corneille, 2004) and blocking compromise (Halperin et al., 2011; Waytz, Young, & Ginges, 2014). Essentialist reasoning may also help to determine the scope of violence within conflicts, promoting violence against people simply because they belong to an essentialized social category rather than because of their actions (Atran et al., 2008). Yet despite the salience of violence carried out in the name of religion at the time of our study, essentialist reasoning about religious identity was low. This is particularly striking in the results of Study 1. Here, despite the high levels of such violence in the lives of our Palestinian participants, they showed relatively low essentialist beliefs about Jewish and Muslim identity. The finding that they do not regard Jews and Muslims (or Jewish Israelis and Palestinians) to be incompatible natural kinds suggests the possibility for long-term resolution, despite considerable difficulties in reaching political compromise.

The studies we describe in this paper were restricted to religions that believe in a universal moralizing God and which have strong traditions of religious conversion. Future work could explore whether our findings extend to other religions - like Hinduism - that lack a formal conversion process. We are also aware that the fluid nature of religious identity might have some negative corollaries that future research could explore. The perceived fluidity of religious identity might be positively associated with identity threat; that is, if people perceive their religious identity, and those of their children, to be vulnerable to context they might be especially sensitive to perceived threats and to the dangers of identity loss through assimilation.

In this paper we show that people are relatively unlikely to think of religious identities as natural kinds, even when religious groups are implicated in chronically violent conflict. Rather than thinking of religious identity as immutable and as emerging from hidden essences which are passed onto offspring by their parents, people think about religious identity as something which may be transformed through practice.

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