# Cross-Cutting Cleavages and Ethnic Voting: 

# An Experimental Study of Cousinage in Mali 

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#### Abstract

Social scientists often attribute moderation of the political salience of ethnicity, in ethnically diverse societies, to the presence of cross-cutting cleavages-that is, to dimensions of identity or interest along which members of the same ethnic group may have diverse allegiances. Yet estimating the causal effects of cross-cutting cleavages is difficult. In this paper, we present experimental results that help to explain why ethnicity appears to have little political salience in Mali, an ethnically heterogeneous subSaharan African country in which ethnic identity is a poor predictor of vote choice and parties do not form along ethnic lines. We argue that the cross-cutting ties afforded by an informal institution called cousinage help explain the weak association between ethnicity and individual vote choice. Both co-ethnic and cousinage alliances enhance the credibility of politicians' policy promises, yet neither dimension of identity becomes dominant as a basis for vote choice due to their cross-cutting nature. The experimental research design we introduce may be useful in many other settings.


## I. Introduction

Social scientists often attribute moderation of the political salience of ethnicity, in ethnically diverse societies, to the presence of cross-cutting cleavages-that is, to dimensions of identity or interest along which members of the same ethnic group may have diverse allegiances (Lipset and Rokkan 1967; Dahl 1982). When individuals who are members of the same group or social category on one dimension of interest or identity (such as ethnicity) are members of different groups on another dimension (such as social class), their competing interests on the second dimension may undercut their primary allegiance to interests arising on the first dimension. Cross-cutting cleavages can thereby inhibit the tendency of political conflicts to intensify along the first dimension. As the sociologist Lewis Coser (1956, 72-81) once put it, "The interdependence of antagonistic groups and the crisscrossing within such societies of conflicts, which serve to 'sew the social system together' by canceling each other out, thus prevent disintegration along one primary line of cleavage., ${ }^{3}$

A recent literature in comparative politics and political economy has extended this classic insight in a number of ways. Where ethnicity has multiple dimensions-for example, where language, race, religion, caste, or clan can each provide the basis for different ethnic identities-the way in which different identities interact can explain whether conflict becomes entrenched along any single ethnic dimension, as well as which dimension of ethnic identity is politically salient (Laitin 1986; Posner 2004a, 2005; Chandra 2005). A rich theoretical literature suggests that the degree to which cleavages are crosscutting may affect individual vote choice and coalition formation (Rogowski 1989; Roemer et al. 2007), patterns of party competition (Bartolini and Mair 1990), and other outcomes of interest to students of ethnic politics. Cross-cutting cleavages may even promote the stability and persistence of democracy (Lipset 1959, 31, 88-89; Chandra 2005). Substantial comparative and observational evidence appears to support claims that cross-cutting cleavages reduce conflict and stabilize polities. One may, for instance,

[^1]contrast stable and integrated polities like Switzerland, where language and religion provide cross-cutting cleavages, with more fractured and unstable polities such as Belgium, where regional, economic, and linguistic conflicts overlap in reinforcing cleavages (Newton and Van Deth 2005, 144).

Yet estimating the causal effects of cross-cutting cleavages on patterns of ethnic conflict or electoral politics is notoriously difficult. Cross-country comparisons can be problematic, because a country's cleavage structure may be related to many confounding factors that might also explain patterns of ethnic conflict. Analysts must also take care to measure preferences separately along the relevant dimensions of identity. In addition, it may be difficult to define the relevant manipulation or intervention, the impact of which we would like to estimate. ${ }^{4}$ Empirical studies are thus challenged to isolate the causal effects of those aspects of the cleavage structure that are in principle subject to manipulation.

In this paper, we present experimental results that help to explain why ethnicity appears to have little political salience in Mali, an ethnically heterogeneous sub-Saharan African country in which ethnic identity is a poor predictor of vote choice and parties do not form along ethnic lines. The apparent absence of ethnic voting in Mali constitutes an important puzzle. Previous survey evidence suggests that ethnic identification is highly socially salient in Mali, as does our own research. Yet unlike many subSaharan African countries, in Mali the social importance of ethnicity does not translate into a strong observed association between ethnicity and voters' electoral choices.

We show that the cross-cutting ties afforded by an informal institution called cousinage help explain the limited political salience of ethnic identity in Mali. During the Mali Empire (1230-1600s), families formed alliances on the basis of patronyms; today, in countries such as current-day Mali as well as Sénégal, The Gambia, Guinea, and western Burkina Faso, these historical alliances are invoked in everyday social interactions. For example, if someone in Mali with the last name of Keita meets someone named Coulibaly, these two fictive cousins may invoke a standard set of jokes, even if they have never previously met. Like ethnic links, such cousinage alliances among joking cousins create and reinforce

[^2]social bonds between particular groups of Malians. Crucially, cousinage constitutes a cross-cutting dimension of identity, because cousinage alliances exist across as well as within ethnic groups. ${ }^{5}$

The cross-cutting nature of cousinage and co-ethnic ties may well explain the weak relationship between ethnicity and vote choice. Imagine two voters from the same ethnic group and a politician who comes from a different ethnic group. If a cousinage alliance exists between the politician and one of the voters but not the other, and if voters prefer their joking cousins as well as their co-ethnics, the relative attractiveness of the candidate to the two voters may diverge. In the aggregate, the cross-cutting nature of ethnic and cousinage ties may weaken the correlation between ethnicity and political choices.

To test this hypothesis, we developed an experimental research design that, unlike previous observational survey research, can isolate the effects of different dimensions of identity on voter preferences. In brief, we showed videotaped political speeches to experimental subjects in Bamako, Mali's capital, and then asked subjects to evaluate the quality of the speech as well as attributes of the candidate giving the speech. The content of speeches viewed by each subject was identical; the experimental manipulation consisted of what subjects were told about the politician's last name. Because last name conveys information about both ethnic identity and cousinage ties in Mali, varying the politician's last name allowed us to vary the treatment along two dimensions: the ethnic relationship of the politician and the subject (same ethnicity/different ethnicity) and the cousinage relationship of the politician to the subject (joking cousin/not joking cousin). The resulting experimental design allows us to compare, for example, subjects' evaluations of cousins from a different ethnic group and non-cousins from their own ethnic group, while holding constant the content of the speech as well as any fixed effects associated with the candidate. Our experiment also allows us to study how different dimensions of identity interact to shape voters' evaluations of political candidates.

We find that cousinage alliances do impact candidate evaluations, and in the anticipated direction: cousins are evaluated more favorably than non-cousins. In contrast to previous observational survey evidence, we also find that subjects favor co-ethnics over politicians from a different ethnic group.

[^3]However, we show that cousinage alliances counteract the negative impact of ethnic differences on candidate evaluations. For example, subjects' evaluations of candidates who are cousins from a different ethnic group are statistically indistinguishable from their evaluations of candidates who are non-cousins from their own ethnic group.

Our experimental data and our observational field research allow us to test further the hypothesis that these offsetting effects can help explain the limited real-world association between ethnicity and vote choice in Mali. First, we show that cousinage links between voters and politicians are widespread and comparable in frequency to co-ethnic ties. Second, cousinage alliances are politically-salient: in our experiment, the effects of cousinage are strongest for politically-active subjects, while our field research suggests that politicians manipulate and prime cousinage relations to serve their electoral ends. As we show, parties also exploit cousinage relations in choosing candidates to place on party lists. Finally, we demonstrate that the weak relationship between ethnicity and vote choice in survey data is plausibly due to the negative correlation between ethnic and cousinage ties: co-ethnics are more likely to be noncousins than cousins, while non-coethnics are at least as likely to be cousins as non-cousins. Because ethnic and cousinage ties both positively impact candidate evaluations, omitting cousinage ties from observational analyses suppresses the true positive effect of co-ethnicity on political preferences. Of course, we do not suggest that cousinage relations necessarily constitute the only reason ethnicity is not associated with vote choice in Mali. Our experimental research simply shows that cousinage has a causal effect on candidate preferences and that it helps to offset the effect of ethnicity-something not easily inferred from the existing observational evidence.

An additional contribution of our research is that it helps elucidate why voters prefer candidates who are their cousins as well as their co-ethnics. We find that voters prefer politicians who are cousins or co-ethnics not because they find them more competent, more intelligent, more likeable, or more impressive in general, but because they find the campaign promises of co-ethnics and cousins to be more credible. For example, co-ethnics and cousins are deemed more worthy of confidence, more likely to do a good job or to defend others once in office, and more likely to have good motivations for seeking office
in the first place. Citizens expect to be able to make special requests of their cousins, once their cousins are elected to office, and to be able to sanction politicians should they fail to honor campaign promises. Our data suggest that the social networks associated with cousinage alliances may help them to do so.

Our research therefore complements the arguments of other scholars that a focus on sanctioning and monitoring, rather than in-group preferences, best explains the political salience of ethnicity in many political contexts (Fearon and Laitin 1996; Habyarimana et al. 2007). Just as ethnicity can provide a visible marker of identity, making it advantageous for politicians to target benefits to co-ethnics and heightening the credibility of their promises to do so (Bates 1983; Fearon 1999b; Chandra 2004), we find that cousinage alliances shape voters' expectations about their ability to influence the post-election performance of politicians. While our emphasis here is on estimating the causal effects of cousinage and ethnic ties, rather than explaining the origins or persistence of cousinage, the political advantages that cousinage provides to vote-seeking politicians may also help to explain its persistence.

In sum, our experiment allows us to illuminate how cross-cutting cleavages interact to shape political preferences and thereby weaken the observed relationship between ethnicity and vote choice, in ways that previous research has not. While some features of our research design are best suited to the study of cousinage and ethnic politics in Mali and elsewhere in West Africa, the experiment we introduce can be used to study the effects of cross-cutting cleavages in other settings. Our paper therefore constitutes a methodological as well as substantive contribution, complementing pioneering recent research in which experiments have been used to study such topics as the relationship between ethnic diversity and public goods provision (Habyarimana, Humphreys, Posner, and Weinstein 2007) or how clientelism shapes voter behavior (Wantchekon 2003). Our expectation is that replication of the experimental design we introduce here will prove useful in other settings as well.

## II. Ethnicity and Cousinage as Cross-Cutting Cleavages in Mali

In this section, we further describe the empirical context for our study, as well as the institution of cousinage. With more than 12 linguistically defined ethnic groups, the West African country of Mali is highly diverse. ${ }^{6}$ For example, Mali's ethno-linguistic fractionalization score of 0.84 , which measures the probability that two individuals selected at random will come from different linguistically-defined ethnic groups, approaches countries such as Kenya (0.89) or Nigeria (0.85) (Alesina et al. 2003: 184-9).

Ethnicity is also a highly relevant social identity in Mali. In surveys taken in 2001 and 2002, respectively, 40 percent and 37 percent of respondents ranked ethnicity as the group to which they felt they belonged "first and foremost," ahead of religion, occupation, or gender; these percentages are higher than the average of 31 percent for ten African countries surveyed (Eifert, Miguel, and Posner 2007, 8). In a survey from 2005, 76 percent of respondents said they felt "some" or "a lot" of confidence in people from their own ethnic group, while just 54 percent said the same of other ethnic groups (Afrobarometer 2007, 51). Different regions of the country are identified with and populated by particular ethnic groups, and while the capital of Bamako tends to be well-integrated, many neighborhoods are also associated with particular ethnicities. ${ }^{7}$

Yet despite the social importance of ethnic identification in Mali, ethnicity does not appear to be highly salient politically. Since the return to democracy in 1992, ethnicity has not provided a strong basis either for individual vote choice or for party competition in Mali, unlike many other sub-Saharan African countries. Dowd and Driessen (2008, 6-8) calculate a measure of association between individual ethnicity and party identification and find that Mali has one of the lowest scores among the seventeen African countries surveyed (see also Norris and Mattes 2003, 25). Posner (2004b), using country reports and other sources to code how often ethnicity is mentioned as a basis for party formation or political identity,

[^4]creates a Politically-Relevant Ethnic Group (PREG) fractionalization index; Mali ranks far below countries with similar levels of ethnolinguistic fractionalization. Finally, cabinets in Mali often include ministers from various ethnic groups. Thus Mali lacks ethnic parties in the sense of Chandra $(2004,3)$ : parties do not portray themselves as "the champion of a particular ethnic group or category to the exclusion of others" or "make such a strategy central to [their] strategy to mobilize voters."

What explains the apparently negligible political role of ethnicity in Mali? Colonists, anthropologists, political scientists, and various Malian political actors have long suggested that the institution ${ }^{8}$ of cousinage has inhibited ethnic conflict and polarization. ${ }^{9}$ Cousinage has played a role in what is now the country of Mali since at least the Mali Empire (1230-1600s), especially since the rule of the emperor Sundiata Keita (c. 1235-1255). Under Keita, cousinage linked subjects of the empire who bore certain patronyms (which were often identified with occupational specializations) to subjects with other patronyms, binding them in relations of mutual obligation and respect. ${ }^{10}$ According to several scholars, the stated purpose of institutionalizing cousinage was to "defend, with language, the peace and the harmony within the empire" (Kouyate 2003, 58). Article 6 of the charter of Kurukan Fuga, which was an official set of prescriptions for how the Mali Empire should be organized and governed, stated that cousinage "is (hereafter) instated among the Mandenkas [subjects of the Mali Empire]. By consequence, no difference born between these groups can degenerate, the respect of the other being the rule" (Kouyate 2003). Just as constructivist scholars have argued with respect to ethnic identities (e.g. Nobles 2000), then, cousinage alliances were codified and reinforced by the state.

Today cousinage alliances exist not only in Mali but also in other places that were either under the authority of the Mali Empire—such as Sénégal (Galvan 2006), Guinea (Humblot 1918), The Gambia

[^5](Davidheiser 2006), and Burkina Faso (Sissao 2002)—or that have since experienced substantial immigration from these areas, such as the northern Ivory Coast. These alliances may be of various kinds; for example, joking that takes place between grandparents and grandchildren is sometimes described as senankunya, the Bambara term for cousinage (Jones 2007). ${ }^{11}$ We focus on alliances between people with particular patronyms, as these alliances provide a dimension of identity that cross-cuts ethnicity and that could therefore conceivably limit the observed relationship between ethnicity and political preferences. ${ }^{12}$

Cousinage relations imply a strong social bond between parties to the alliance, that is, between joking cousins. At least historically, there was often hierarchy involved, with one patronym in a pair of cousins associated with a higher caste (say, the caste of nobles) than the other. ${ }^{13}$ Part of the point appears to be precisely that the leveling influence of joking subverts hierarchies of power, at least temporarily, and joking cousins sometimes compete to call each other their "slave" (esclave). Although cousinage alliances allow for joking or teasing between cousins, they are also said to imply a set of reciprocal obligations. As one ethnic Senoufo interviewee told us, he could "never hurt his cousin" and would "have to do what his cousin asks," ${ }^{14}$ a sentiment shared by other interviewees as well. Anthropologists and other scholars have alleged that patterns of joking kinship may "result in greater willingness to make voluntary material sacrifices (of resources, time, willingness to voluntarily cede in disputes, etc.) for people thought to belong to different groups" (Galvan 2006).

Various observers have attributed the near-absence of overt ethnic conflict, in Mali and several other countries, to the institution of cousinage. ${ }^{15}$ Patterns of armed conflict in West Africa do suggest the plausibility of this hypothesis. For example, since independence, Mali has avoided the sorts of ethnic

[^6]civil wars that have ravaged many other African countries, such as the Nigerian Biafran War (19671970), the genocidal conflict in Rwanda (1994), or the recent ethnic war in the neighboring Ivory Coast (2002-2007). The existence of conflict between the Malian state and Tuareg (Tamasheq) groups in the north of Mali-the one area of the country in which ethnic conflict has persisted-only reinforces the point, because unlike Black Malians who were formerly under the Mali Empire, Tuaregs (who speak a Berber language) generally are not integrated into the cousinage system. In other areas in which cousinage relations prevail-for instance, Sénégal, Guinea, Burkina Faso, and parts of the Ivory Coastinterethnic relations have also been peaceful, relative to many other sub-Saharan countries. The recent ethnic civil war in the Ivory Coast (2002-2007), in which conflict took place between Mandé groups in the northern part of the country (many of them immigrants from Burkina Faso or Mali) and other ethnic groups in the south, also supports the hypothesis: while cousinage relations exist between various northern groups, they do not exist between these groups and their ethnic antagonists to the south.

Beyond the question of ethnic wars, however, does the presence of this cross-cutting dimension of identity affect patterns of ethnic voting and electoral competition? Even if cousinage were shown to inhibit large-scale armed conflict, this does not necessarily explain the limited salience of ethnicity in electoral politics in Mali. As we describe further below, various observers have pointed to the electoral usefulness of cousinage alliances for office-seeking politicians, but to our knowledge none have pointed out that cousinage may undercut the role of ethnicity in political competition. In this paper, we therefore extend existing hypotheses to explain not only the absence of ethnic conflict in Mali, generically, but also the seemingly negligible role of ethnicity in electoral politics. We believe that ours is the first rigorous empirical test of the proposition that these cross-cutting ties interact to shape political preferences in Mali and thereby inhibit the crystallization of political preferences along ethnic lines.

## III. Experimental Design

In our experiment, we showed videotaped political speeches to experimental subjects, who were recruited through door-to-door canvassing in Bamako, Mali's capital. Subjects were told that the candidate in the video was a political independent who was considering launching a campaign for deputy in the National Assembly. ${ }^{16}$ In all 824 experimental trials, we asked subjects to evaluate the quality of the speech and the attractiveness of the candidate along various dimensions. The content of speeches viewed by all subjects was identical.

The experimental manipulation consisted of what subjects were told about the politician's last name. As mentioned above, because last name conveys information about both ethnic identity and about cousinage ties in Mali, varying the politician's last name allowed us to vary the treatment along two dimensions: the ethnic relationship of the politician and the subject (same ethnicity/different ethnicity) and their cousinage relationship (joking cousins/not joking cousins).

Our resulting experimental design had six treatment and control conditions. In the four treatment conditions shown in the top two rows of Table 1, the subject and the politician are, respectively, joking cousins from the same ethnic group (top-left cell); non-cousins from the same ethnic group (top-right cell); joking cousins from different ethnic groups (first column of second row); or non-cousins from different ethnic groups (second column of second row). According to our hypotheses, a joking cousin relationship between voters and politicians should moderate the negative effect of ethnicity on voters' evaluations of politicians. Thus, while we expect subjects to evaluate politicians more positively, on average, if the politician is a co-ethnic or a cousin, we also expect the effect of having a cousinage alliance with a politician to counteract the negative effects of ethnic difference.

We also added two additional control conditions to the experimental design (bottom row of Table 1). In the fifth condition, subjects were provided with no information about the politician's last name-and thus no information about their ethnic and cousinage ties to the politician. (As we describe

[^7]below, subjects were unable accurately to infer their ethnic and cousinage ties to the politician, absent information about the politician's last name). Adding this fifth condition therefore allowed us to estimate baseline evaluations of the candidate and to estimate treatment effects relative to this baseline. Finally, in the sixth condition, the politician had the same last name as the subject. Of course, such politicians are also non-cousins from the subject's own ethnic group (because cousinage alliances occur between patronyms, and because last name indicates ethnicity); thus, this condition may coincide with the top-right cell of Table 1. However, adding this condition allows us to compare treatment effects stemming from cousinage or co-ethnicity to a simple sameness or clan effect: perhaps people simply want to vote for politicians who share their family names. Experimental subjects were assigned at random to these six treatment and control conditions with equal probability, using a computer-generated list of pseudorandom integers between 1 and 6 (inclusive).

Table 1: Experimental Design: Subjects Assigned to Treatment and Control Conditions

|  | Subject and Politician are <br> Joking Cousins | Subject and Politician are <br> Not Joking Cousins |
| :---: | :---: | :---: |
| Subject and Politician are from the <br> Same Ethnic Group | $\mathrm{N}=136$ | $\mathrm{~N}=122$ |
| Subject and Politician are from <br> Different Ethnic Groups | $\mathrm{N}=124$ | $\mathrm{~N}=152$ |
| Politician's Last Name Not Given <br> Subject and Politician Have the <br> Same Last Name | Control Conditions <br> $\mathrm{N}=132$ |  |

To assign subjects at random to the treatment and control conditions, we needed a way to expose each subject to the appropriate stimulus-that is, to a politician's patronym that corresponds to the relevant cell of Table 1, for a given subject surname. To do this, we reviewed the secondary literature and
conducted interviews with experts on cousinage, as well as ordinary Malian informants in Bamako. We then catalogued the politicians' surnames that would be associated with each of the treatment conditions, for more than 200 subject surname-ethnicity combinations. ${ }^{17}$ This allowed us to create a large matrix, each row of which corresponds to a Malian last name that we could expect to encounter in the field and each column of which gives politicians' surnames associated with the appropriate treatment or control condition. ${ }^{18}$ We used two small experiments ( $\mathrm{N}=42$ and $\mathrm{N}=169$, respectively) to test a preliminary version of our matrix; in conjunction with further qualitative interviews in the field, these smaller experiments allowed us to create and refine the random assignment matrix used in the larger experiment reported in this paper. Though several secondary sources describe cousinage alliances between various patronyms, we know of no mapping that is as comprehensive as our random assignment matrix.

Table 2 shows a typical row of our matrix, this one for a subject named Keita who is from the Malinké (also known as Maninka) ethnic group. The columns of Table 2 give the politicians' surnames associated with each of the six treatment and control conditions, for such a subject. For example, politicians with the surnames in the first two columns are co-ethnics of the subject; however, those in the first column (Sissoko and Konaté) are considered cousins of the Keita, while those in the second (Diané) are not. The surnames in the third and fourth columns, meanwhile, are associated with other (nonMalinké) ethnic groups, some of which are cousins of the Keita (third column) and some of which are not (fourth column). In cells with multiple entries, such as in the first, third, and fourth column in Table 2, the politician's last name was selected at random from the names listed in the cell; in these cases, we thus estimated the average effect of being exposed to the surnames included in that column, relative to other treatment conditions. The surnames included in each column are not intended to be exhaustive: for instance, the first and third columns of the matrix do not include all possible cousins for this subject

[^8]surname. Rather, we sought to use politician surnames for which cousinage links are well-understood and widely-recognized, so that we could accurately manipulate the stimulus to which subjects were exposed.

Table 2: A typical row of our random assignment matrix

|  | (1) Co-ethnic/ Cousin | (2) <br> Co-ethnic/ <br> Not cousin | (3) <br> Not co-ethnic Cousin | (4) <br> Not co-ethn Not cousin | (5) <br> No name | (6) Same name |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Keita <br> (Maninka) | 1. Sissoko <br> 2. Konaté | 1. Diané | 1. Doucouré <br> 2. Sacko <br> 3. Sylla <br> 4. Coulibaly <br> 5. Touré | 1. Diallo <br> 2. Cissé <br> 3. Dambelé <br> 4. Théra <br> 5. Touré <br> 6. Togola <br> 7. Watarra | Pas de nom | Keita |

One important question is thus whether we were in fact able to manipulate subjects' perceptions of their ethnic and cousinage ties to politicians. This is important, because we ultimately care about how subjects' perceptions of their ethnic or cousinage ties to politicians shape candidate evaluations. In some cases, we were concerned that we risked misclassifying the stimulus to which subjects perceived themselves to be exposed. As a manipulation check, we therefore asked subjects to identify the ethnicity of the politician in the videotape and also asked whether or not the politician was a joking cousin of the subject. (We did this only after subjects had answered all questions related to the treatment.)

Subjects in fact perceived both the politician's ethnic identity and their cousinage ties to the politician with substantial accuracy. First, given only the politician's last name, and choosing from more than 14 ethnic categories, subjects correctly classified the politician's ethnicity more than 80 percent of the time. In the control condition in which no politician surname was provided, subjects' guesses roughly tracked the distribution of ethnic groups in Bamako. Next, when assigned to view a speech by a politician from a different ethnic group, subjects correctly classified the politician as a cousin or a non-cousin nearly 85 percent of the time. Subjects more often misclassified their cousinage ties to politicians from their own ethnic group (in particular, they more often classified co-ethnic cousins as non-cousins than they did
co-ethnic, non-cousins as cousins). As a substantive matter, the direction of the misclassification may serve to emphasize that cousinage alliances are typically understood to cut across ethnic groups. (As an inferential matter, however, the slight misclassification may lead us to underestimate the true effects of some treatments, as we discuss in the next section and in the Appendix.)

We recruited experimental subjects by canvassing in almost all of Bamako's neighborhoods, approaching men and women sitting outside homes (or knocking on doors) and asking if they would participate in a study on political speeches. Distributions on several measured variables in the experimental population are similar to those given for Bamako and other urban areas by representative surveys (Afrobarometer 2007). However, the experiment severely under-represents women, who comprise just 26 percent of the experimental population. ${ }^{19}$ After approaching a potential subject, we administered a screening questionnaire in which we sought background information, including first and last name and ethnic identity. ${ }^{20}$ The information gathered during screening allowed us to determine subject eligibility and to assign subjects randomly to the treatment and control conditions. ${ }^{21}$

To create the political speech to be viewed by the experimental subjects, we drew on fieldwork conducted by one of us (Lauren Harrison) in Bamako during Mali's parliamentary elections in 2007, as well as secondary sources. The speech focused on standard themes in Malian political campaigns, such as the need to improve infrastructure, invest in schools, and relieve electricity blackouts. Around 56\% percent of experimental subjects said the speech "reminded them of a speech they had heard on a previous occasion." The speech was delivered in Bambara/Bamanakan, which is the lingua franca of Bamako (and of Mali). ${ }^{22}$ The fieldwork for our experiment took place from June to October 2008.

[^9]Subjects viewed the videotaped political speech on a portable DVD player or laptop computer, using headphones. When subjects were found in groups, only one subject was recruited per group; only the subject could hear the speech through the headphones, and each subject answered follow-up questions on his or her own. These features of the research design limited the potential for subjects' responses to treatment to depend on the treatment assignment of other subjects, which would violate the standard assumption in experimental analysis of "no interference between units" (Cox 1958) or what Rubin (1978) called the "stable unit treatment value assumption" (SUTVA).

Follow-up questions then asked subjects to evaluate the content of the speech and the politician who delivered it. For instance, subjects answered questions about the speech's quality, whether the speech made them want to vote for the candidate, and about candidate attributes such as competence, likeability, and intelligence. The experimental manipulation was reinforced through repetition of the politician's patronym: our research assistants mentioned the politician's surname before playing the videotape (after subjects were randomly assigned to one of the treatment conditions) and repeated it each time they asked about the candidate or the speech in the post-treatment questionnaire. Our Malian research assistants asked the follow-up questions in French, Bambara, or a mixture of the two. ${ }^{23}$

A final aspect of the experimental design to note is that we sought to achieve a within-subjects component to the experimental design, in order to reduce the variance of estimated treatment effects. To do this, we hired two Malian actors, who each separately recorded the political speech; some subjects saw the speech twice, with a different actor each time. However, we took care to ensure that the identity of the actor did not interact with other experimental stimuli. ${ }^{24}$ The results reported below are also robust to

[^10]dropping all data from second showings of the speech. The experimental protocol was published prior to data analysis (Dunning 2009), as recommended by many methodologists.

It bears emphasis that we might expect treatment effects to be weak in this experiment, for several reasons. First, viewing a videotaped political speech may not closely approximate the experience of attending a real political rally; despite our attempt to create a speech that is similar to typical campaign speeches, the delivery of the speech over a laptop or DVD may make the stimulus somewhat artificial. Second, subjects were not asked to evaluate politicians whom they already knew; thus, the subjects may have questioned whether the politicians were truly candidates for office. Finally, merely changing the last name of the politician across different treatment conditions may not provide a very strong priming of ethnic identification or of cousinage ties. Cousinage relations may be strategically invoked in political settings, as we discuss further below. Yet as Launay $(2006,95,99)$ puts it, "joking [between cousins] has constantly to be instantiated....Such relationships are virtually never automatic. They are either deliberately staged...or voluntarily instantiated by one or both parties. For there to be a joking relationship, someone actually has to do the joking." By simply changing the last name of the politician giving a speech, we may fail to capture the subtle and perhaps more powerful ways in which political actors call upon the institution of cousinage to serve their strategic purposes.

Our substantive wager was nonetheless that ethnic ties and cousinage-based alliances are sufficiently important that merely changing the last name of the politician would allow us to capture some of the interacting effects of these cross-cutting cleavages. However, the true effects of cousinage and ethnic ties may be substantially stronger than those we estimate here.

## IV. Experimental Results: Intention-to-Treat Analysis

After viewing the videotaped political speech, subjects were asked, "On a scale of 1 to 7 , how much does this speech make you want to vote for (name of politician)? ${ }^{25}$ For subjects assigned to the control condition in which the politician's last name was not given, this candidate replaced name of politician. Higher numbers indicate more favorable evaluations. The average candidate evaluation was 4.53 across all treatment conditions, with a standard deviation of 1.73. Table 3 reports descriptive statistics for all the response variables analyzed in this paper.

Table 3: Descriptive Statistics on Response Variables (across all treatment conditions)

| Variable | Range | Mean (SD) |
| :--- | :---: | :---: |
| Global Evaluation of Candidate | $1-7$ | $4.53(1.73)$ |
| Global Evaluation of Speech | $1-7$ | $6.29(1.21)$ |
| Candidate is... |  |  |
| Likeable | $1-5$ | $4.49(0.61)$ |
| Intelligent | $1-5$ | $2.91(0.96)$ |
| Competent | $1-5$ | $2.72(0.97)$ |
| Impressive | $1-7$ | $4.26(1.69)$ |
|  | $0-1$ | $0.58(0.17)$ |
| Candidatective |  |  |
| Is Worthy of Confidence | $1-5$ | $2.57(1.08)$ |
| Would Do a Good Job in Office | $1-7$ | $3.49(1.78)$ |
| Would Defend Others and Fight for Ideals | $1-7$ | $2.99(1.80)$ |
| Has Good Motivations for Running | $1-7$ | $6.13(1.39)$ |
| Would Successfully Face Challenges of Office | $1-7$ | $4.00(1.35)$ |
| credible | $0-1$ | $0.51(0.21)$ |

[^11]How did co-ethnicity and cousinage alliances shape subjects' evaluations of candidates? To answer this question, we compare average responses among subjects randomly assigned to the various treatment and control conditions. Such intention-to-treat analysis, which is often the best way to analyze experiments, estimates the causal effect of treatment assignment (Freedman 2006). Here, the intention-totreat principle implies that we ignore (for the moment) whether subjects actually believed the politician to be their co-ethnic or their cousin; we will return to this important issue below.

Figure 1 graphically depicts average candidate evaluations by treatment assignment category, for four treatments; Table 4 reports the full results. As the figure and table show, co-ethnicity and cousinage alliances both significantly affect candidate evaluations. On average, assignment to view a speech by a co-ethnic, rather than a politician from a different ethnic group, raised candidate evaluations by over onehalf a point, while assignment to view a cousin rather than a non-cousin increased evaluations by just under one-half of one point. Taken together, the effects imply that assignment to view a speech by a coethnic cousin, rather than a non-cousin from a different ethnic group, raised the average evaluation by 1.09 points (with a t statistic of 5.54), or nearly two-thirds of one standard deviation. ${ }^{26}$

Most importantly for our purposes, the evidence suggests that cousinage relations can counteract the negative effects of ethnic differences on candidate evaluations. In fact, the average evaluation of cousins from a different ethnic group (4.44) is statistically indistinguishable from the average evaluation of non-cousins from the same ethnic group (4.57). On average, subjects appear roughly indifferent between non-cousins from their own ethnic group and cousins from a different ethnic group.

[^12]Figure One: Average Candidate Evaluations, by Treatment Assignment


We subjected these results to a variety of robustness tests. Non-parametric, two-sample Wilcoxon rank-sum tests, which are based on the median rather than the mean, tell the same story as the parametric analysis: co-ethnics are significantly preferred to non-coethnics, and cousins are significantly preferred to non-cousins, while preferences for joking cousins from a different ethnic group and noncousins from the same ethnic group are statistically indistinguishable. We also found very similar treatment effects for similar questions, such as "On a scale of 1 to 7 , how would you rate the global quality of this speech?" Since our main analysis effectively pools across multiple experiments, one for each subject surname, we also analyzed treatment effects by individual surnames; while sample sizes are small, even for the most common last names, the results track the aggregate findings.

In addition, while our intention-to-treat analysis suggests significant effects, it very likely underestimates the effect of treatment receipt. As we show in the Appendix, treatment effects are nearly 50 percent larger once we adjust for some mismatches between treatment assignment and subjects' perceptions of treatment receipt - that is, when we estimate the effects of treatment on the treated (also known as the effect of treatment on compliers). We present the intention-to-treat analysis here, however,
as we believe this approach offers the clearest and most credible analysis of the experimental data.
Qualitative data gathered during the experiment also underscore the political salience of both ethnic and cousinage ties. In response to open-ended questions, subjects frequently made disparaging remarks about candidates from different ethnic groups. For example, an ethnic Bamanan subject who saw a speech by a politician named Guindo (a patronym from the Dogon ethnic group) said someone named Guindo could never do a good job as a politician or rise to the challenges of his mandate; another Bamanan said that Dogons "don't know how to lead." An ethnic Songhai suggested that Bobo ethnics "don't know anything about politics," while an ethnic Malinké subject said the same of Dogons. An ethnic Soninké subject, in turn, offered the opinion that "the Malinkés are not intelligent."

Subjects tended to offer more positive comments about co-ethnics. For instance, a Bamanan subject named Koné saw a speech by a co-ethnic named Diarra and said "the Koné and the Diarra are the same thing." One subject who said he paid attention to the candidate's family name in reflecting on his merits said he did so because "it is important to know the identity of the candidate." Subjects also held a special regard for politicians who shared their own surnames. ${ }^{27}$ A subject with the last name Anne offered the opinion that "the Anne family is composed of intellectuals." One subject named Sacko said that "a Sacko is a hard worker" and another commented that the "Sackos are very cultured." A griot (oral historian) named Kouyaté commented that "if a griot [a Djely or Kouyate] is a candidate, it is because he is capable of many things," while a Malinké subject named Koné said that she paid attention to the politician's name of Koné because the "Konés are nobles." (The Konés were members of the caste of nobles during the Mali Empire). A subject named Keita, when asked whether she would be more susceptible to vote for a candidate sharing her family name said "yes, like uncle IBK"-a reference to an opposition candidate during the 2007 presidential elections, Ibrahim Boubacar Keita.

Finally and most importantly, subjects offered several rationales for their tendency to support cousins. The ability of cousins to reprimand and sanction one another appeared to play a particularly

[^13]important role. As one subject put it, if a joking cousin "is not serious, we will correct him." Another said she would vote for her cousin because "if he does not respect his promises, I will bring him to heel, because he is a cousin." This evidence echoes the claims of Douyon (2006: 899) that "voters tend to vote for their allies (cousins), saying that in case of problems-administrative, political, or social-the elected ally would be more prompt to intervene than he would be even with a direct member of his own family." These comments thus suggest hypotheses about why voters prefer candidates who are their cousins or coethnics, a topic to which we now turn in more detail.

Table 4: Average Candidate Evaluations, by Treatment Assignment

|  | Subject and Politician are Joking Cousins <br> (A) | Subject and Politician Are Not Joking Cousins <br> (B) | $\begin{gathered} \hline \text { Difference of } \\ \text { Means } \\ (\mathbf{A}-\mathbf{B}) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Subject and Politician are from Same Ethnic Group (C) | $\begin{gathered} 5.05 \\ (0.15, \mathrm{~N}=136) \end{gathered}$ | $\begin{gathered} 4.57 \\ (0.16, \mathrm{~N}=122) \end{gathered}$ | $\begin{aligned} & 0.48 * * * \\ & (0.21) \end{aligned}$ |
| Subject and Politician are from Different Ethnic Group (D) | $\begin{gathered} 4.44 \\ (0.17, \mathrm{~N}=124) \end{gathered}$ | $\begin{gathered} 3.96 \\ (0.13, \mathrm{~N}=152) \end{gathered}$ | $\begin{aligned} & 0.49 * * * \\ & (0.21) \end{aligned}$ |
| Difference of Means (C-D) | $\begin{aligned} & 0.61^{* * *} \\ & (0.22) \end{aligned}$ | $\begin{aligned} & 0.61^{* * *} \\ & (0.20) \end{aligned}$ |  |
|  | Control conditions |  |  |
| Politician's Last Name Not Given | $\begin{gathered} 4.33 \\ (0.12, \mathrm{~N}=132) \end{gathered}$ |  |  |
| Subject and Politician Have Same Last Name | $\begin{gathered} 4.84 \\ (0.15, \mathrm{~N}=158) \end{gathered}$ |  |  |

The cells report average answers to the question, "On a scale of 1 to 7 , how much does this speech make you want to vote for (name of politician/this candidate)?" Estimated standard errors and the number of trials in each treatment condition are reported in parentheses. ${ }^{* * *}=$ significant at the 0.001 level.

## V. What Explains the Effects? Credibility and Social Networks

In principle, there could be many different mechanisms that lead subjects to prefer those with whom they have ethnic or cousinage ties. On the one hand, subjects might find their co-ethnics and their cousins to be more likeable, intelligent, competent, or impressive. This broad class of mechanisms involves subjects' affective evaluations of candidates' attributes. On the other hand, subjects might focus on their expectations regarding the ex-post performance of candidates, once elected to office. For instance, subjects might find cousins and co-ethnics to be more worthy of confidence, expect them to do a better job once in office, or think they have better motivations for running for office in the first place. Because these latter topics relate to whether the post-election performance of political candidates will mirror their pre-election campaign promises, they plausibly reflect concerns about candidate credibility. ${ }^{28}$

We created two aggregate variables to explore these two broad classes of mechanisms. The first variable, affective, is a linear additive scale constructed from subjects' answers to several questions about politicians' likeability, intelligence, competence, and general impressiveness. We normalized the variable to run from 0-1 for purposes of comparability with our second variable, credible, which includes questions tapping subjects' expectations about the post-election performance of politicians. For instance, credible incorporates questions about whether the politician is worthy of confidence; how good a job the politician would do in office; whether he would defend others and fight for his ideals; whether he has good motivations for running for office; and how well he would face the challenges of the office. ${ }^{29}$ Table 3 above gives descriptive statistics on the affective and credible indices, as well their components. ${ }^{30}$

In general, subjects did not find their cousins or their co-ethnics to be more likeable, intelligent,

[^14]competent, or impressive. Table 5 presents the means and standard errors of affective and credible by treatment assignment. ${ }^{31}$ As the table shows, treatment assignment did not strongly shape subjects' affective evaluations of the candidates. While mean affective evaluations of subjects assigned to the coethnic cousin condition are significantly higher than mean evaluations of subjects assigned to noncoethnic, non-cousin condition (t-ratio 2.66), most other differences of means across treatment conditions are insignificant for the affective variable (and for their component variables; results omitted). Most importantly for our purposes, affective evaluations of cousins and non-cousins, for subjects assigned to view a speech by a politician from a different ethnic group, are not significantly different from each other.

In contrast, credibility can help explain why cousinage alliances help to counteract the negative effect of ethnic difference on candidate evaluations. For subjects assigned to the co-ethnic, cousin condition and the co-ethnic, non-cousin condition, the means of credible are significantly greater than means for subjects assigned to the non-coethnic, non-cousin condition (t-ratios of 3.31 and 2.74, respectively). Most importantly, non-coethnic cousins are found to be significantly more credible than non-coethnic, non-cousins (bolded entries of Table 5): assignment to the non-coethnic cousin condition causes credible to rise an estimated 0.07 points (with a t statistic of 2.68 ) or more than one-quarter of a standard deviation, relative to the non-coethnic, non-cousin condition. While we present the evidence in Table 5 on the aggregated affective and credible variables, similar patterns hold at the disaggregated level. The strongest treatment effects appear when subjects are asked if the politician is worthy of confidence.

The importance of credibility also suggests another hypothesis. Various scholars have emphasized the role of social networks in allowing voters to monitor and sanction politicians (or vice versa; see Stokes 2006). If voters prefer cousins and co-ethnics because they feel they have a greater chance of sanctioning poor ex-post performance, it may be because they are more tightly linked in social networks with their cousins and co-ethnics. Our experimental data allow us to evaluate this hypothesis as well.

[^15]Table 5: Credibility or Affective Evaluations?
(Means of normalized $\mathbf{0 - 1}$ scales, by treatment assignment)

|  | Subject and Politician Are Joking Cousins <br> (A) | Subject and Politician Are Not Joking Cousins <br> (B) | Difference of Means (A-B) |
| :---: | :---: | :---: | :---: |
| Subject and Politician Are From Same Ethnic Group (C) | $\begin{gathered} \text { affective: } \\ 0.59 \\ (0.01, \mathrm{~N}=135) \\ \text { credible: } \\ 0.54 \\ (0.02, \mathrm{~N}=134) \end{gathered}$ | $\begin{gathered} \text { affective: } \\ 0.59 \\ (0.01, \mathrm{~N}=121) \\ \text { credible: } \\ 0.53 \\ (0.02, \mathrm{~N}=119) \end{gathered}$ | affective: <br> 0.00 <br> (0.02) <br> credible: <br> 0.01 <br> (0.03) |
| Subject and Politician Are From Different Ethnic Groups <br> (D) | $\begin{gathered} \hline \text { affective: } \\ 0.57 \\ (0.02, \mathrm{~N}=124) \\ \text { credible: } \\ 0.53 \\ (0.02, \mathrm{~N}=122) \end{gathered}$ | $\begin{gathered} \hline \text { affective: } \\ 0.54 \\ (0.01, \mathrm{~N}=151) \\ \text { credible: } \\ 0.46 \\ (0.02, \mathrm{~N}=149) \end{gathered}$ | affective: <br> 0.03 <br> (0.02) <br> credible: <br> 0.07** <br> (0.03) |
| Difference of Means (C-D) | affective: 0.02 $(0.02)$ credible: 0.01 $(0.03)$ | affective: $0.05^{* *}$ $(0.02)$ credible: $\mathbf{0 . 0 7 * *}$ $\mathbf{( 0 . 0 3 )}$ |  |
| Politician's Last Name Not Given | affective: credible: <br> 0.56 0.47 <br> $(0.01, \mathrm{~N}=129)$ $(0.01, \mathrm{~N}=129)$ |  |  |
| Subject and Politician Have Same Last Name | affective: credible: <br> 0.62 0.54 <br> $(0.02, \mathrm{~N}=157)$ $(0.02, \mathrm{~N}=154)$ |  |  |

See the text for the construction of affective and credible variables. Standard errors are in parentheses. For the difference-of-means tests, ${ }^{* *}$ indicates statistical significance at the 0.01 level.

In our post-treatment questionnaire, we asked subjects how many of their close friends and how many of their acquaintances (people they see regularly but who are not as close as friends) bear the same last name as the politician in the video. Possible answers ranged from 0 to 10 or more. It should be borne in mind that this is an observational, not experimental, quantity: we cannot manipulate the number of
friendships that subjects have with people bearing various last names. However, since social networks may play an important role in explaining why subjects do favor their co-ethnics and their cousins, it is useful to examine the available evidence in this respect.

The evidence suggests that social networks linking cousins may be at least as strong as those linking co-ethnics. Table 6 displays the average number of close friends and acquaintances bearing the last name of the politician in the video, by treatment assignment. Subjects assigned to the co-ethnic, cousin condition have on average nearly three more friends, and more than three and one-half more acquaintances, bearing the politician's last name than subjects assigned to the non-coethnic, non-cousin condition. Co-ethnicity and cousinage are separately related to numbers of subjects' friends and acquaintances as well; among non-coethnics, for instance, subjects assigned to view a speech by a cousin have around twice as many friends and acquaintances with the politician's last name as subjects assigned to view a speech by a non-cousin. Strikingly, subjects assigned to see a speech by a non-coethnic cousin actually have more friends and acquaintances with the politician's last name than those assigned to see a co-ethnic non-cousin, though the difference here is not significant. The data therefore support the idea that social networks may play a role in explaining why subjects prefer their co-ethnics and their cousins.

The evidence discussed in this section raises two further questions: why might concerns about credibility be so central in this context, and what precise role do social networks play? We interpret our data as underscoring the links between ethnicity, cousinage, and clientelist politics. Since Mali's return to democracy in the early 1990s, clientelism - that is, the exchange of individualized benefits in return for votes-has played an important role in electoral competition between multiple, ideologically-similar parties. In a nationally-representative survey, for example, 83 percent of respondents said that politicians offer gifts to voters during electoral campaigns "always" or "often" (Afrobarometer 2007, 50). At the same time, the credibility of politicians is generally low. For instance, 90 percent of respondents said that politicians "often" or "always" make promises just to get elected, while 84 percent said politicians "never" or "rarely" keep their promises after elections (Afrobarometer 2007, 50). Qualitative evidence from our experiment supports the interpretation that politicians generally cannot be trusted, while

Table 6: The role of social networks
(Mean number of friends and acquaintances with politician's surname, by treatment assignment)

|  | Subject and Politician Are Joking Cousins <br> (A) | Subject and Politician Are Not Joking Cousins (B) |
| :---: | :---: | :---: |
| Subject and Politician Are From Same Ethnic Group (C) | friends: 4.73 $(0.36, \mathrm{~N}=135)$ acquaintances: 7.10 $(0.32, \mathrm{~N}=135)$ | friends: 3.35 $(0.35, \mathrm{~N}=120)$ acquaintances: 5.01 $(0.40, \mathrm{~N}=120)$ |
| Subject and Politician Are From Different Ethnic Group (D) | friends: 3.74 $(0.34, \mathrm{~N}=124)$ acquaintances: 5.50 $(0.38, \mathrm{~N}=124)$ | friends: 1.75 $(0.22, \mathrm{~N}=151)$ acquaintances: 3.52 $(0.32, \mathrm{~N}=151)$ |
| Politician's Last Name Not Given | -- |  |
| Subject and Politician Have <br> Same Last Name | friends: acquaintances: <br> 6.89 8.11 <br> $(0.31, \mathrm{~N}=151)$ $(0.27, \mathrm{~N}=152)$ |  |

The cells report average answers to the questions, "How many of your close friends have the family name of politician's last name?" and "How many of your acquaintances (people whom you see regularly but who are not as close as friends) have the family name politician's last name?" Possible answers run from 0 to 10 or more (which is coded as 10). Standard errors are in parentheses.
reinforcing the point that voters expect politicians to favor cousins as well as co-ethnics. According to one subject, the videotaped politician "would construct his village with the country's money, forgetting all of his ideals;" according to another, the politician "will only defend his own village."

However, subjects approvingly evaluated their own co-ethnics and cousins by noting the credibility of their promises. ${ }^{32}$ Thus, even if politicians cannot be trusted in general to carry out programs that serve the public good, they appear to be more trusted to distribute benefits to their co-ethnics or

[^16]cousins. Social networks may also further boost the credibility of politicians' promises. Perhaps subjects are more familiar with their cousins and co-ethnics, which may breed greater trust and thus greater credibility for such politicians; or perhaps networks allow voters to monitor and sanction their cousins more effectively, just as they can monitor co-ethnics in other contexts (Fearon and Laitin 1996).

While this should be a subject of further research, our evidence is therefore consistent with claims by other scholars about why ethnic identity is salient in sub-Saharan African settings (Bates 1983, Fearon 1999b). It also complements previous evidence that in-group altruism or "preferences" may provide only a limited basis for co-ethnic cooperation (see Habyarimana et al. 2007). Here, cousinage alliances may play a similar role as ethnic ties. The main point for our purposes is that ethnic and cousinage ties between voters and politicians both enhance the credibility of politicians' policy promises, yet neither dimension of identity becomes dominant as a basis for vote choice due to their cross-cutting nature.

## VI. Can Cousinage Alliances Explain the Absence of Ethnic Voting in Mali?

Do the causal effects revealed by our experiment really help explain the real-world puzzle we have examined—namely, the weak relationship between ethnicity and individual vote choice in Mali? Several pieces of additional evidence may be required to support this claim.

First, cousinage links between voters and politicians must be widespread, and comparable in frequency to ethnic ties. After all, if cousinage alliances only affected a small proportion of the population, they could not very plausibly counter the effects of ethnicity on voter preferences in the electorate as a whole. Next, cousinage relations must have political (and not merely social or cultural) salience. In particular, our argument has observable implications for electoral strategies: given our finding that cousinage alliances affect voter preferences, we might expect politicians and parties to exploit the preference of voters for their cousins in campaigns, as well as in the placement of candidates on party lists. Finally, co-ethnic and cousinage ties must arguably be negatively associated, in the sense that one's cousins tend disproportionately to be non-coethnics. As we have shown, co-ethnicity and cousinage both positively affect candidate evaluations. If co-ethnic and cousinage links are negatively related, then
omitting the effects of cousinage can plausibly account for the misleadingly weak association between ethnicity and political preferences in observational data.

We turn in this penultimate section to evidence on these three points. First, we can estimate the probability that any two subjects drawn at random from our dataset are cousins, using the following procedure. The probability that any subject drawn at random has a given surname is the number of subjects with this surname, divided by the total number of subjects. The probability that a second subject drawn at random will be the cousin of the first subject is the number of the first subject's cousins in our dataset, again divided by the number of subjects. For each surname in our dataset, we use our random assignment matrix as a guide to counting the number of cousins. The probability of drawing a subject with the first surname and then drawing a subject who is his or her cousin is then the product of these two probabilities. (This assumes drawing with replacement, a minor technical detail.) Finally, the probability that any two names drawn from the dataset are cousins is the sum of the individual probabilities that the draw of a subject with a given surname will be followed by a draw of one of the subject's cousins.

Assuming arguendo a quasi-representative sample of last names, this procedure allows us to estimate the probability that any two individuals drawn at random from the population of Bamako are cousins. ${ }^{33}$ Note, however, that because we included only well-known or "strong" cousinage relations in the first and third column of each row of our random assignment matrix (the list is not intended to be exhaustive), our procedure will likely underestimate the true probability that any two individuals drawn at random from the population of Bamako are cousins, and thus bias against the hypothesis that cousinage links are widespread. At the least, however, our procedure puts a floor on this probability.

Our analysis suggests that cousinage alliances are at least as widespread as co-ethnic ties. The estimated probability that any two individuals drawn at random are cousins is at least 0.14 , which again is likely an underestimate. Using an analogous procedure, if we pick any two individuals at random from our data set, the probability that they are co-ethnics is around 0.17 . Notice this latter number nearly

[^17]matches the ethnolinguistic fractionalization score of 0.84 reported for Mali by Alesina et al. (2003, 185), which gives the probability that two individuals are from different ethnic groups. It also bears emphasis that leading exemplars of cross-cutting cousinage alliances are very common. For example, around 10 percent of subjects are named either Keita or Coulibaly; on average, at least one-half of one percent of randomly-drawn subject pairs will be a Keita-Coulibaly pair (an alliance that cross-cuts the Malinké and Bambara ethnic groups). ${ }^{34}$ In sum, cross-cutting cousinage ties are very widespread in Mali.

Second, both our experimental data and our other field research further attest to the political salience of cousinage relations. In our experiment, the estimated effects of cousinage alliances are strongest for politically-active subjects-defined as subjects who say they are registered to vote and who have voted in the most recent presidential and parliamentary elections. Although the group of politicallyactive subjects is smaller than the group of non-active subjects, the treatment effects reported in Table 4 tend to be substantively large as well as statistically significant for this smaller, politically-active group; for the larger, non-active group, estimated treatment effects are smaller and sometimes insignificant. ${ }^{35}$ In addition, the political salience of cousinage appears independent of any "modernization" effect, whereby the importance of cousinage recedes as people become more educated: if anything, causal effects are stronger for more educated people (those who have a baccalaureat) than for less educated people. The heightened relevance of cousinage alliances among politically-active as well as educated citizens may suggest the political utility of these alliances in fully "modern" forms of electoral competition.

Our field research also suggests that politicians employ cousinage relations to serve their electoral objectives. A deputy in the National Assembly told one of us (Thad Dunning) that he uses cousinage alliances to establish rapport and "win the loyalty" of non-coethnic voters in his constituency. ${ }^{36}$ Mali's current president, Amadou Toumani Touré, often refers in speeches to his joking cousins; the president is

[^18]fortunate that his surname grants him alliances with voters bearing common patronyms from at least four ethnic groups-namely, the Coulibaly (ethnic Bamanans), the Maiga (ethnic Songhais), the Keita and the Sissoko (ethnic Malinkés), and the Guindo (ethnic Dogons). Thus, the president can invoke cousinage relations nearly wherever he travels in the country (Douyon, 899). ${ }^{37}$ A small secondary literature also underscores the electoral utility of cousinage alliances. Douyon $(2006,899)$ for example, says that "numerous candidates in the legislative or municipal elections have solicited the vote of their senankun allies [their cousins], who are manipulated more easily than (even) direct relatives" (see also Canut 2006). ${ }^{38}$ Interestingly, politicians sometimes find ways to extend the range of cousinage relations to which they can legitimately appeal politically, for example by drawing on maternal as well as paternal patronyms. ${ }^{39}$ Finally, where deputies or other politicians come from a minority or non-dominant ethnic group in a given constituency, they appear to enjoy particularly widespread cousinage relations with voters in the consituency. In the region of Gao, which is ethnically nearly 75 percent Sonrhai, the president of the regional assembly is ethnically Dogon, an extreme minority comprising well under five percent of the population in that region. However, this politician's surname (Guindo) grants him cousinage relations with all of the most common Sonrhai patronyms (such as Maiga, Cissé, or Touré). ${ }^{40}$

Such examples suggest that in nominating candidates for elected office, party leaders may pay attention not only to ethnicity but also to the cousinage relations that exist between candidates and voters in given constituencies. We devised a way to test this hypothesis more systematically. First, we used three rounds of Afrobarometer survey data to estimate the distribution of ethnic groups within each of the electoral constituencies from which candidates on single or multi-member party lists are elected to the

[^19]National Assembly. ${ }^{41}$ The Afrobarometer surveys taken in 2001, 2002, and 2005 were all nationally representative probability samples, and each survey has respondents from most of Mali's 55 constituencies. ${ }^{42}$ Combining data across the three surveys gives us probability samples of, on average, 87 respondents per constituency (with a median of 60 ); since most constituencies have one or two major ethnic groups (see below), this sample size allows us to estimate the distribution of ethnic groups in each constituency with reasonable precision. Next, we obtained the names and ethnicities of 221 candidates placed on party lists by Mali's three largest parties, ADEMA-PASJ, RPM, and URD, during the 2007 legislative elections; together, these parties won 96 of 147 seats in the National Assembly. ${ }^{43}$ We then coded the ethnic match between each candidate and his or her electoral constituency. Since the largest ethnic group in each constituency comprises, on average, nearly 71 percent of the population, it makes sense to code whether or not politicians came from the largest ethnic group in the constituency. However, our results are similar if we instead code whether each candidate came from one of the two largest, the three largest, or the four largest ethnic groups. ${ }^{44}$

We also developed a way to evaluate the extent of cousinage alliances between ethnic minority candidates and the ethnic majority group(s) in each candidate's constituency. The idea is to test systematically the hypothesis suggested by the anecdotal evidence above: when parties run candidates who are ethnic minorities in a constituency, they tend to run candidates who enjoy widespread cousinage alliances with voters in the ethnic majority group. Two probabilities are therefore relevant: the probability that a voter drawn at random from the largest ethnic group (or groups) in a given constituency would be a cousin of the candidate, and the weighted average probability that a voter drawn at random from any other ethnic group would be a cousin (where the weights are the relative sizes of the other ethnic groups). Under the null hypothesis that parties are not paying attention to cousinage relations between

[^20]ethnic minority candidates and ethnic majority groups, these probabilities would be the same: a politician picked at random is as likely to have cousinage relations with voters outside a constituency's major ethnic group as within it. If, on the other hand, parties choose candidates whose patronyms grant them cousinage alliances with very common surnames of the constituency's largest ethnic groups, we should find that ethnic minority candidates are more likely to have cousinage relations with voters from the ethnic majority group as they are with voters from other ethnic groups. ${ }^{45}$

Our results suggest two striking conclusions. First, in choosing candidates, parties in Mali underrepresent major ethnic groups in each electoral constituency: while the largest ethnic group comprises on average 71 percent of each constituency, the candidates in our dataset come from this ethnic group just 39 percent of the time. ${ }^{46}$ (Note that if parties were picking candidates at random from the population of each constituency, they would in expectation pick candidates from the majority group 71 percent of the time!). This finding, striking as it is, is obviously consistent with the puzzle that motivates this article. Second, the strategic use of cousinage relations by parties can at least partially account for the lack of ethnic match between candidates and their constituencies. The estimated probability that a candidate who does not come from his or her constituency's largest ethnic group is a cousin of a voter drawn at random from that group is 0.16 , while the estimated probability that the candidate is a cousin of a voter drawn at random from any other ethnic group is 0.09 . As discussed above, these are likely to be underestimates of the true probabilities, but each probability is likely underestimated by the same amount. ${ }^{47}$ What is relevant is therefore not the absolute quantities but rather the difference in these estimated probabilities. Our evidence suggests that ethnic minority candidates are at least two-thirds more likely to be cousins of voters in the ethnic majority group than they are to be cousins of ethnic minority voters.

[^21]Finally, how do co-ethnicity and cousinage alliances co-vary? We can answer this question using the following procedure. For each experimental subject, we can use the information in our random assignment matrix to classify the subject's ethnic and cousinage ties to an ethnically Malinké politician named Keita, the patronym of Mali's first president after independence. Keita is a good surname to examine in this regard, because unlike some other names it appears in one of the columns of nearly all of the rows of our random assignment matrix; thus we can classify cousinage and ethnic relations between almost every subject in our experimental population and a politician named Keita.

Our analysis suggests a strong negative relationship between ethnic and cousinage ties, at least for the patronym Keita. Among subjects from the Malinké ethnic group, just 34 percent of subjects are also cousins with the Keita. On the other hand, among subjects from non-Malinké ethnic groups, around 57 percent are cousins of the Keita. In other words, for a politician named Keita, the off-diagonal cells in the top two rows of Table 1 are more heavily populated, empirically, than are the diagonal cells. In the Appendix, we show that subjects are also typically more cognizant of the identity of their cousins from different ethnic groups than from their own ethnic group (see the Appendix), which may further suggest the salience of across-group rather than within-group cousinage alliances. While our data do not allow us to investigate the relevant covariance for all potential politicians names, our analysis therefore suggests the strong plausibility that cousinage and co-ethnic ties are negatively related.

In sum, cousinage alliances are as widespread as ethnic ties, and the cross-cutting nature of these links is especially important. Cousinage alliances are exploited strategically by politicians and appear to be considered by parties in choosing candidates. Our evidence may therefore explain why vote choice is not strongly related to ethnicity in surveys: although both ethnic and cousinage ties positively affect evaluations of politicians, ethnic and cousinage alliances are plausibly negatively related. The omission of cousinage alliances therefore suppresses the true effect of ethnicity, leading to a misleadingly weak association between ethnicity and political preferences in observational data.

## VII. Conclusion

Social scientists have often suggested that cross-cutting cleavages may shape patterns of ethnic conflict as well as the salience of ethnicity in electoral politics. In this study, we have assessed whether cross-cutting ties can elucidate the apparent absence of ethnic voting in Mali, an ethnically-heterogenous sub-Saharan African country. Our experimental results suggest several conclusions. First, cousinage alliances and co-ethnicity both positively shape voters' evaluations of candidates. Second, however, cousinage ties help explain why ethnicity may appear unrelated to vote choice: the omission of cousinage alliances suppresses the true effect of co-ethnicity on voter preferences. Finally, the mechanisms through which these effects take place have to do mostly with expectations about politicians' post-election behavior. Although the campaign promises of politicians are deemed more credible when the politician is a co-ethnic or a cousin, the cross-cutting nature of cousinage and ethnic alliances helps explain why electoral competition does not crystallize around any one line of cleavage.

Of course, we do not mean to suggest that cousinage alliances necessarily provide the only reason that ethnicity appears unrelated to vote choice in Mali. Our experiment and our supplementary evidence simply demonstrate that there is indeed a causal effect of cousinage alliances and ethnic ties on candidate evaluations-something not easily inferred from the observational evidence-and that the cross-cutting nature of these ties can account for the lack of salience of ethnicity in electoral politics.

The experimental design we introduce in this paper could be useful for exploring further questions in future research. For instance, why do cross-cutting cleavages seem to inhibit ethnic voting in some settings but may not do so in others? Does the nature of the cross-cutting cleavage structure (for example, the empirical distribution of voters along different cleavage dimensions) matter? How do political or electoral institutions shape the salience of different dimensions of identity? An innovative theoretical and empirical literature in comparative politics has recently addressed such questions (e.g., Chandra 2005; Posner 2004a, 2005), and an impressive body of observational research has been built up. Experimental designs similar to the one we have employed in Mali could readily complement and extend such research to illuminate the political effects of cross-cutting cleavages.

## References

Afrobarometer. 2007. "Afrobarometer Survey Findings, Summary of Results: Round 3
Afrobarometer Survey in Mali, 2005." Updated February 17, 2007. Available at URL.
Alesina, Alberto, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat, and Romain Wacziarg. 2003.
"Fractionalization." Journal of Economic Growth 8 (2): 155-194.
Allardt, Erik, and Yrjö Littunen, eds. 1964. Cleavages, Ideologies, and Party Systems. Helsinki: Distributor, Academic Bookstore.

Arcin, A. 1906. "L'organisation sociale en Guinée française. Les Familles." La Revue Coloniale 45: 803832.

Bartolini, Stefano, and Peter Mair. 1990. Identity, Competition, and Electoral Availability: The Stabilisation of European Electorates 1885-1985. Cambridge: Cambridge University Press.

Bates, Robert. 1983. "Modernization, Ethnic Competition and the Rationality of Politics in Contemporary Africa." In Donald Rothschild and Victor Olorunsola, State Versus Ethnic Claims: African Policy Dilemmas, Boulder, CO: Westview Press, pp. 152-171.

Canut, Cécile. 2006. "Construction des discours identitaires au Mali: Ethnicisation et instrumentalisation des senankuya." In Cécile Canut and Étienne Smith, eds. "Parentés, plaisanteries et politique," special issue of Cahiers D'Études Africaines XLVI (4).

Canut, Cécile, and Étienne Smith. 2006. "Pactes, Alliances et plaisanteries. Pratiques locales, discours global." In Cécile Canut and Étienne Smith, eds. "Parentés, plaisanteries et politique," special issue of Cahiers D'Études Africaines XLVI (4): 795-808.

Chandra, Kanchan. 2004. Why Ethnic Parties Succeed: Patronage and Ethnic Head Counts in India. New York: Cambridge University Press.

Chandra, Kanchan. 2005. "Ethnic Parties and Democratic Stability." Perspectives on Politics 3 (2): 235252.

Chandra, Kanchan. 2006. "What is Ethnic Identity and Does It Matter?" Annual Review of Political Science 9: 397-424.

Cochran, William G. 1955. "Research Techniques in the Study of Human Beings." Milbank Memorial Fund Quarterly 33 (2):121-36.

Coser, Lewis A. 1956. The Functions of Social Conflict. Glencoe, IL: The Free Press.
Cox, David R. 1958. Planning of Experiments. New York: John Wiley \& Sons.
Dahl, Robert Alan. 1956. A Preface to Democratic Theory. Chicago: University of Chicago Press.
Dahl, Robert Alan. 1982. Dilemmas of Pluralist Democracy: Autonomy vs. Control. New Haven, CT: Yale University Press.

Dahrendorf, Rahl. 1959. Class and Conflict in Industrial Society. Stanford: Stanford University Press.
Davidheiser, Mark. 2006. "Joking for Peace: Social Organization, Tradition, and Change in Gambian Conflict Management." In Cécile Canut and Étienne Smith, eds. "Parentés, plaisanteries et politique," special issue of Cahiers D'Études Africaines XLVI (4): 795-808.

Delafosse, M. 1912. Haut-Sénégal Niger, 3 vols. Paris: E. Larose.
Dowd, Robert A., and Michael Driessen. 2008. "Ethnically Dominated Party Systems and the Quality of Democracy: Evidence from Sub-Saharan Africa." Afrobarometer Working Paper No. 92.

Douyon, Denis. 2006. "Le discours diplomatique et démagogique du cousin plaisant au Mali." In Cécile Canut and Étienne Smith, eds. "Parentés, plaisanteries et politique," special issue of Cahiers D'Études Africaines XLVI (4).

Dunning, Thad. 2009. "Natural and Field Experiments: The Role of Qualitative Methods." Qualitative Methods 6 (2).

Eifert, Ben, Edward Miguel, and Daniel Posner. 2007. "Political Sources of Ethnic Identification in Africa." Afrobarometer Working Paper No. 89.

Fearon, James D. and David D. Laitin. 1996. "Explaining Interethnic Cooperation." The American Political Science Review. Vol. 90 (4): 715-735.

Fearon, James. 1999a. "What is Identity (as We Now Use the Word)?" Mimeo, Stanford University, November 1999. Available at http://www.stanford.edu/~jfearon/.

Fearon, James. 1999b. "Why Ethnic Politics and 'Pork’ Tend to Go Together." Presented at an SSRCMacArthur sponsored conference on "Ethnic Politics and Democratic Stability," University of Chicago, May 21-23, 1999. Available at http://www.stanford.edu/~jfearon/.

Freedman, David. 2006. "Statistical Models for Causation: What Inferential Leverage Do They Provide?" Evaluation Review 30: 691-713.

Freedman, David, D.B. Petitti, and J. M. Robins. 2004. "On the Efficacy of Screening for Breast Cancer." International Journal of Epidemiology 33: 43-73. Correspondence, pp. 1404-6.

Galvan, Dennis. 2006. "Joking Kinship as a Syncretic Institution." In Cécile Canut and Étienne Smith, eds. "Parentés, plaisanteries et politique," special issue of Cahiers D'Études Africaines XLVI (4): 809-834.

Greif, Avner. 2006. Institutions and the Path to the Modern Economy: Lessons from Medieval Trade. Cambridge: Cambridge University Press.

Griaule, M. 1948. "L'Alliance cathartique." Africa 18 (4): 242-258.
Habyarimana, James, Macartan Humphreys, Daniel Posner, and Jeremy Weinstein. 2007. "Why does Ethnic Diversity Undermine Public Goods Provision?" American Political Science Review 101 (04): 709-725.

Horowitz, Donald L. 2000. Ethnic Groups in Conflict. Berkeley: University of California Press, $2^{\text {nd }}$ Edition.

Humblot, P. 1918. "Du nom et des appellations chez les Malinkés des vallées du Niandian et du Milo (Guiné française)." Bulletin du comité d'etudes historiques et scientifiques de l'AOF: 519-540.

Imbens, Guido W., and Joshua Angrist D. 1994. "Identification and Estimation of Local Average Treatment Effects." Econometrica 62: 467-75.

Jones, Rachel A. 2007. "You Eat Beans! Kin-Based Joking Relationships, Obligations, and Identity in Urban Mali." Senior Honors Thesis, Anthropology Department, Macalester College. Downloaded from http://digitalcommons.macalester.edu/anth honors/2/.

Kouyaté, Siriman. 2003. Le Cousinage à Plaisanterie: Notre Héritage Commun. Conakry, Guinée: Editions Ganndal.

Laitin, David. 1986. Hegemony and Culture: Politics and Religious Change Among the Yoruba. Chicago: University of Chicago Press.

Laitin, David. 1998. Identity in Formation: The Russian-Speaking Populations of the Near-Abroad. Ithaca: Cornell University Press.

Launay, Robert. 2006. "Practical Joking." In Cécile Canut and Étienne Smith, eds. "Parentés, plaisanteries et politique," special issue of Cahiers D'Études Africaines XLVI (4): 795-808.

Lipset, Seymour Martin. 1959. Political Man: The Social Bases of Politics. Garden City, NY: Doubleday.

Lipset, Seymour Martin and Stein Rokkan. 1967. "Cleavage Structures, Party Systems, and Voter Alignments." In Seymour Martin Lipset and Stein Rokkan, eds., Party Systems and Voter Alignments: Cross-National Perspectives. New York: The Free Press.

Mauss, Marcel. 1928. "Parentés à plaisanterie." Annuaire de l'École pratique des hautes études, section des sciences religieuses ("Les classiques en sciences sociales"). Melun, Imprimerie administrative, Paris: 3-21.

Molinié, Lt. 1959. Les systèmes patronymique au Soudan Central, Centre militaire d'information et de specialization pour l'Outre-Mer, 4e trimester, 544/A.

Newton, Ken and Jan W. Van Deth. 2005. Foundations of Comparative Politics: Democracies of the Modern World. Cambridge, UK: Cambridge University Press.

Nobles, Melissa. 2000. Shades of Citizenship: Race and the Census in Modern Politics. Palo Alto, CA: Stanford University Press.

Norris, Pippa, and Roberto Mattes. 2003. "Does Ethnicity Determine Support for the Governing Party? The Structural and Attitudinal Basis of Partisan Identification in 12 African Nations." Working paper, Harvard University.

North, Douglass. 1990. Institutions, Institutional Change, and Economic Performance. New York: Cambridge University Press.

Pageard, R. 1958. "Notes sure les rapports de 'senakouya' au Soudan français, particulièrement dans les circles de Ségou et de Macina." Bulletin de l'IFAN, XX, série B: 123-141.

Posner, Daniel N. 2004a. "The Political Salience of Cultural Difference: Why Chewas and Tumbukas Are Allies in Zambia and Adversaries in Malawi." American Political Science Review 98 (4): 529545.

Posner, Daniel. 2004b. "Measuring Ethnic Fractionalization in Africa." American Journal of Political Science 48 (4): 849-863.

Posner, Daniel. 2005. Institutions and Ethnic Politics in Africa. Cambridge: Cambridge University Press.
Radcliffe-Brown, A. R. 1940. "On Joking Relationships." Africa 19: 133-140.
Robinson, James, and Thierry Verdier. 2002. "The Political Economy of Clientelism." CEPR Discussion Paper No. 3205.

Roemer, John E., Woojin Lee, and Karine Van der Straeten. 2007. Racism, Xenophobia, and Distribution: Multi-Issue Politics in Advanced Democracies. New York and Cambridge: Russell Sage Foundation and Harvard University Press.

Rogowski, Ronald. 1989. Commerce and Coalitions: How Trade Affects Domestic Political Alignments. Princeton: Princeton University Press.

Rubin, Donald. 1978. "Bayesian Inference for Causal Effects: The Role of Randomization." The Annals of Statistics 6 (1): 34-58.

Smith, Étienne. 2006. "La nation 'par le coté': le récit des cousinages au Sénegal." In Cécile Canut and Étienne Smith, eds. "Parentés, plaisanteries et politique," special issue of Cahiers D'Études Africaines XLVI (4): 795-808.

Simmel, Georg. 1955. Conflict and the Web of Group Affiliations. Glencoe, IL: The Free Press.
Sissao, Alain Joseph. 2002. Alliances et Parentés à Plaisanterie au Burkina Faso: Mécanisme de fonctionnement et avenir. Ouagadougou, Burkina Faso: Sankofa \& Gurli Editions.

Stokes, Susan C. 2006. "Perverse Accountability: A Formal Model of Machine Politics with Evidence from Argentina." American Political Science Review 99(3):315-325.

Taylor, Michael, and Douglas Rae. 1969. "An Analysis of Crosscutting between Political Cleavages." Comparative Politics 1 (4): 534-547.

Wantchekon, Leonard. 2003. "Clientelism and Voting Behavior: Evidence from a Field Experiment in Benin." World Politics 55: 399-422.

Weber, Max. 1978 [1914]. "Ethnic Groups." In Guenther Roth and Claus Wittich, eds., Max Weber, Economy and Society: An Outline of Interpretive Sociology, Berkeley: University of California Press ( $2^{\text {nd }}$ printing).

## Appendix: The Effect of Treatment on the Treated

As discussed in the text, one inferential issue in our experiment is that subjects may not perceive themselves to be in the intended cell of Table 1—that is, the treatment condition to which they had been randomly assigned. For example, a subject might perceive a politician who we intend to be a co-ethnic cousin as, say, a cousin from a different ethnic group. This may be problematic, since we ultimately care about how perceiving oneself as being a cousin or co-ethnic of a politician shapes candidate evaluations.

From the perspective of experimental analysis, however, this issue is analogous to the standard problem of experimental crossover. In a typical experiment to evaluate a new medical drug, not all subjects will follow the experimental protocol: some subjects assigned to the treatment regime may refuse the drug, while subjects assigned to control may seek out the treatment. Crossover from the treatment to the control arm of the experiment tends to dilute the effects of treatment assignment (Freedman 2006).

Under some conditions, experimental data may be adjusted to recover the effect of treatment on compliers, that is, the effect of treatment on subjects who follow the treatment regime to which they are assigned. (This estimand is sometimes called the effect of treatment on the treated; we follow that terminology here.) In this appendix, we use this adjustment procedure to calculate an estimate of the effect of cousinage alliances, for subjects who viewed a speech by a politician from a different ethnic group. The estimated effect of treatment on the treated is 50 percent larger than the effect size suggested by the intention-to-treat analysis reported in the text.

In our post-speech questionnaires, we asked subjects to identify the ethnic group to which the politician in the video belonged, and also whether the politician in the video was the subject's joking cousin. Using these two questions as well as the self-identified ethnicity of subjects, we are able to code whether subjects assigned to a particular treatment condition in fact perceived the politician as we intended. Table 7 cross-tabulates treatment assignment and perceived treatment receipt. As the bolded cells in the table show, subjects who viewed a speech by a politician from a different ethnic group could determine with substantial accuracy whether the politician was their cousin. (Put differently, their
perceptions matched the perceptions of the informants who helped us to construct our random assignment matrix.) Nonetheless, as the bolded cells suggest, there was some crossover from the non-coethnic, cousin to the non-coethnic, non-cousin condition, and vice versa. In addition, subjects who were assigned to view a speech by a co-ethnic perceived themselves in the "wrong" treatment condition with greater frequency. ${ }^{48}$

These mismatches between treatment assignment and perceived treatment receipt probably occurred for several reasons. First, correctly classifying cousinage relations for over 200 Malian last names is a complex and imperfect science. Even after improving our random assignment matrix through our smaller experiments as well as through further interviews with key informants, the matrix likely remained imperfect. Second and perhaps more importantly, even if we could create a perfectly accurate matrix of cousinage relations, as understood by key informants, individuals vary in their knowledge of cousinage relations in Mali. ${ }^{49}$ Finally, individuals appear to have considerably less certainty regarding who are their cousins, when evaluating joking partners from their own ethnic group.

Here, estimation of the effect of treatment on the treated for the full set of treatment conditions is a complicated proposition: for one, subjects assigned to view speeches by co-ethnics crossed over to each of several other conditions. However, it may be reasonable to estimate the effect of treatment on the treated, for subjects assigned to view speeches by politicians from a different ethnic group. For such subjects, nearly all of the crossover occurred between the cousin and the non-cousin conditions, and treatment assignment is strongly correlated with perceived treatment receipt: nearly 80 percent $(98 / 124)$ of subjects assigned to the different ethnicity, cousin condition correctly perceived treatment receipt, while the same held for more than 85 percent $(131 / 152)$ of subjects assigned to the non-coethnic, noncousin condition.

[^22]Table 7: Treatment Assignment and Treatment Receipt

|  | Treatment Receipt |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Same <br> Ethnicity, <br> Joking <br> Cousin | Same <br> Ethnicity, <br> Not <br> Joking <br> Cousin | Different Ethnicity, Joking Cousin | Different Ethnicity, Not Joking Cousin | Totals |
|  | Same Ethnicity, Joking Cousin | 37 | 69 | 12 | 18 | 136 |
| Treatment | Same Ethnicity, Not Joking Cousin | 26 | 67 | 24 | 5 | 122 |
| Assignment | Different Ethnicity, Joking Cousin | 1 | 3 | 98 | 22 | 124 |
|  | Different Ethnicity, Not Joking Cousin | 0 | 3 | 18 | 131 | 152 |
|  | Totals | 64 | 142 | 152 | 173 |  |

Ignoring the very few such subjects who perceived the politician to be a co-ethnic (see the third and fourth rows of Table 7), we can estimate the effect of treatment on the treated (ETT) for subjects assigned to view a speech by a politician from a different ethnic group as follows:

$$
\begin{equation*}
\mathrm{ETT}=\frac{4.44-3.96}{0.79-0.12}=0.72 \tag{1}
\end{equation*}
$$

The numerator of the estimator in equation (1) is the estimated intention-to-treat parameter, which is calculated by subtracting the right-hand cell of the second row of Table 4 from the left-hand cell. The denominator is the proportion of subjects assigned to the non-coethnic, cousin condition who correctly perceive treatment assignment (that is, $98 / 124$ or 0.79 ), minus the proportion of subjects assigned to the different ethnicity, non-cousin condition who (incorrectly) perceive themselves to be viewing a speech by a joking cousin from a different ethnic group (that is, $18 / 152$ or 0.12 ). See Freedman (2006) and Imbens and Angrist (1994) for discussion of this estimator, and Freedman, Petitti, and Robins (2004) for an application. The estimated effect of treatment on the treated of 0.72 in equation (2) is 50 percent greater than the estimated intention-to-treat parameter in the numerator, that is, 4.44-3.96 $=0.48$.


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[^1]:    ${ }^{3}$ The idea has a long and distinguished history: see Allardt and Littunen (1964), Dahl (1956, 1982), Dahrendorf (1959), Lipset (1959), Lipset and Rokkan (1967), Simmel (1955), or Taylor and Rae (1969).

[^2]:    ${ }^{4}$ Although non-manipulationist accounts of causation obviously exist, causal inference often involves specifying the hypothetical manipulation, the effects of which we would like to estimate (Cochran 1955).

[^3]:    ${ }^{5}$ For example, the Keita typically come from the Malinké ethnic group, while the Coulibaly are ethnically Bambara.

[^4]:    ${ }^{6}$ Ethnic groups in Mali include the Bambara/Bamanan (an estimated 26 percent of the national population), Peulh/Fula ( 14 percent), Sonrhai ( 10 percent), Soninké/Sarakolé ( 9 percent), Maninka/Malinké ( 7 percent), Dogon ( 6 percent), Bobo ( 3 percent), Sénoufo ( 3 percent), Mianka ( 3 percent), Khasonké ( 2 percent), Tuareg ( 2 percent), and Bozo ( 1 percent), among others (Afrobarometer 2007, 51).
    ${ }^{7}$ One interviewee was able to identify a neighborhood (quartier) in Bamako that is associated with each of 10 different ethnic groups. Field interview, Bamako, October 14, 2008.

[^5]:    ${ }^{8}$ We refer to cousinage as an informal institution in the sense of North (1990) or Greif (2006: 30): "An institution is a system of rules, beliefs, norms and organizations that together generate a regularity of social behavior."
    ${ }^{9}$ See, inter alia Arcin (1906), Delafosse (1912), Humblot (1918), Mauss (1928), Radcliffe-Brown (1940), Griaule (1948), Pageard (1958), Molinié (1959); more recently, Canut and Smith (2006), Davidheiser (2006, 837), Douyon (2006), Galvan (2006), Launay (2006), and Smith (2006).
    ${ }^{10}$ Alliances between patronyms existed even before Sundiata Keita's time (interview of the griot Noumoussa Kante, Bamako, October 12, 2008); however, Keita codified and sanctioned the practice. Kouyate (2003, 24-69) traces the origins of the practice to the West African village of Conde de Dafolo during the Middle Ages.

[^6]:    ${ }^{11}$ The standard French terms used to describe fictive or joking kinship relations in Mali include cousinage and parenté a plaisanterie. There is also a related institution of blood pacts, tanamannyonya.
    ${ }^{12}$ It may be tempting to think of cousinage alliances as themselves being ethnic ties. However, this does not seem appropriate. Common descent is often taken to be a defining feature of ethnic identity (Weber 1978; Laitin 1998, 335; Fearon 1999a; Horowitz 2000; Chandra 2006). Yet in Mali, sharing a patronym may imply common descent only in the loosest way. As Launay (2006, 767-8) explains, "in a large community, it is not uncommon for two entirely unrelated descent groups to share the same patronym...in principle at least, the relationship of senankunya transcends all locality, linking all people who share one name with all people who share another."
    ${ }^{13}$ Cousinage ties are not transitive: if A is a cousin of B and B is a cousin of C, A and C are not necessarily cousins.
    ${ }^{14}$ Interview, Mamadou Sonogo. Bamako, October 8, 2008.
    ${ }^{15}$ See the citations in footnote 9 .

[^7]:    ${ }^{16}$ Mali has a multiparty democracy with direct elections for President and list-based elections in single- or multimember constituencies for seats in the National Assembly.

[^8]:    ${ }^{17}$ Although last name usually implies a single ethnicity in Mali (as implied by our experimental design), one will occasionally encounter exceptions; these exceptions may have different cousins as well. In each row of our matrix, we therefore specified not just the last name of the subject but also his or her ethnicity.
    ${ }^{18}$ The random assignment matrix is posted online at http://pantheon.yale.edu/~td244/research.html, along with the experimental questionnaires and the text of the videotaped political speech (in French).

[^9]:    ${ }^{19}$ In Bamako, women tend to be doing work inside houses or compounds, while men tend to be outside sipping tea.
    ${ }^{20}$ The screening questionnaire asked for name, sex, year of birth, last year of schooling completed, place of birth, years living in Bamako, where else subject has lived (if anywhere), whether the subject is registered to vote, language of greatest daily use, the first language the subject learned, and the subject's ethnic identity.
    ${ }^{21}$ Around 20 percent of potential subjects we contacted were not eligible to participate in the experiment, because their (more unusual) last names did not appear in the rows of our random assignment matrix. For such ineligible subjects, we showed a single version of the speech to the subject and then administered a highly abbreviated postspeech questionnaire. Data for ineligible subjects are not analyzed here.
    ${ }^{22}$ The use of Bambara does not necessarily imply a particular ethnic identity on the part of the politician. Among our experimental subjects who self-identified with an ethnicity other than Bambara/Bamanan, 61 percent said they

[^10]:    speak Bambara more frequently than any other language in daily life, while another 14 percent speak both Bambara and French and 13 percent speak primarily French-leaving just 12 percent of non-Bambaras who use a language other than Bambara most frequently in daily life. In addition, subjects did not disproportionately attribute a Bamanan/Bambara identity to the politician, even though the speech was given in Bambara.
    ${ }^{23}$ We supervised our two research assistants intensively, especially during our initial smaller experiments. In total, one of us (Thad Dunning or Lauren Harrison) was present for 11 percent of the subject interviews.
    ${ }^{24}$ The identity of the actor in the first video was assigned at random, with the other actor then shown in the subsequent version (for those subjects who saw two versions). Interestingly, relatively few subjects commented that the content of both speeches was identical; we also saw substantial within-subject variance in responses.

[^11]:    ${ }^{25}$ In French, the question reads: "Sur une échelle de 1 à 7 , est-ce que le discours de (nom du politicien/ce candidat) vous donne envie de préférer ce candidat? $(1=$ non, pas du tout, $7=$ oui, tout à fait)." The verb "préférer" may be slightly ambiguous, as it may be interpreted as "to prefer" or "vote for" in this context.

[^12]:    ${ }^{26}$ Interestingly, the evidence suggests additive, rather than interactive effects: the estimated effect of co-ethnicity is nearly the same whether or not the politician is a joking cousin, while the effect of cousinage ties is about the same whether or not the politician is a co-ethnic. The evidence on mechanisms below suggests more interactive effects.

[^13]:    ${ }^{27}$ The manipulation check supported our assumption that the sixth (same name) control condition is like the coethnic, non-cousin condition: among subjects assigned to see a speech by a politician with the same last name, 98 percent said the politician was not a cousin, while 90 percent said the politician was a co-ethnic.

[^14]:    ${ }^{28}$ In a different context, Habyarimana et al. (2007) catalogue three families of mechanisms that might explain why co-ethnics are better able to cooperate to provide public goods: in-group altruism or "preferences," "strategy selection," and "technology." The first family of mechanisms corresponds closely to what we define here as affective evaluations, while our emphasis on credibility may combine aspects of strategy selection and technology.
    ${ }^{29}$ Arguably, the final two questions may relate to either affective evaluations or to credibility, though they seem to us most likely to relate to the latter: for instance, opinions about a candidate's motivations for running for office presumably relate to expectations about his behavior once in office. Our main results are not affected by the exclusion of these questions from the credible variable, however (or their inclusion in the affective variable).
    ${ }^{30}$ We also asked questions about whether the subject agreed with the politician's political ideas. However, treatment assignment did not significant affect subjects' degree of agreement with the politician's ideas.

[^15]:    ${ }^{31}$ In Table 4, the numbers of subjects in each treatment condition differ slightly from Table 3 due to non-response on component questions of each index. The proportion of missing data is very similar across treatment conditions, suggesting that non-response is unrelated to treatment assignment.

[^16]:    ${ }^{32}$ For example, one Kouyaté subject, when asked if the politician was worthy of confidence, noted that "the Djelys (griots, Kouyatés) are trustworthy."

[^17]:    ${ }^{33}$ As mentioned above, among our subjects the distribution of pre-treatment covariates, including ethnicity, closely approximates the population distribution in Bamako, as estimated by representative surveys. It also seems unlikely on a priori grounds that our sampling procedure would produce a highly unrepresentative sample of last names.

[^18]:    ${ }^{34}$ For politicians bearing one of the surnames of Mali’s four presidents since independence-Keita, Traoré, Konaré, and Toure-the probability that any voter drawn at random is a cousin also approaches or surpasses the probability that any voter is a co-ethnic.
    ${ }^{35}$ Full results are available from the authors upon request.
    ${ }^{36}$ Lanceni Balla Keita (an ethnic Malinké deputy in the National Assembly) reported using cousinage ties to establish report while campaigning in a village inhabited by many non-coethnics (Bambaras) named Samaké, who are his joking cousins. Interview, Bamako, October 12, 2008.

[^19]:    ${ }^{37}$ This is not atypical, because each last name or jamu in Mali typically has not one but several joking partners, across various ethnic groups (Launay 2006, 797).
    ${ }^{38}$ Translated from the original French; all translations are ours, unless otherwise noted.
    ${ }^{39}$ Douyon (2006, 896-7) even says that "the changing of patronyms is very frequent near elections" and that "children of a man with two wives can bear different patronyms," drawing on their paternal patronym as well as either of their "maternal" last names, as circumstances require.
    ${ }^{40}$ Personal communication, Kassim Traoré, December 8 and December 22, 2008.

[^20]:    ${ }^{41}$ Census data in Mali do not appear to report the distribution of ethnic groups by electoral constituency. Mali has a two-round, winner-take-all list system, in which the party commanding the majority of votes (in the first or second round) takes all of the seats from the constituency.
    ${ }^{42}$ The electoral constituencies comprise 49 administrative units called cercles, plus the 6 communes of Bamako.
    ${ }^{43}$ The National Assembly has 13 additional seats reserved for representatives of Malians living abroad.
    ${ }^{44}$ Across Mali's 55 constituencies, the identity of the largest ethnic group is alternately Bambara (23), Bobo (2), Dogon (2), Fula/Peulh (4), Malinké (3), Mianka (1), Senoufo (1), Soninké (6), Sonrhai (8), or Tuareg (5).

[^21]:    ${ }^{45}$ To estimate these probabilities, we followed a procedure analogous to that described at the start of this section (though now conditioning on the ethnic group).
    ${ }^{46}$ Similarly, the two largest ethnic groups in each constituency comprise on average 87 percent of citizens but just 62 percent of candidates; the three largest groups include 91 percent of citizens but just 74 percent of candidates; and the four largest groups comprise 92 percent of citizens but only 75 percent of candidates.
    ${ }^{47}$ Again, our cousinage matrix only includes well-understood or especially "strong" cousinage relations, which biases estimates of the prevalence of cousinage alliances downwards. However, this downward bias should apply equally to both probabilities of interest, so it should not affect comparisons between the two.

[^22]:    ${ }^{48}$ In general, as mentioned above, subjects inferred the intended ethnicity of politicians with great accuracy, but they more frequently labeled cousins as non-cousins, or non-cousins as cousins.
    ${ }^{49}$ As one expert puts it, "The question of which jamu [patronym] actually jokes with whom is subject to considerable indeterminacy. Lists of the joking partners of any given jamu may vary from community to community, or even from individual speaker to speaker" (Launay 2006, 799).

