

Ethnic Identity, Collective Action, and Conflict: An Experimental Approach

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ABSTRACT

Theories of ethnic mobilization and conflict tend to assume that political actors are easily able to place other actors into their “correct” ethnic categories. While this may be the case for some individuals and some categories, it is not always so. We argue that this variation, although typically ignored, has implications for theoretical, empirical, and policy-oriented research on ethnic cooperation and conflict. In this paper we propose the use of experimental methods to collect data regarding how the information actors have about the identities of others varies within a polity. We describe an experiment that provides insight into the individual and group-level determinants of ethnic “identifiability” – that is, on how well, and under what conditions, actors can correctly identify the ethnic backgrounds of others. We also demonstrate how the information gathered in this experiment informs a second set of experiments that enable us to distinguish between rival explanations for the relationship between ethnicity and collective action.

The experiment described in this paper will be conducted in Uganda in July-August 2003, with a trial run taking place in the U.S. in November 2002. We welcome all suggestions, theoretical and practical to help improve our research design.

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INTRODUCTION

Ethnic identities are widely seen as facilitating and sometimes inducing violent conflict. By one account, conflicts over “identity” account for more than 70% of the civil wars started between 1960 and 1999 (Sambanis 2001). Moreover, ethnic conflicts are perceived to be particularly conducive to large-scale violence such as ethnic cleansing and genocide.

Why is ethnicity so often a basis of political violence? A number of leading theories suggest that the answer lies in the ability of ethnicity to facilitate collective action. One account holds that ethnicity facilitates collective action by *structuring actors’ preferences* to assign positive values to the welfare of fellow group members (Tajfel, Billig, and Bundy 1971). Another hypothesis emphasizes that ethnicity *provides a technology* – a shared language and shared understandings about modes of social interaction – that makes it easier for individuals to coordinate with co-ethnics (Bates 1983). A third approach focuses on the *informal social institutions* that ethnic groups provide. These institutions facilitate collective action by promoting the flow of information about reputations, facilitating sanctioning, and generating expectations that cooperative overtures to fellow group members will be reciprocated. A fourth approach suggests that ethnicity *operates as a focal point* that allows individuals to coordinate their behavior to include or exclude others (Hardin 1995).

Although quite different in the causal mechanisms they emphasize, all of these hypotheses depend, to varying extents, on strong, implicit assumptions about the ability of individuals to sort the people they encounter into their “correct” ethnic categories. Yet this ability is never demonstrated and, in fact, may frequently be questionable. We believe that the ability of individuals to correctly categorize their interacting partners varies across individuals and contexts, and that this variation, if systematic, may have important implications for the relationship between ethnicity and collective action. The problem is that, at present, we simply do not know how well individuals are able to identify the ethnic backgrounds of others, what factors affect their ability to do so, or how these dynamics affect the political decisions they make.

We intend to respond to these gaps in knowledge by employing experimental techniques to test competing hypotheses for the role that ethnicity plays in collective action and conflict. A first goal of our project, which we address in its first phase, is to collect data on a) whether actors are, in fact, able to categorize the strangers they encounter into their

correct ethnic groups and b) how changes in the degree of information that actors have about a stranger's physical appearance, speech patterns, and name affect their ability to do so.

A second goal, which we will address in the project's second phase, is to test the relative explanatory power of the several competing accounts for why ethnicity is so often a basis for political mobilization and violence. To do this, we will undertake a series of experiments in which we take advantage of what we have learned in the first phase to systematically vary the certainty that actors have about their cooperating partners' ethnic backgrounds. Such experimental control is crucial for distinguishing among the multiple roles that ethnicity is hypothesized to play in political organization, and it is only possible if we have a clear understanding of how individuals assess the ethnic identities of others.

The first phase of the larger project will thus serve a dual role. It will provide important new data on what we term "identifiability" – that is, on how well, and under what conditions, actors can correctly identify the ethnic backgrounds of others. And, by doing this, it will provide the information necessary for us to calibrate and control actors' certainty about the ethnic affiliations of others when we turn, in the second phase, to experiments that test rival explanations for the relationship between ethnicity and collective action.

We proceed as follows. In the first section, we describe the role that the assumption of perfect information regarding group membership plays in theoretical and empirical work. We outline the reasons why this assumption is almost certainly invalid and how, if this is the case, it may direct researchers away from asking important questions regarding ethnicity and politics.

In the second section, we demonstrate how collecting information regarding the ability of people to place others in ethnic categories may help us to distinguish between different explanations for the role played by ethnicity in political organization. In doing so, we indicate the form of our second set of proposed experiments, showing how they build upon and make use of the information collected in the first. In the third section, we turn to a detailed examination of the first experiment. We begin by reviewing the existing literature in social and experimental psychology which provides a set of models for our experimental design and points to a number of questions we will be able to answer with systematic data on ethnic identifiability. We then outline the structure of the experiment.

WHY COLLECTING DATA ON IDENTIFIABILITY IS IMPORTANT IN ITS OWN RIGHT

Students of conflict in Africa have paid considerable attention to the role played by ethnicity in the development of political organizations. There is a large literature on the role of ethnicity in political culture before colonization, during independence struggles, in the political organization of African states and in state collapse. More recently, scholars interested in a diverse range of issues have turned their attention to ethnicity as a central explanatory variable. Ethnicity is seen as an important determinant of the provision of public goods (Alesina, Baqir, and Easterly (1999), Miguel (1999) Alesina and La Ferrara (1999)), the distributive nature of policy choice (La Porta et al. (1998), Bates and Yackovlev (2002)), the degree of corruption or institutional quality (Mauro (1995), Knack and Keefer (1997)), and the level of economic growth (Collier and Gunning (1999), Easterly and Levine (1997), Temple (1998)). With a rise in concern regarding the security and economic impacts of civil wars, scholars have also turned to ethnicity to help understand the onset and duration of violent conflict (Collier and Hoeffler (1998), Elbadawi and Sambanis (2000)).³ Much of this literature fails to specify the mechanisms that link ethnicity to political action, but studies that do typically build their accounts around the ability of ethnic groups to solve collective action problems.

More specifically, empirical and theoretical work that relate ethnicity to political organization share the assumption that, however groups are defined, members of a given group recognize each other to be members of that group. It is generally also assumed that individuals know not only when others are not part of their own group, but they also know to which group other individuals belong. Moreover, the boundaries of groups, however artificial they may be, are often assumed to be common knowledge. That is, people know not only what the relevant groups are and who belongs to each one, but they also assume that others have this same information.

These assumptions are of some consequence for theoretical work. By ignoring variation in identifiability, theorists can make a clearer distinction between identity and strategy: it rules out the possibility that, conditional upon some social structure, some

³ This statistical work builds on a longer tradition in security studies that highlights the centrality of ethnic group identity for understanding civil wars (Brown (1993, 1996), David (1997)).

individuals may choose their identity strategically.⁴ It also makes it easier to ignore collective action problems that exist within groups (Caselli and Coleman (2001), Fearon (1999)).⁵ In theories of bilateral transactions, this assumption allows players to play strategies that are conditional upon the identity of the individual that they are engaging with. And in theories involving punishment strategies, it allows us to ignore the costs that may be involved in gathering information about the “types” of different individuals (Fearon and Laitin 1996).

This assumption is also of consequence for empirical research. In the models that underlie their statistical analyses, researchers assume that the *presence* of multiple ethnic groups is what matters, irrespective of whether political actors know how many groups there are, or at the individual level, to which group a given person belongs. These researchers use information that draws only on the number and relative size of ethnic groups as enumerated by anthropologists and professional ethnic taxonomers in order to establish proxies for the level of ethnic conflict or cooperation. By assuming that the borders between groups and the membership of groups are well-defined, and even common knowledge, these approaches implicitly assume that political actors have information about the identities of other actors that they may or may not, in fact, possess.

These assumptions are challenged by two bodies of literature – one arising from empirical research, which suggests that these assumptions are not valid in every context, and the other from theory, which indicates that political and economic processes are not robust to changes in these assumptions. Researchers undertaking fieldwork in areas experiencing ethnic violence often find that information regarding the ethnic identity of others is imperfect. Horowitz (2001: 130) relates the following illustrative story:

In Sri Lanka (1983), Sinhalese rioters suspected a man in a car of being a Tamil. Having stopped the car, they inquired about his peculiar accent in Sinhala, which he

⁴ In making this claim, we suggest that “passing” is only possible where identifiability is imperfect. In Kenya, for example, a Luo can only pass for a Kikuyu if individuals cannot tell simply by looking at him that he is a Luo. Individuals may be able to pass, however, by activating other identities. That is, a Luo may self-identify as a Westerner placing himself in a category with other ethnic groups in order to overcome whatever negative stigma are associated with being a Luo. Some theoretical models have begun to recognize that identities can be chosen strategically. A notable example is Caselli and Coleman (2001) where it is assumed that individuals can take costly actions to alter their identities. Even in this model, however, it is assumed that identities, while endogenous, are common knowledge and can be used to make allocations of assets across individuals.

⁵ Theorists often ignore collective action problems within ethnic groups because they assume that these groups have institutions that facilitate the punishment of defection of in-group members. If identifiability is not perfect, it is much harder to assume that ethnic groups can police themselves in resolving collective action problems.

explained by his lengthy stay in England and his marriage to an English woman. Uncertain, but able to prevent his escape, the rioters went off to kill other Tamils, returning later to question the prospective victim further. Eventually, he was allowed to proceed on his way, even though the mob knew it risked making a mistake, which in fact it had: the man was a Tamil.

An eyewitness account of a 1997 massacre by Hutu rebels in Buta, in southern Burundi, offers a similar example.⁶ A priest who was present at the time recalls that:

There were 250 children, ages 11 to 19. On April 30, around 5:30, we heard shots. In several minutes, the assailing rebels had become masters of the seminary. The soldiers charged with protecting us had fled. A troop of rebels had taken over the dormitories...The assailants gathered us in the middle of the room and demanded that we separate into Hutus and Tutsi. The students refused. They were united. Then the leader of the group, an enraged woman, ordered their killing. There were 70 students. The assailants fired their grenades.

It is clear that the Hutu rebels wished to kill selectively, just as the Sinhalese rioters sought to murder only Tamils. The goal in both cases was to eliminate members of the out-group while protecting one's own co-ethnics. Yet, both the rebels and the rioters were unable to easily categorize their would-be victims. In the first example, they let their would-be victim go; in the second, they elected to kill everybody. Although the outcomes were different, the lesson of both accounts is identical: ethnic categorization is not always as straightforward as most accounts of ethnic violence assume.⁷

Alongside empirical examples of this sort, there is also a large theoretical literature on the importance of imperfect information for social choice and strategic interaction (e.g., Akerloff 1970; Myerson and Satterthwaite 1983; Green and Porter 1984; Radner 1986; Fudenberg, Levine and Maskin 1986). This literature points to the consequences for

⁶ This story was reported in the *National Catholic Reporter*. See http://www.natcath.com/NCR_Online/archives/022202/022202a.htm.

⁷ Indeed, there is abundant evidence that, when needed, groups take actions to make other groups more readily identifiable: the requirement during the WWII that Jews wear the Star of David or that Americans of Japanese descent wear labels on their lapels indicating this fact are but two well-known examples. Less visual actions are sometimes also taken, such as requiring information on ethnic or racial identity on identity cards, as is still the case in Israel, Iraq, Singapore, and Vietnam. In the absence of such formal mechanisms, members of groups may attempt to place each other by using a variety of tests, ranging from physical checks (for example, for circumcision), to behavioral checks (for example, for language or accent), to knowledge checks (for example, the would-be Tamil victim in Horowitz's account was asked to recite Sinhalese nursery rhymes). Similarly, when needed, groups take deliberate actions that send signals to other groups of the identity of their members. These may be costly and difficult to imitate, such as childhood scarifications among the Tabwa in Congo or the Bumi in Ethiopia, or they may be more superficial, such as the wearing of indigo cloth among the Tuareg in Mali or of a bowler hat and sash by an Orangeman in Northern Ireland.

collective action when actors are unable to correctly categorize their interacting partners. Recent work by Chwe (2001) has reinforced this point by demonstrating the importance of “common knowledge” among players for the achievement of certain outcomes. Chwe’s research suggests that for certain kinds of collective outcomes, a social actor may need to have information not simply about the identities of others but also about the information that others have about him, and so on.

The upshot is that explanations for ethnic mobilization and violence that fail to take account of the imperfect information actors have about others’ ethnic affiliations may rely on unreasonable assumptions, and thus generate findings that cannot be generalized. To take but one example, Fearon and Laitin’s (1996) model of in-group policing as a mechanism for resolving inter-group conflict relies on the assumption that individuals can easily identify members of their own group as well as members of other groups. If, instead, individuals can pass as members of other groups, or if they fail to identify transgressors from their own group correctly, then the conflict-resolving mechanisms suggested by Fearon and Laitin may not be relevant. Or, more interestingly, if there is systematic cross-national or cross-group variation in the ability of individuals to identify in-group and out-group members, then we should expect to find variation across polities or groups in the viability of in-group policing as a solution to inter-group conflict.

A failure to consider variation in group identifiability also has the effect of limiting the *kinds* of questions that can be asked. For theories of coalition-building across groups or of endogenous ethnic groups, the assumption that all groups are readily identifiable, paradoxically, prevents us from using identifiability as a determinant of coalition choice. And the assumption that all groups are equally identifiable blinds us to variations that may exist in the ease with which political entrepreneurs may be able to *mobilize* different groups either in support of or in opposition to other groups. Hence, while the assumption facilitates theoretical analysis, it also prevents us from studying important aspects of ethnic processes.⁸

⁸ The present practice in empirical work, of using measures that simply count the number and size of ethnic groups (or some function of them) to proxy for ethnic conflict, produces results that are particularly sensitive to the set of categories that are used partition the population. Counting groups also shields our attention from the more fundamental questions of whether these ethnic differences are apparent and meaningful to individuals and groups. It also limits our ability to predict which groups are likely to be the sources and targets of ethnic tensions. And finally, it rules out *ex ante* the possibility that the salience of ethnicity may vary between polities with similar ethnic structures – as for example between Sudan and Mozambique.

Consider, for example, how variation of this sort may help to account for important differences in the form that conflicts take. As an illustration, the wars in the north of Mali (1990-1995) and the south of Senegal (1982-) have much in common. Both involve bids for separation by movements dominated by members of minority groups: the Tuaregs and Maures in Mali and the Diola in the Casamance region of Senegal. In Mali, the fact that the Tuaregs and Maures – the “whites” – are readily identifiable meant that ethnicity could be used to pressure members of these groups, including intellectuals living in the capital, to join the rebel movements. It also allowed “black” sedentary groups and the Malian army to take reprisals against arbitrary Tuareg and Maure civilians. The result was a rapid polarization of camps and the descent of the separatist struggle into communal violence. In Senegal, by contrast, such ready association of individuals with ethnic groups has been more difficult. As a consequence, ethnicity has not been used to target reprisals in the same way that it is in Mali, and the intensity of violence is much lower (Humphreys and ag Mohamed 2002). The story suggests a correlation between ethnic identifiability and the form and scope of violence.

Hypotheses about the function of ethnicity can only be entertained, and the validity of many theories and findings meaningfully tested, once reliable data is collected on the ability of individuals to correctly categorize their fellow citizens. Anecdotes of the difficulties that actors sometimes have in performing such categorizations abound. But our project will be the first effort of which we are aware to document this variation systematically, to explore its causes, and to spell out the implications for ethnically-based collective action and conflict. In this project, we gather systematic data about the identifiability of ethnic groups by looking at whether individuals can correctly place others in their own self-identified, ethnic categories, conditional upon a controlled set of information. These data will enable us to reassess the validity of previous theoretical and empirical work on ethnic politics and help point that work in new directions. Moreover, they will also allow us to uncover the factors that shape whether members of a particular ethnic group can be identified. This information may prove crucial in explaining why some groups are more susceptible to discrimination than others and why some groups are able to organize politically while others are not. Finally, these data will provide us with information we need to design a set of experiments that test rival explanations for the potency of ethnicity in political organization.

HOW DATA ON IDENTIFIABILITY WILL HELP US DISTINGUISH AMONG RIVAL ACCOUNTS FOR WHY ETHNICITY MATTERS FOR COLLECTIVE ACTION

Ethnicity may affect politics directly through its impact on the ability of groups to engage in collective action. But the importance of ethnicity in politics – sometimes referred to as the “salience” of ethnicity – varies across groups, between states, and over time. While we have found no adequate attempts to define with any precision what is meant by the “salience” of ethnicity or how to measure it, we can begin to make headway by considering four different ways in which ethnicity may be salient for collective action. The first of these describes the salience of ethnicity in preference space while the other three describe analytically distinct ways in which ethnicity may be salient in strategy space. Loosely, the first describes how ethnicity may determine *what* people want while the other three describe how ethnicity shapes *how* people get what they want. We distinguish between:

1. Ethnicity structuring preferences. Ethnicity may function by structuring the preferences individuals have over social outcomes. Research in social identity theory has found that individuals can establish preferences that value the welfare of members of their own group positively and members of other groups negatively. Indeed these preferences may form rapidly after arbitrary assignation of group membership (Tajfel, Billig, and Bundy 1971).

2. Ethnicity as technology for collective action. Conditional upon a player’s preference, ethnicity may be prominent in determining a player’s choice of strategy. Arguably in collective action settings, individuals find it “technologically” easier to coordinate with members of their own group than to coordinate with individuals from other groups.⁹ The most obvious reason is that they may be able to communicate with members of their own group because they belong to the same language community. This fact has led to efforts to collect measures of the ease with which individuals in a polity can interact using

⁹ Or, as has been found in some work, it may be that some groups are considered by all groups to be easier to coordinate with (see for example Fershtman and Gneezy 2001).

common languages (see Laitin 2000). However, even in the presence of a *lingua franca* across groups, in-group members may find it easier to interact with each other because of a shared set of understandings over modes of social interaction.

3. Ethnicity as reciprocity. Ethnicity may function by providing a set of institutions or norms allocating the responsibilities that members of a group hold to the other members of that group. If members of an ethnic group have succeeded in solving complex collective action problems, it may be expected that members of that group choose their actions in expectation of future punishments or rewards by other members of their own group. For such established in-group collective action mechanisms to be sustained, a high degree of information may be required regarding the ethnicity of the players involved.

4. Ethnicity as a focal point. Arguably, by providing “tags,” for individuals, ethnicity serves to facilitate coordination. This may, for example, facilitate within-group problem-solving by giving group members convergent expectations and may occur even if there are no preference-based, institutional, or technological reasons why coordination with members of one’s own group is preferential to coordination with members of other groups. In such instances, coordination among co-ethnics may become rational (Hardin 1995). Ethnic coordination may also have implications for between-group politics through the formation of exclusive coalitions for the allocation of pork. Such relations have, for example, been studied in Fearon (1999) and Chandra (2002).

In order to distinguish among the distinct roles that ethnicity plays in political and economic organization, we need to combine observations of strategic interaction with knowledge about the information actors have regarding the identity of other actors. For example, to uncover the importance of ethnicity in shaping preferences, we will design experiments that allow us to estimate “meta-utility functions” that accord weights to an individual’s own welfare, the welfare of other members of the individual’s group, and the welfare of members of other groups. We will set up games (modeled on the well-known dictator game) in which we allow players to choose partners (or victims) for cooperative endeavors that will result in benefits for the players and the partners they choose. By varying the costs to the player of selecting different partners, the information they have about those partners, and the benefits

or costs accruing to the partners, we can estimate meta-utility functions for the different players. We will then use the relative weights that players put on the welfare of fellow group members and outsiders as individual-level indicators of the salience of ethnicity in preference space.

In looking at the importance of preferences, we also will examine the extent to which ethnic favoritism can be overridden by preferences generated from membership in other arbitrary groupings. Constructing an experiment that enables us to distinguish the impact of preferences for “real” versus arbitrary groupings requires systematic information about the identifiability of in-group and out-group members in practice in order to estimate the extent to which ethnic preferences depend on certainty of the ethnic identities of others.

To test the “ethnicity as technology” hypothesis, we will employ a series of experiments in which we add complexity to the tasks that players are required to perform and examine how players evaluate the ease with which different tasks can be achieved jointly with in-group and out-group members. This will allow us to measure the perceived technological advantages of ethnicity independent of the distributive concerns of actors. Again, we expect that the likelihood of actions taken to exploit the benefits of communication with in-group members will vary depending on the degree of confidence players have in placing other players in their own group. We will use information gathered in phase one to estimate these effects.

We can also use controlled information to distinguish between the roles played by focal points and by social institutions. The effects of ethnicity on cooperation that derive from other-regarding preferences or from expectations for clearer communication require, in many situations, only one-sided information regarding identity. They may not depend on whether other players are aware of one’s own identity.¹⁰ However, to capture the effects of ethnicity through focal points and in-group institutions, we will allow for the controlled introduction of common knowledge. If players are to risk coordinating on a focal point in order to secure a high personal payoff, they require not simply knowledge of the identity of other players but also that there be common knowledge regarding each others’ identities. Evidence that co-ethnics coordinate with each other in order to take risky strategies for high

¹⁰ For example, in some games knowing that another player knows your identity may lead you to expect that the other player’s in-group altruism will benefit you, whether or not she knows that you know she is in your group.

personal rewards will provide evidence that they are also using ethnicity as a focal point. On the other hand, evidence that the introduction of common knowledge induces players to coordinate on strategies that benefit another in-group member but which, conditional upon the other-regarding preferences of the player are dominated for that player, provides evidence of effective in-group collective action institutions.

In their structure, these experiments differ little from standard experimental situations studied by experimental economists in American universities. What is new is our ability to control the information we provide to participants and our enhanced ability to interpret the results from these experiments using information from phase one. Experiments already undertaken to study ethnicity and collective action have not had access to such data and have, as a consequence, been limited in both the questions they have been able to ask and the kinds of inferences they have been able to draw. For example, in their experimental study of ethnicity in Israel, Fershtman and Gneezy (2001) assume that ethnicity can be correctly inferred from the names of players. In constructing interactions, they eliminate cases of interaction between players whose ethnic identity they take to be ambiguous. In doing so, they implicitly impose strong assumptions that limit the real-world applicability of their findings. Rather than recording the implications of variation in identifiability across groups, they simply remove that variation.

With a prior understanding of what players know about the identities of others and how they know it, we can vary the information players have about other players' ethnicities – from no information, to imperfect information, to one-sided and two-sided perfect information, to induced common knowledge – and evaluate the impact of these manipulations on individual and group outcomes. This experimental design will allow us to differentiate between aspects of decision making that are too often conflated.

HOW WE WILL COLLECT DATA ON IDENTIFIABILITY

In the identification phase of the project (phase one), we gauge identifiability through a set of simple experiments in which we test whether individuals can place subjects in the ethnic categories in which the subjects themselves claim membership, conditional upon a controlled information set. Our expectation is that we will find that groups vary in the ease with which their members can be identified. We also anticipate that individuals will vary in

the ease with which they can identify members of other groups, perhaps being more sensitive to subdivisions within their own “family” of groups than to subdivisions within other families. And we expect this variation to take place across regions of the country and across the situations in which individuals are asked to categorize others.

Theoretical and Empirical Background

The structure of the first experiment is motivated by a long tradition of research in social psychology. Since the late 1940s, psychologists have sought to uncover the origins of prejudice using survey methods and experimental designs. The vast majority of this work has focused on racial differentiation in an American context – looking at the determinants of anti-Semitic attitudes and prejudice against African-Americans. Here, we use a brief review of these approaches to motivate: (1) the experimental methods we propose to examine the process of ethnic identification and; (2) a set of questions about how individual and group-level factors that are likely to shape ethnic identifiability.

Two definitional issues are important. First, we define a set of identity groups. There are many problems associated with the selection of any set of identity groups. To make headway we define an identity structure S , conditional upon criterion C , as a set of categories $\{s_1, s_2, \dots, s_m\}$ with the property that criterion C places each element of the population into one and only one category.¹¹ S may include a residual category. The criterion C may be a self-placement criterion; alternatively, it may be the placement of an individual into a category by government policy or by the agreement of some majority or plurality. In practice, the two criteria that we consider are self-placement and placement by the plurality of a sample of the population.

Since different dimensions of identity may be salient for different people at different times, possibly as a result of the strategic context, our design allows for multiple identity structures.¹² As a consequence, in the experiment we construct questions that allow respondents to *first* indicate the most salient identity structure and then to categorize

¹¹ We recognize that, in some contexts, individuals may belong to multiple categories within any one identity structure, S . This is the case for people who identify as mixed-race in the United States. For the purposes of simplicity, however, we begin by assuming that individuals belong to only one category.

¹² For example, while a Sinhalese individual in Sri Lanka may find it hard to pass as a Tamil because of easily apparent physical differences, that person might easily choose to identify as a “Christian” (if he happens to be a Sinhalese Christian) or as an urban-dweller (if he happens to live in Colombo).

themselves and others within a range of pre-determined categories in that structure. In our experiment, we restrict these identity structures to ethnicity, region, and religion – all of which have particular importance in most African contexts. Our primary focus however is on ethnic structures. For this, we take the lead from others in this field and begin with widely accepted ethnic classifications used by governments to distinguish between groups. Of course, we make no claims to biological or anthropological precision in choosing ethnic categories. We recognize that such groupings are often politically constructed, change over time, and may not be the most meaningful for individuals within certain contexts. Nonetheless, we use them as the basis for ethnic self-identification and the identification of others. Moreover, our experimental design allows us to test for the significance of these pre-determined categories.

Second, we define “identifiability” more precisely. We expect “successful” identification within some identity structure to be a function of both the characteristics of the identifier and of the person being identified. Hence, for identity structure S , individual A , individual B (a member of $s \in S$ under criterion C), and some information set I , we say that “ B ’s identifiability for A , given I , S and C ”, is given by the expected ability of A to place B in s .¹³ A group’s identifiability, conditional upon an identity structure S and information set I , is measured by taking the average across the individuals of that group of the average identifiability of each individual within that groups across the whole population. Thus, a group within structure S is more identifiable than another if a typical member of that group is more likely to be placed correctly by a typical member of the population.

A large body of literature in psychology under the rubric of social identity theory suggests that correctly identifying members of an in or out-group is of critical importance as social groups try to differentiate themselves from one another (Tajfel and Turner 1986). The failure to make an accurate categorization could result in the inclusion of an out-group member in the in-group, thereby risking damage to the in-group and the perceiver’s evaluation of it. Importantly, the capacity of individuals to correctly place others in ethnic categories is something we can measure. A series of experiments in social psychology provide us with models for how to proceed.

¹³ More formally, if $g_A(B/S,I)$ is A ’s guess of the identity of B given structure S and information I , B ’s identifiability for A , $(X_{BA} | S,I)$, is defined as, $(X_{BB} / S,I) = \text{Prob}(g_A(B/S,I)=s)$.

Research in Social Psychology

The fact that groups (and individuals within groups) differ in their ability to correctly place others in ethnic categories has found consistent support in social psychology. We are interested in uncovering the factors that shape the extent of ethnic identifiability. Why are some groups more easily identified than others? Why are some groups better able to identify members of their own group and of other groups? And why are some individuals better able to correctly place in and out-group members? To answer these questions, we must gather data on how individuals place others in ethnic categories and supplement it with information on the relevant background characteristics of each individual observer.

Six major studies in social psychology have pioneered this research. The majority of them have tested the link between racial attitudes and racial categorization. Allport and Kramer (1946) initiated this line of research with a study that asked a sample of university students to distinguish pictures of Jewish students from those of non-Jewish students. Participants were given fifteen seconds with each photograph before being asked to identify the person in the photograph as “Jewish,” “Non-Jewish,” or “Don’t Know.” In addition, the authors used a survey instrument to assess the level of prejudice of each participant. This instrument included questions about an individual’s awareness of and opinion about members of other racial groups. They found that students with higher levels of prejudice judged more faces to be Jewish than students with lower prejudice scores. Moreover, students with higher levels of anti-Semitic prejudice were more often *correct* in their judgments about whether the person in the photograph was Jewish.¹⁴

Using a similar experimental procedure, Secord (1959) tested the connection between levels of racial prejudice and how individuals categorize photographs with varying “Negroid” and “Caucasoid” features. The study used photographs from magazines chosen to vary the extent of black and white features. In looking at the photos, participants were asked to assign a list of traits to the people represented in the images. The traits were pre-selected as part of the experimental design and categorized in terms of whether they were

¹⁴ Elliot and Wittenberg (1954) refined this experimental procedure, drawing attention to the presence of a “response bias” that could account for the positive correlation between prejudicial attitudes and correct placement. By removing the option of “Don’t Know” and systematically varying the proportion of Jewish photos in the sample, they argued that the link found by Allport and Kramer was possibly spurious. While these experiments suggest that there are differences in how well individuals correctly identify Jews and non-Jews, they do not conclusively support or refute the link to prejudicial attitudes.

favorable, unfavorable, favorable but irrelevant to the black stereotype, and unfavorable but irrelevant to the black stereotype. Secord found that high and low-prejudice individuals differed in the degree to which they attributed aspects of the black stereotype to people in the photographs. Moreover, when individuals characterized the image as that of a “black” person, they assigned black stereotypes regardless of the extent to which the subject of the picture had typically-black features. In addition, one of Secord’s experimental innovations was to vary the information that participants had about what they would see. While some were told nothing about the race of the people in the photographs, others were told that, no matter how white they looked, all had “Negro” blood. He found that the designation of seemingly white images as black led individuals to categorize them as black only where they had a higher than the median score in terms of prejudice. Thus, it appears that the ethnic identity of others may be more salient to prejudiced individuals.

A second generation of experiments incorporated new methods to further test for the link between attitudes and categorization. Pettigrew, Allport, and Barnett (1958) studied the determinants of observed race in South Africa. In the highly-charged racial climate of South Africa, Pettigrew and his colleagues used a stereoscope – a device that presents different images to the left and right eye, and merges those images so that participants see only one object – to examine how individuals classify images that combine persons from two different groups. In addition, the study included a non-random sample of participants representing the full diversity of ethnic groups (European, “Colored”, Indian, and African), occupations, and gender. In the classification process, the participants were told they would see images of different ethnic groups, were given two seconds to view the picture, and in assigning a category, they were allowed to indicate their uncertainty.

Their results showed that Europeans, in particular Afrikaners, were more likely than Coloreds, Indians, and Africans to identify mixed-race images as members of extreme racial categories (ie. black or white). Moreover, paired photos of members of the same group were almost always classified correctly; where they were not, though, it was more likely that the photos represented Colored or Indian individuals. The authors linked this “bifurcation” – the tendency to categorize in the extremes – to the high-levels of prejudice and significant insecurity of Afrikaners in apartheid South Africa.

Lent (1970) replicated the South African experiment in the United States. He applied the same method, but refined the racial categories to apply in an American context

(White, Mexican, Dark Black, and Light Black), and used a non-random sample of participants from Austin, Texas who had varied social backgrounds. He found that both dark black and white participants tended toward bifurcation and categorized mixed-race images in extreme racial categories. This effect was particularly pronounced for dark black individuals. Lent also tested for a range of psychological variables that might explain the individual-level and group-level differences in racial identification. He concluded that there was no link between racial attitudes, ethnocentrism, and a set of other psychological variables and the perceptual differences he found in his study. Lent went on to suggest that future studies introduce a new range of participant characteristics including broader demographic variables, a subjective measure of the perceived situation of one's group, a subjective measure of the relation of one to one's group, and some objective measures of the relative position of each racial group in the society.

More recently, social psychologists have returned to studies of "observed race." Blasovich, Wyer, Swart, and Kibler (1997) developed a new experiment with university students to test whether prejudiced individuals are more attuned to ethnic differentiation. Participants were shown photos on a video monitor of white, black, and ambiguous individuals and were asked a series of questions to assess their level of racism. The authors measured the amount of time each participant took to identify the race of the person in the photo. The results showed that prejudiced individuals required longer periods of time to classify photos than less prejudiced individuals. They took this to mean that prejudiced individuals are more cautious in assigning racial categories to preserve in-group and out-group distinctions.

A final study aimed to uncover the set of observer characteristics that explain differences in racial categorization. Looking beyond measures of racial attitudes and prejudice, Harris (2001) designed a study to test the impact of a wider range of observer characteristics on racial classification. The study used a web-based survey of a probability-sample of the University of Michigan to test the impact of observer race, gender, and experience with other races on identification choices. Students were asked to categorize a set of photographs as white, African-American, Latino, Asian-American, American Indian, Pacific Islander, or other. The author measured both their classification choice as well as their response time. Harris found significant differences in self-identified and observer-identified race. That is, how people in the photographs identified themselves was often

different than how they were categorized by the participants in the survey. In particular, individuals who self-identify with multiple races are more likely to be identified with only one racial group. This can be seen as support for the bifurcation process revealed in earlier studies. Moreover, these variations were linked to the characteristics of the observers. Whites and Asians more quickly classified photographs and used many less racial groups to categorize the full set of photographs. Other minority groups were more likely to see complexity in the photographs, to take their time, and use multiple racial categories. A final key finding was that the participant's experience with other races mattered for how they classified the images. Whites who roomed with non-whites at Michigan were more attuned to the complexity of the images they saw, taking more time to assign categories, and using more racial groups to classify the photographs.

We build on this work in social psychology in four key ways. First, we apply experimental tools to the study of ethnicity, as opposed to race. While ethnic groups are likely to exhibit less extreme physical differences than those between racial categories, the politics of in-group and out-group discrimination can be just as important.

Second, we structure the experiment in order to gather data on a set of dependent variables that have proven relevant in previous work. The central variable is the correct placement of individuals into ethnic categories. However, in soliciting information about ethnic identification, we prompt respondents first in an open-ended fashion, enabling them to indicate the dimension of identity that appears most salient. As a result, we will know how well individuals place others into ethnic categories and when they focus on ethnic as opposed to other dimensions of identity. By manipulating background, or contextual cues, we can test constructivist hypotheses about how individuals' judgments about the ethnic affiliations of others are affected by the situations in which they encounter them (Mitchell 1956; Epstein 1958, 1992). In addition, we will allow individuals to indicate their uncertainty about the classifications they choose. Like measures of response time used in previous experiments, these assessments of uncertainty will help us uncover the extent to which ethnic identifiability differs across groups and individuals.

Third, following Harris (2001), we will gather systematic data on the characteristics of the observers. Participants will include a non-random sample of 500 people representing a sufficient diversity of ethnic groups, ages, genders, educational levels, and urban/rural environments. Moreover, we will gather subjective measures of the participants' ethnic

affiliations and perceptions of social distance and government favoritism. These will allow us to test for the impact of individual-level and group-level beliefs on the awareness of ethnic difference.

Finally, and most importantly, we will control the information that is available to observers in order to test the impact of information on the capacity of individuals to correctly place others into ethnic categories. In controlling the information observers are provided, we will vary not only ethnicity, but also appearance, language and context, as well as other facts such as the name of the individual. Each of these signals will be introduced one-by-one and, at each step, participants will be asked to identify the ethnicity of the individual and to indicate their degree of certainty. In this way, we can uncover the effectiveness of different signals in conveying ethnic affiliation to in-group and out-group members.

Questions We Will Be Able to Answer

The ability of a person (the “respondent”) to correctly identify the ethnic background of another person (the “subject”) depends on three factors: (1) the identifiability of the subject’s group; (2) the coding abilities of the respondent, which derive from his or her own personal attributes or those of his or her group; and (3) the context in which the identification takes place. Empirical work in social psychology points to a number of questions relating to each of these factors that we can examine explicitly with data gathered from the experiment. We present a sample of these questions in turn.

Subject Group’s Identifiability

- Q₁: Are members of ethnically dominant groups more likely to be identified correctly than members of other groups?
- Q_e: Are respondents more likely to identify individuals using government-defined categories?
- Q₃: Are members of groups with ethnic political organizations more likely to be identified correctly?

Characteristics of the Respondent

- Q₁: Are individuals who more closely identify with their own ethnic group better able to correctly categorize others?
- Q₂: Are individuals who feel that their ethnic group has been the victim of discrimination better able to differentiate between in and out-group members?
- Q₃: Are individuals who have had more contact with other ethnic groups better able to correctly categorize others?

Characteristics of the Respondent's Group

- Q₁: Are members of minority groups more attuned to ethnic differentiation?
- Q₂: Are members of dominant groups less cognizant of the ethnic identity and sub-identities of minority group members?
- Q₃: Are members of dominant groups less likely to show uncertainty in the placement of individuals in ethnic categories?

The Impact of Context

- Q₁: Do individuals in urban contexts use different categories to identify individuals than those in rural areas?
- Q₂: Are individuals in market-settings more attuned to differences in ethnic identity than those in isolated villages?
- Q₃: Are individuals in religious settings more likely to categorize others according to their religious identity as opposed to using other distinguishing characteristics?

These questions focus largely on “correct placement” as a dependent variable. The data we gather will also enable us to look at patterns in the overall placement of individuals in ethnic categories and to identify the individual and group-level determinants of these “false positives.” This tendency to “over-identify” individuals as members of particular groups can also be used as a dependent variable. For example, with respect to the factors shaping group identifiability, our hypotheses could be re-stated as follows: all else being equal, observers are

more likely to identify subjects as members of majority groups, groups with government approved categories, and groups with ethnic organizations than is, in fact, the case. However, the critical influences on this dependent variable are likely to emerge from the data we gather. They are hard to predict in advance, given the theoretical work that has come before us. “False positives” in the form of bifurcation in South Africa and the United States were explicitly linked to the nature of the country’s racial categories and the polarization of black and white groups. In writing up our results, we will link our findings with respect to overall ethnic placing and incorrect placement to past work, but we move ahead now without developing specific hypotheses for these variables.

The Experimental Design

We will conduct the experiment in Uganda. Uganda has a number of distinct advantages for this project. First, ethnicity has been highly politicized, contributing to a series of military coups, civil wars, and a fifteen-year ban on political parties that was imposed in an attempt to end ethnic sectarianism. Ethnicity, however, is not so contentious that people will be reluctant to talk about it, as it might be in a country emerging from extreme ethnic conflict like Rwanda and Burundi.¹⁵ Second, regional ethnic segregation is profound. Ethnic groups have congregated in four regions – western, central, eastern, and northern – and these regional divisions have played out in patterns of political and economic development. Table 1 provides a breakdown of Uganda’s ethnic groups. We will focus our efforts on those in the top portion of the table that comprise at least four percent of the total population. By soliciting respondents in each of the four regions, we will be able to build a sufficiently diverse response pool to make comparisons in ethnic awareness across groups. Moreover, the distance between these regions is not large, making it logistically feasible for work to be done in each region. Finally, Makerere University in Kampala provides the necessary variation we need for our subject pool. The Makerere campus, owing to a successful government scholarship scheme, attracts faculty and students from the full diversity of ethnic groups in the country. Makerere also has a strong social sciences faculty that we expect will be able to contribute to the success of the research.

The Subjects. In the first stage of the experiment, we will select 150 individuals (the “subjects”) to reflect Uganda’s ethnic composition. For each person, we will record a set of video images, which we will feed onto laptop computers. In the second stage, we will disperse to various areas of the country and show these video files to individuals (“respondents”) who will be asked to determine the identity of the subjects whose images they are shown. We anticipate exposing each respondent to information on ten subjects. We plan to survey a total of 500 respondents, providing us with 5000 data points, and an average of 33 viewings of each subject. Subjects will receive modest remuneration for their participation.

Our 150 subjects will be selected from among the students, faculty, and staff of Makerere University. In selecting our subjects, we will seek to maximize variation in ethnic identity as well as a range of other characteristics (such as age, gender, and socio-economic background) that might provide clues to the respondents about how they should be classified. We will include between fifteen and twenty members of each of Uganda’s major ethnic groups.

For each subject, we will gather information on their self-professed identity (first asked open-endedly; then in a closed-ended question that provides a number of “major groups” in which the subject will be asked to place him/herself), as well as their sub-group membership, regional identity, religion, and age. (Appendix: Form I)

For each subject, we will digitally record six different images, each (save the last) providing progressively more information about their ethnic identity: (1) a headshot; (2) a full-body shot; (3) a shot with the subject speaking in English (Uganda’s official language); (4) a shot in which the subject gives his name; (5) a full-body shot in which the subject tries to convince a co-ethnic that he is indeed a co-ethnic; and (6) a full-body shot in which the subject tries to convince a non-co-ethnic that he is a member of some group other than his own. All images will be taken in front of an identical white background.¹⁶ In images (5) and

¹⁵ Our confidence in Uganda’s suitability for this project stems from our collective experience conducting similar ethnicity-related survey and focus group work in Uganda itself and in Zambia, Malawi, Senegal, and Mali – countries in which ethnicity plays a similarly central role in politics and society.

¹⁶ In a separate side-experiment, we will digitally manipulate this background to test how different contextual cues – e.g., seeing the subject in front of a church versus in a crowded urban market versus in a rural setting – affect how respondents “code” the people they see.

(6), we will allow the subjects to choose the language in which they wish to communicate, enabling us to introduce local languages as a source of information.

Selecting Respondents. Whereas our subjects will be drawn from Kampala (where Makerere is located), the sample of respondents will include individuals from each of Uganda's four major ethnically-defined regions as well as the capital. Within each region, we will select a stratified random sample of sixteen villages and towns on average. At the most local level (i.e. a village or town), we will solicit an average of seven respondents, varying contexts between village markets, isolated homesteads, and religious institutions using a simple method of stopping at every k^{th} house or premises. A stratified random sample of eight further sites will be selected within Kampala, in which we again select seven respondents. The strata used for sampling in the regions will be selected to ensure proportionate representation across ethnic territories and between urban and rural settings.

The structure of the experiment with respondents will be designed to take no more than an hour. The hour will include a short period of introductions that traditionally is required before one can move onto the business of the day. We keep the total time short in order to minimize the number of potential respondents who choose not to participate and to reduce the likelihood that respondents will tire and lose their focus during the interview. Each day we will begin our work in a new village to ensure that previous respondents are unable to share their experiences with other members of the village.

The survey work itself will be carried out by three teams, each led by one of the co-PIs and containing one Ugandan researcher who speaks the dominant language of the site under study. Each team will meet with an average of seven respondents per day and visit an average of twenty four sites. We therefore estimate that approximately 24 full working days plus travel time between sites will be required to complete the data collection for the 500 respondents.

Ethnic Placing by Respondents. Respondents will be given basic information about the purpose of the experiment. They will be told that it is an academic project of the Makerere Institute of Social Research that aims to understand the role of identity in their society. In addition, the respondents will be informed that they will see a variety of images of people, and will be asked to describe the identity of each individual. Importantly, each respondent

will be assured that the information gathered will be used only for research purposes and that their answers will remain strictly anonymous.

With the full set of video files loaded onto laptop computers, a program will randomly select ten subjects for each respondent to view, with two of ten chosen from the respondent's own ethnic group. For each subject, the respondent will see, sequentially:

- a head-shot, with blank background;
- a full body shot, with background;
- an image with the respondent reading a sentence in the official language;
- a shot in which the subject gives his or her name.
- Depending on the responses given and whether the subject is a co-ethnic of the respondent, the respondent will then see either the shot in which the subject tries to convince a co-ethnic that he is indeed a co-ethnic or the shot in which the subject tries to convince a non co-ethnic that he is a member of a group other than his own.

After seeing each image, the respondent will be asked a series of questions about the identity of the person on the screen (Appendix: Form II).

First, the respondent will be invited to provide adjectives that describe the person in the image and to indicate whether or not they personally know the person on the screen. Following the open-ended question, the respondent will be asked to indicate (if they have not done so already): 1) the major ethnic group affiliation of the person on the screen and the degree of certainty in their response; 2) the sub-group affiliation of the person on the screen and the degree of certainty in their response; 3) the region from which they think the person on the photograph originates and the degree of certainty in their response; and 4) the religion of the person on the screen and the degree of certainty in their response. A member of the enumerating team will record these responses.¹⁷ We expect that each subject can be viewed and responses recorded in an average of three minutes.

¹⁷ In practice, after the first shot we will ask respondents if they wish to update their guesses and their estimates of their certainty.

Collecting Background Information from Respondents. After the ethnic placing exercise is completed, we will ask respondents a set of background questions. (Appendix: Form III) For each respondent, we will gather information on their self-described identity, their major ethnic group affiliation (from a list provided), their sub-group affiliation (again, from a list provided), the region they are from, and their religion. We will also collect demographic indicators including data on age, gender, socio-economic status, occupation, geographic location of birth, geographic location of current residence, level of education, level of political involvement, level of religious involvement, and extent of exposure to media (radio, television, newspapers). Finally, we will solicit information about the respondent's knowledge and perception of ethnic identity in Uganda. First, we will ask them to name the country's ethnic groups and to rank them by size and importance. Then we will ask them to rank, on a scale of 0-10, how close they feel to each of these ethnic groups, and to each of the sub-groups within their ethnic family. We will also ask respondents for their assessments of how well off economically they feel their group is compared with each of the other major ethnic groups in the country, and about whether they believe the government favors other ethnic groups more than their own. We expect the collection of this data to take approximately 15 minutes per respondent.

Data Collected. The experiment will yield data that provides insight into four fundamental issues of independent theoretical interest. First, data on the respondents' socio-economic backgrounds will enable us to uncover the individual-level determinants of identifiability. Second, aggregated information about the ethnicity of respondents and their perceptions of relative group size and importance will allow us to examine why some groups are more attuned to ethnic differentiation than others. Moreover, by sampling both subjects and respondents from the larger population, we can distinguish between the influence of individual-level characteristics and group-level factors on our results. Third, by enabling individuals to "pass" for members of other ethnic groups in one set of images, we gather data about the relative ability of different types of people to pass successfully and examine how robust individuals' placements are to attempts at misdirection. Finally, information about the relative success of identification for each image will help us understand which physical, linguistic, and informational cues are most important for successful identification. What we learn in this experiment will be critical in designing the second phase of our

research. With a clear understanding of how individuals assess (and how accurately they judge) the ethnic identities of others, given certain signals, we can systematically vary what players know about their partners to determine the impact of ethnic structure on collective action.

Key Questions of Experimental Design

The experimental project we intend to undertake is innovative, but it is also complex. Thus, in addition to soliciting advice and feedback from experts in experimental economics, social psychology, and African political economy, we will subject our protocols and methodologies to a trial run (with American subjects and respondents and a set of American ethnic categories). In designing our experimental approach, a number of outstanding issues remain.

The first issue relates to the ethnic identities of our subject pool. We ask each volunteer to self-identify as a member of an ethnic, regional, and religious group as part of the video production process. This variable, self-identified membership in a racial group, has been used as a dependent variable by Harris (2001). However, if the processes of “passing” and “changing” one’s identity are at work in the society in which we operate, we can expect that one’s self-identified race may not correspond to that assigned by an outside observer. Individuals from minority groups that inhabit areas that border the territory of larger groups may be able to “pass” as a member of these larger groups because of their skin color, language, or other aspects of their appearance. Thus, in using self-identified identities we risk falling victim to the “passing” that is already taking place in Uganda. This would lead us to code the answers of respondents as incorrect, even if, in reality, they were correctly categorizing an individual. One solution to this challenge would involve conducting an external assessment of each subjects’ ethnic identity by using a small sample of social scientists to assign ethnic classifications based on the photographs and the background data we gather (Pettigrew et. al. 1958). We could use these data to test the robustness of our results to variations in how the dependent variable is defined.

A second challenge involves trying to distinguish between how good respondents are at placing, conditional upon trying, versus simply how hard they are trying in the first place. We need to structure the experiment with strong incentives for trying so that we can rule out the possibility that the variation we find is the product of some people simply trying harder

than others. To approach this challenge, we could use the monetary remuneration as a “prize” – linking its award to the relative success of individuals in correctly placing the subjects. With an appropriate incentive scheme, respondents would be more likely to try to get it right, than to provide any answer in response to our questions. We are still in the process of thinking about a feasible incentive structure.

CONCLUSION

This project is unique in three respects. First, it adapts methods pioneered by social psychologists to the study of ethnicity and political action. Informed by work in political science, we aim to disentangle aspects of ethnicity that are often conflated: the relationships between ethnicity and preferences, between ethnicity and trust; and between ethnicity and strategy. Second, it develops an experimental protocol for the study of comparative politics and inter-group relations. Before now, experiments have been used almost exclusively in the study of voting and information processing and in a purely American context. Third, we conduct both stages of these experiments using participants in Africa. By working in a local context rather than in a psychology lab, we can study the impact of ethnicity on collective action within a real-world setting. In this respect, we see our work as a combination of experimental economics and data collection.

The data gathered from this experiment will provide insight into four fundamental issues: Which groups may most effectively use ethnic markers to facilitate collective action, and which may be most easily targeted? What individual-level factors shape the capacity of individuals to place people correctly in ethnic categories? Why are some groups more attuned to ethnic differentiation than others? And what physical and linguistic cues are the most important for providing signals about ethnic group membership? Although of independent theoretical interest, this first experiment also provides data for a second set of experiments that study the impact of ethnicity on political action. We can use this data to vary the amount of information players have about the ethnicity of other players – from no information, to imperfect information, to one-sided and two-sided perfect information to induced *common knowledge*. In doing so, we can begin to distinguish between alternative theories about the role ethnicity plays in political and economic life.

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APPENDIX

**Table 1:
Major Ethnic Groups in Uganda by Region
(Population Share in Parentheses)**

| WEST | EAST | NORTH | CENTER |
|---------------------|---------------|------------------|---------------|
| Major Groups | | | |
| Ankole (8) | Basoga (8) | Lango (6) | Baganda (16) |
| Kiga (7) | Teso (8) | Acholi (4) | |
| Banyarwanda (5.9) | Gisu (6) | | |
| Minor Groups | | | |
| Toro (3.2) | Padhola (1.6) | Lugbara (3.6) | Banyoro (2.9) |
| Rwenzuru (2.6) | Sebei (1) | Karamojong (2.2) | |
| | | Kakwa (2) | |
| | | Madi (1) | |
| | | Alur (1) | |

Source: Scarritt and Mozaffar (1999)

APPENDIX

Form I: Gathering of personal information (Subjects)

For each subject, we gather the following information through a personal survey delivered in the participant's language.

1. (Open Question) In no more than three words, how would you describe yourself? What is your identity? (What group do you belong to?)

We first ask respondents to self-identify in response to an open question. This is intended to elicit the dimensions of identity that are most salient for each person. After this process of self-identification, the subject will then be asked to identify his or herself on the dimensions of identity (ethnicity, region, and religion) that did not appear in his/her answer in (1).

2. (Closed Question) In which of these (major) ethnic groupings do you belong (A, B, C, D) (Mark no more than two).
3. (Closed Question) In which of these subgroups do you belong? (Aa Ab Ab Ba...) (Mark no more than two).
4. (Closed Question) What region are you from (I, II, III, IV)?
5. (Closed Question) What is your religion (1, 2, 3, 4)?
6. (Closed Questions) On a scale of 0-10 (perhaps on a line) where **0** is "feel very different to" and **10** is "feel very close to" indicate how close you feel to each of these major ethnic groups (A, B, C, D).

7. (Closed Questions) On a scale of 0-10 (perhaps on a line) where **0** is “feel very different to” and **10** is “feel very close to” indicate how close you feel to each of these subgroups within your family (e.g. Ba Bb Bc...)

8. The survey ends with a set of questions covering the background characteristics of the participants including their: age, gender, socio-economic status, occupation, geographic location of birth, location of current residence (ie. urban/rural), and level of education.

APPENDIX

Form II: Questions Asked of Subjects After Seeing Images

After seeing each image, the respondent will be asked the following question:

Q1 (Open Question) What is the identity of the person in the picture?

The respondent will be invited to provide adjectives that describe the person in the image, but will not be told to provide their ethnicity. If the respondent's answer includes a description of ethnic, regional, or religious group membership, the subsequent questions on that dimension are excluded. Following the open-ended question, the respondents are asked to indicate:

- Q2** The major ethnic group affiliation of the person in the photograph
- Q3** An indication of the degree of certainty of the respondent in their response
- Q4** The sub-group affiliation of the person in the photograph
- Q5** An indication of the degree of certainty of the respondent in their response
- Q6** The region from which the person in the photograph originates
- Q7** An indication of the degree of certainty of the respondent in their response
- Q8** The religion of the person in the photograph
- Q9** An indication of the degree of certainty of the respondent in their response
- Q10** Whether or not they personally know the person in the photograph

These responses will be recorded immediately in a second laptop computer.

APPENDIX

Form III: Gathering of personal information (Respondents)

After the ethnic placing exercise is completed, we ask respondents a set of background questions. For each respondent, we gather the following information through a survey in the respondent's local language:

1. (Open Question) In no more than three words, how would you describe yourself? What is your identity? (What group do you belong to?)

We first ask respondents to self-identify in response to an open question. This is intended to elicit the dimensions of identity that are most salient for each person. After this process of self-identification, the subject will then be asked to identify his or herself on the dimensions of identity (ethnicity, region, and religion) that did not appear in his/her answer in (1).

2. (Closed Question) In which of these (major) ethnic groupings do you belong (A, B, C, D) (Mark no more than two).
3. (Closed Question) In which of these subgroups do you belong? (Aa Ab Ab Ba...) (Mark no more than two).
4. (Closed Question) What region are you from (I, II, III, IV)?
5. (Closed Question) What is your religion (1, 2, 3, 4)?
6. Provide and rank the ethnic groups in this country by size.
7. Provide and rank the ethnic groups in this country by their importance.

8. (Closed Question) On a scale of 0-10 (perhaps on a line) where **0** is “feel very different to” and **10** is “feel very close to” indicate how close you feel to each of these major ethnic groups (A, B, C, D).
9. (Closed Questions) On a scale of 0-10 (perhaps on a line) where **0** is “feel very different to” and **10** is “feel very close to” indicate how close you feel to each of these subgroups within your family (e.g. Ba Bb Bc...)
10. (Closed Questions) On a scale of 0-10 (perhaps on a line) where **0** is “not at all”, **5** is “**equally**”, and **10** is “very”, indicate how well off economically you feel each of these major ethnic groups is relative to your own group (A, B, C, D).
11. (Closed Questions) On a scale of 0-10 (perhaps on a line) where **0** is “not at all”, **5** is “equally”, and **10** is “very”, indicate to what extent you believe the government privileges each ethnic group relative to the attention paid to your own group (A, B, C, D).
12. The survey ends with a set of questions covering the background characteristics of the participants including their: age, gender, socio-economic status, occupation, geographic location of birth, geographic location of current residence, level of education, level of political involvement, level of religious involvement, and extent of exposure to media (radio, television, newspapers).