Conceptualizing and Measuring Ethnic Politics: An Institutional Complement to Demographic, Behavioral, and Cognitive Approaches

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Abstract The influence of "ethnic politics" has been demonstrated in a range of empirical studies of economic growth, violence, and public goods provision. While others have raised concerns about the measurement of ethnic variables in these works, we seek to situate such discussions within a more thoroughgoing conceptual analysis. Specifically, we argue that four conceptual approaches—demographic, cognitive, behavioral, and institutional—have been used to develop theories in which the mechanism that relates causes to outcomes is *ethnic political competition*. Within this literature, we believe that institutional approaches have been relatively under-appreciated, and we attempt to address that imbalance. We begin by critically reviewing the three main ways in which ethnic variables have been specified and operationalized, delineating the assumptions and trade-offs underlying their use. Next, we describe an institutional approach to the study of ethnic politics, which focuses on the rules and procedures for differentiating ethnic categories. We propose some new indices based on this latter approach that might be developed and used in future research. Subsequently, we analyze the relationship between each of these approaches and patterns of ethnic political competition in a set of six country cases, highlighting their strengths and weaknesses, as well as theoretical links between them.

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Introduction

The past few decades have witnessed a burgeoning scholarship on the influence of ethnicity on a range of outcomes, including outbreaks of violence (Annett 2001; Sambanis 2001; Reynal-Querol 2002; Laitin and Fearon 2003; Wimmer et al. 2009), democratic stability (Rabushka and Shepsle 1972; Fish and Brooks 2004), economic growth (Easterly and Levine 1997), quality of governance (LaPorta et al. 1999), and the provision of public goods (Alesina et al. 1999; Baldwin and Huber 2010; Jensen and Skaaning 2010; Miguel and Gugerty 2005), and yet, these studies employ a range of different measures of the extent or intensity of ethnic difference across countries or other entities. This begs a series of questions concerning whether this set of outcomes is associated with a common cause, and if not, what is the relationship between the variables described with the moniker, "ethnic?"

We believe that all of these studies, and many others, seek to capture some defining characteristic of what might be termed the "ethnic landscape" of the countries or subnational units under investigation. This is akin to the way in which the natural landscape of different countries might be compared using well-defined and quantifiable indicators, such as the percentage of mountainous territory, inches of rainfall, proximity to the ocean, and/or qualitative characteristics such as climactic zone, etc. Each of these variables is distinct, but they are also related within a broader ecology. A political theory that is interested in examining the influence of the natural landscape might consider using different measures depending on pragmatic concerns of data availability as well as theoretical concerns about which specific aspect(s) of the landscape are believed to be more important for the mechanism that is hypothesized to bring about change in a particular outcome. So too does this pertain to the ethnic landscape. Scholars might focus on a measure of the distribution of ethnic traits, the location of groups, the extent of ethnic group discrimination, organization, or the number of ethnic riots, based on the question they are asking and the data that are available. But in so doing, one would also not want to lose sight of the fact that no single aspect of the landscape exists in complete isolation from the others.

While scholars have fruitfully scrutinized the use of different *measures* of ethnic difference (Posner 2004; Montalvo and Reynal-Querol 2005; Abdelal et al. 2006; Selway 2011), we believe that insufficient attention has been paid to the bigger picture of understanding the fuller range of conceptual approaches to what we are calling the ethnic landscape. We argue that such conceptual parsing is essential to understanding how ethnic categories become salient and are manifested in society and politics. Chandra and Wilkinson (2008) raise a similar concern that currently employed measures of ethnic politics are presented without sufficient appreciation for conceptual nuance. We disagree, however, with their fundamental point that the overarching search for a concept in this literature is "so big as to be meaningless" and that the proper solution is to replace the larger concept with narrower ones (517). We take a different approach, exploring how different conceptual approaches to and associated measures of the ethnic landscape are related to one another and how these, in turn, affect patterns of *ethnic political competition*—which in virtually all of the cited scholarly works is implicitly or explicitly theorized to be a consequence of some aspect of the ethnic landscape.

We do not suggest that every aspect of the ethnic landscape must be considered in every study, but that a more self-conscious approach to scholarship in this field requires this fuller appreciation of conceptual and measurement range. Our concern is not a matter of defining ethnicity. Like most political scientists (i.e., Varshney 2003: 365), we employ the relatively broad definition of "ethnic groups" specified by Horowitz (1985) as all groups based on ascriptive group identities such as race, language, religion, tribe, or caste. This definition excludes communities founded, for example, on identities of class, partisanship, or ideology. We also follow Chandra's (2006) notion that ethnicity is a descent-based category. We treat ethnic landscape as a background concept, which is to say that it encompasses, "the broad constellation of meanings and understandings associated with a given concept" (Adcock and Collier 2001: 531). In this sense, our notion of an ethnic landscape, like a natural landscape, is so rich, varied, and textured, and includes the full distribution within a society of ethnic traits, such as languages spoken, skin colors, religions practiced, settlement patterns, and the degree to which these markers are actually used, that no single definition, let alone measure, could hope to adequately capture what is encompassed. Nonetheless, this serves as a meaningful reference for what we take to be the starting point for the development of more systematized concepts and associated indicators.

This paper describes four different systematized conceptual approaches that are used in the development of theories that predict a mechanism of "ethnic political competition," which we define as a pattern of resolving collective dilemmas in which actors pursue strategies and goals in coordination with co-ethnics and in rivalry with those from other ethnic groups within the same polity. Such theories vary widely in terms of the outcomes that they examine, including violence, prosperity, governance, redistribution, and public goods provision, and yet, in all of these theories, the primary *unobserved* mechanism linking cause to effect is ethnic-based political competition. In theories that use demographic approaches to explain public goods provision and civil conflict, for example, the main mechanism asserted is conflicting preferences and competitive rent-seeking on the part of members of different ethnic groups (Easterly and Levine 1997; Alesina et al. 1999; LaPorta et al. 1999). Similarly, in theories that employ attitudinal approaches, the strength of identification with one's own ethnic "in-group" is hypothesized to be associated with antipathy towards and competition with members of ethnic "out-groups." In theories based on behavioral approaches, mobilization on the part of ethnic groups is posited to occur in opposition to other ethnic groups (Gurr 2000). Similarly, in theories that employ institutional approaches, state institutions are hypothesized to harden distinctions and foster competition between ethnic groups (Marx 1998; Nobles 2000) and to structure opportunities for claims-making, thereby altering the "common sense" basis for politics (Laitin 1986: 305, 307).

The plan of the article is as follows: We begin by critically reviewing the three main approaches—demographic, cognitive, and behavioral—to the conceptualization of ethnic landscapes, drawing out the similarities and distinctions in their premises and links and identifying the different measures associated with each. Next, we describe an institutional approach to the study of ethnic politics and propose some new indices based on this approach that might be developed and used in future research. Subsequently, we discuss patterns of ethnic political competition in a set of

six country cases, comparing the insights gleaned from the four approaches, which allows us to highlight the relative strengths and weaknesses of each as well as their theoretical links. We conclude by reiterating the advantages of conceptualizing and measuring ethnic politics in institutional terms and describe plans for future research.

Identifying the Conceptual Field

For the most part, social scientists who focus on ethnicity do so because they believe it looms as a potential dimension of *conflict*. But to the extent that they choose to focus on ethnic variables as causes of some outcome, they must identify some characteristics of the society being studied, which might make such conflict, whether non-violent or violent, more or less likely. The value added of a social scientific approach is to focus on the most relevant features of the ethnic landscape in as succinct and reliable a manner as possible in order to develop a clear and testable theory describing its relationship with some other relevant social or political phenomenon. Specifically, we highlight how social scientists have described ethnic *demographies*, ethnic *attitudes and cognitions*, ethnically oriented *behaviors*, ethnic *institutions*, and conceptual *hybrids*, within broader theories of ethnic political competition (Table 1).

Demographic Approaches

Demographic approaches—those that focus on the relative sizes of ethnic groups—have dominated the scholarship on comparative ethnic politics. At first blush, it might seem obvious that the most relevant cross-unit metric for comparison ought to be the ethnic make-up of a given town, city, state/province, or country. Because Sweden is ethnically "homogeneous" and Nigeria ethnically "heterogeneous," scholars generally expect to observe some form of ethnic political competition in the latter but not the former. But beyond such extremes, or at least beyond the distinction between completely homogeneous and at least somewhat heterogeneous societies, it is less obvious that any particular makeup should be more consequential for outcomes of interest, and scholars have offered different perspectives on what type of ethnic diversity will lead to the most intense forms of political competition. Indeed, Chandra and Wilkinson (2008) make similar and additional critiques of ethnic diversity measures. At a purely conceptual level, however, we believe that it is reasonable to generate propositions about the nature of ethnic competition based on ethnic demography. Indeed, some social psychological theories assign causal effects to relative group sizes, independent of additional factors (Simmel 1955; Witte and Davis 1996; Brewer and Kramer 1986).

Most demographic approaches to the study of ethnic political competition focus on increasing levels of diversity, typically measured by the "ethnolinguistic fractionalization" or ELF index, a decreasing transformation of the Herfindahl concentration index,[1] interpretable as the probability that two randomly selected individuals from a

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[1] Calculated according to the formula $\left[\text{ELF} = 1 - \sum_{i=1}^{n} s_i^2 \right]$, where s_i indicates the population share represented by each group, $i=(1,\dots,n)$.

Table 1 Comparing approaches to the study of ethnic political competition

Conceptual approach	Theorized link to background concept	Data sources	Advantages	Disadvantages/concerns
Demographic	More groups, more diversity connotes (or predicts) more intense ethnic political competition	Census data; Demographic surveys; other estimates; generally converted to summary score (e.g., fractionalization index)	Easily standardized to units (via Herfindahl, other); quick profile of possibly relevant actors; compatible with democratic theory (counts matter)	What/whom to count/measure is non-obvious, subject to interpretation; Counting may be biased; May be at odds with constructivist theory
Cognitions and attitudes	Higher levels of average attachment to ethnic group connotes more intense ethnic political competition	Attitudinal surveys; Experiments; Discourse analyses	Closer to constructivist model, as takes seriously subjective views of ethnic attachments	Extremely difficult to measure and to calibrate across countries. Desirability biases associated with non-ethnic responses; Very limited comparative data over-time
Behavior	Increased participation in ethnic "events" and organizations connotes more intense ethnic political competition	Observation; interviews; media reports; organizational membership; surveys	Concrete manifestation of phenomenon of interest; issues of aggregation and comparison across units are less problematic	Extremely difficult to measure and to calibrate across countries; may require interpretation of particular acts as "ethnic"
Institutions	Repetition of rules making reference to ethnic groups connotes more intense ethnic political competition	Official documents, interviews, secondary sources	Closest to constructivist theory; non-reactive measures/not subject to interviewer effects; institutional isomorphism	Not always clear which institutions matter for actors—i.e., informal institutions may trump formal, state institutions; Ambiguous implications of institutional change; Substantial data collection costs

population will belong to different ethnic groups. Since Easterly and Levine's (1997) seminal paper, which attributed Africa's "growth tragedy" to high levels of ethnic diversity, as measured by the ELF index, an overwhelming number of empirical studies have employed versions of this index to study the effect of ethnicity on a range of outcomes, as described at the outset. Responding to widespread critiques of the original ELF index, scholars have offered a set of alternative indices that largely retain the same demographic approach as well as the same basic intuition, that is, that the more "diverse" the society, the more likely we are to witness ethnically based competition. Roeder (2001) and Alesina et al. (2003), for example, expand the original ELF Index to aggregate groups along other cleavage lines. Bossert et al. (2010), develop the generalized ethno-linguistic fractionalization index (GELF), a "natural extension of the ELF index," which combines information on population shares with information on similarities among groups and individuals. Fearon's cultural fractionalization index (2003) takes into account cultural/linguistic similarity when counting and interpreting groups such that the overall Herfindahl index reflects the likelihood of selecting two individuals from *culturally distinctive* groups as measured by linguistic dissimilarity. Other efforts, including those of Mozaffar et al. (2003) and Posner (2004), develop fractionalization indices based on what they deem to be socially or politically relevant groups. Mozaffar et al. (2003) supplement their fractionalization index with information from the Minorities at Risk database (discussed below), identifying whether or not a group is known to be spatially clustered. In a study of civil wars, Matuszeski and Schneider (2006) replace the standard ELF measure with a new measure of how clustered the ethnic groups in a country are.

Within purely demographic measures, another strand of scholarship has tried to move away from fractionalization to other ways of thinking about the political implications of the size and number of ethnic groups. Montalvo and Reynal-Querol (2005) argue that ethnic tensions and/or conflict are more likely not when there are more ethnic groups but rather when there are two groups of relatively equal size. They consequently replace the concept of fractionalization with polarization and develop an index that captures the distance of the ethnic demography from the bipolar distribution, which represents the highest level of polarization.

Selway's (2011) "cross-cuttingness" indices measure the extent to which differences on one dimension of identity line up with differences along another dimension (i.e., people of different races also speak different languages), the argument being that when differences cluster across cleavages (there is no cross-cuttingness), societies tend to be more deeply divided.[2] In so far as it takes into account that individuals have different identities, this constitutes an important advance over unidimensional fractionalization and polarization indices. A theory of the likelihood of competition is, however, again based on a calculation of the demographic distribution of traits, as defined in census or survey data. In addition, Selway (2011) assumes equal salience for all cleavages in his dataset presenting the problem of which of the many possible comparisons to choose as the most meaningful in analysis.

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[2] It is important to note here that while the measure of cross-cuttingness is primarily based on counts of ethnic groups and we therefore classify it within the demographic family of approaches, in so far as it also includes data on income differences between groups and geographic concentration, the index builds on and could also be potentially grouped with the hybrid approaches that we will discuss later in this article.

Demographic theories are intuitively plausible, and many of the above-mentioned studies as well as a host of others find significant associations with a range of outcomes of interest. All of them seek to predict an outcome such as violence or poor policy-making[3] based on the implication that certain arrangements of ethnic group sizes will generate more or less competitive ethnic dynamics. What remains of concern, however, is the quality of measurement as related to patterns of *identification* (i.e., the number of people estimated to speak a given language is not equivalent to a measure of ethnic group size), and the treatment of groups and categories as exogenous phenomenon, when the ambiguity of which groups to count (i.e., Asian-Americans or Vietnamese-Americans) is non-obvious and, in fact, clearly contested. In short, demography is a valid but incomplete approach to the study of ethnic political competition.

Cognitive/Attitudinal Approaches

Rather than focusing on the size and distribution of ethnic groups, cognitive/attitudinal approaches instead focus on aggregates of individual attachment to ethnic identities.[4] Such approaches address a fundamental deficit of demographic approaches in that they explicitly concentrate on the subjective quality of ethnic identities and the indeterminate path from trait diversity (different skin colors, languages spoken, religions practiced, etc.) within a society to the degree of attachment to particular groups as constituent aspects of political life. To the extent that variation in ethnic political competition is essentially about differences in the salience of ethnic groups, it makes good sense to focus on how individual cognitions and strategies are shaped by their ethnic identities, and to describe their levels of attachment to those identities.

It turns out, however, to be extremely difficult to measure the extent to which people think about political issues through an ethnic "lens," let alone to reliably estimate ethnic salience across space and time. Ethnic attitudes and cognitions have typically been measured through direct, usually close-ended questions in individual-level surveys. Large, cross-national surveys such as the various regional barometers (Afrobarometer, Eurobarmoter, Latino Barometer, etc.), the World Values Survey and the ISSP National Identity survey, for example, ask respondents some variant of the question, "Above all which group do you feel closest to?" Studies of ethnic identification in different parts of the world, for example, Brady and Kaplan's (2009) study of nationalities in four republics of the former Soviet Union, as well as Sylvan and Metskas's (2009) analysis of Israeli and Palestinian identities, also employs a combination of open- and close-ended surveys. A clever recent innovation is Lee's (2009)

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[3] Habyarimana et al. (2009: 156) provide a useful delineation of the mechanisms by which ethnic demography has been hypothesized to lead to reduced provision of a range of different public goods. It is notable that two of the three families of mechanisms that they identify—preferences and technology—are closely linked to competition between ethnic groups. For example, the absence of other-regarding or shared preferences over outcomes as well as the process is hypothesized to generate competition between members of different ethnic groups. A similar competitive dynamic can be seen to underlie the technology mechanism whereby individuals from different ethnic groups are hypothesized to be less likely to function, understand or think they understand, engage and track down each other.

[4] Of course, such approaches are *also* used to study the individual-level causes and consequences of ethnic identification, but this article focuses on aggregate or macrolevel relations.

move away from the standard categorical approach and towards a measure that allows respondents to allocate "identity points" to more than one racial or ethnic group and to weigh the strength of their self-identification.

More recently, scholars have attempted to capture ethnic salience through more indirect (investigator-provided) cues in experiments such as television advertisements with varying racial compositions (Mendelberg 2001) or recordings of an actor playing a political leader with varying surnames, as a cue for different ethnicity (Dunning 2010; Dunning and Harrison 2010) or the randomized introduction of experimental vignettes in representative surveys (for example, Gibson and Gouws 2003; Gilens 1999).

In addition to surveys and experiments, scholars of comparative politics routinely conduct content analyses of mass media, such as newspapers, television programming, and advertisements; political speeches; official documents; writings of leaders and other messages associated with non-elite or elite actors in order to gauge the extent and nature of "ethnic language" (see, for example, Brady and Kaplan 2009). In recent years, investigators have also begun to pursue fMRI techniques in order to capture emotional responses to ethnic cues (Westen et al. 2006; Kabashima et al. 2009), but such approaches are very costly and remain in their infancy.

Again, at a conceptual level, a focus on human cognitions strikes us as a critical perspective on the ethnic landscape in developing theories of ethnic political competition. However, a great many questions relevant to scholars of comparative ethnic processes cannot be answered through cognitive approaches alone (or at all). Survey questions on ethnicity are problematic for a host of reasons, including varied interpretations of questions, interviewer effects, and normative biases against "ethnic" responses. Responses to identity questions have also been shown to be highly sensitive to question wording, response structure, and sequencing in the survey.[5] One of the most renowned scholars of ethnicity and nationalism has gone so far as to say that "In few areas is the attitude questionnaire of such doubtful utility as in the domain of cultural values and meanings" (Smith 1992: 57).

If the goal is to estimate the strength of ethnic ties and/or interethnic animosities, it is extraordinarily difficult to standardize survey instruments or to interpret responses in a meaningful manner across large groups of countries from different world regions, in which the axes of potential ethnic divide are qualitatively distinct. Moreover, because representative sample surveys with questions about ethnic attachments are of relatively recent vintage, especially in developing countries, it is also virtually impossible to use these data for wide-ranging temporal comparisons of ethnic politics within a single country.

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[5] For example, there is considerable variation on questions about national identity depending on whether they are structured in terms of eliciting "closeness," "belonging," or "pride." In general, far more respondents claimed that they felt "close" to their country (International Social Survey 1995) as compared to "belonging" to it (European Values Study 1990). In Hungary, for instance, 96 % said they felt close to their nation (ISS 1995) but only 63 % felt that they belonged to it (EVS 1990). Even within the same survey, for example, the European Values Study of 1990, there are remarkable differences in the proportion of people who said they were proud of their nationality and those that indicated a strong sense of identification with their country. In the USA, 98 % of people said they were proud to be American, but only 58 % said they felt a sense of belonging to the USA. The difference is even more conspicuous for a country such as Latvia where 92 % of respondents indicate pride in their country but only 15 % felt that they belonged to it. It is far from clear which of these is the best measure of national identity and depending on which one you use, countries line up very differently.

When implemented properly, attitudinal questionnaires may provide more reliable measures of ethnic attachments in the context of experimental interventions that surveyors would otherwise fail to elicit due to conscious desirability bias, or unawareness of deep-seated but unconscious ethnic attachment. However, experiments are often logistically more difficult to conduct and, consequently, occur on a smaller scale than surveys. Even when scholars manage to generate cross-national experimental data on ethnic identities, we will still face the problem of interpreting these findings across countries because treatments will need to be adjusted for context, and to be certain, we will lack time-varying experimentally based data.

In so far as unobtrusive content analyses can code the ethnic implications of messages that are already in the public domain, they eliminate many of the problems associated with *asking* individuals about ethnicity. The challenging task of classifying many hundreds or thousands of messages has also been made easier by the development of computer coding programs.[6] However, the identification of what should count as "ethnic language" is not unambiguous. Take, for example, an American reference to "inner city youth" or a South African one to "previously disadvantaged persons." In these cases, there can be reasonable disagreement concerning the degree to which such phrases are making ethnic/racial references or references to status or class. In addition, the absence of ethnic language might not necessarily signify that ethnic identities are not important. Either because they are not fully cognizant of it themselves or because of normative reasons, elite and even non-elite actors might not use ethnic discourse overtly or at all, even when ethnic orientations figure prominently in their goals and strategies. Some scholars have sought to balance the shortcomings of these different cognitive/attitudinal measures by combining them. Brady and Kaplan (2009), for example, combine surveys and content analysis to construct a "graded ethnicity measure."

Behavioral and Event-Based Approaches

A third conceptual approach involves a focus on behaviors, such as voting, violence, and/or group mobilization along ethnic lines. In this line of scholarship, to the extent that scholars observe the development of ethnically based organizations and parties (Birnir 2007; VanCott 2005; Yashar 2005), voters voting for co-ethnics (Chandra 2009), or individuals perpetrating acts of violence against ethnic others (Petersen 2002; Varshney 2002; Wilkinson 2004), they are describing a critical aspect of the ethnic landscape, and one that is so conceptually proximate to ethnic political competition, that they two are almost indistinguishable. Such sets of acts are routinely theorized as either the cause or consequence of other ethnic and non-ethnic factors, including ethnic demographics and ethnic cognitions as described above.

Again, we find both theoretical and empirical strengths and weaknesses to behavior and event-based approaches. On the one hand, behavioral variables are concretely recognizable as phenomena of interest, and issues of aggregation are less concerning: To the extent that we observe more acts of violence, more ethnic appeals, or more organizations that are self-described in ethnic terms, we can reasonably conclude that there is an increased salience or intensity to ethnic political competition. In contrast to

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[6] For example, General Inquirer, Diction 5.0, VBPro, Yoshikoder and Wordstat.

relatively fixed fractionalization indices and to attitudinal surveys, for which, as mentioned in the previous section, it may be difficult to study over-time change, behavioral approaches provide opportunities for historical comparisons. For example, the Minorities at Risk (MAR) dataset includes data going back to 1945 and is being constantly updated. The Varshney–Wilkinson dataset includes information on Hindu–Muslim violence from 1950 to 1995, but again, clear coding rules ensure that interested researchers could widen the geographic and/or temporal scope.

However, what remains as a challenge for scholars is the classification of behaviors as *ethnic*. The burning of a Hindu temple, or the lynching of a black man by the Ku Klux Klan, might be obviously ethnic acts, but what about the shooting of poor, black street children by middle-class, white police officers? The overlap of various dimensions of social diversity in an ambiguous context poses substantial challenges to clear descriptive inference. If one relies on the explicit claims of ethnically motivated actors, then one risks both false negatives and false positives. For example, India's leading electoral analysts have argued that the Bahujan Samaj Party, an ostensibly dalit party, classified as an "ethnic party" by Chandra (2004) is best seen as "a coalition of the downtrodden" (Yadav and Kumar 2007). In the last elections in 2007, over half of the BSP's votes came from poor non-dalits, who voted for the party for economic and not ethnic reasons. Similarly, if two neighbors from different ethnic groups with longstanding grievances over the location of a fence come to blows after the onset of an ethnic civil war, is this a case of ethnic violence (Kalyvas 2003)? Additionally, in some circumstances, actors may opt for coded language, i.e., "traditional values," etc., to disguise ethnic coordination. Finally, if one relies on the judgments of other observers (i.e., journalists or other scholars), then one has simply transferred the responsibility of making inferences.

Ethnic behaviors are in many ways so conceptually proximate to the notion of ethnic political competition that they may be indistinguishable. In this sense, if we are to observe, for example, consistent patterns of ethnic voting, which in turn, tends to have a consistent effect on distributive outcomes, we could more quickly infer that the relationship between the two is explainable in terms of a mechanism of ethnic political competition, as we have defined it. However, when such ethnic behaviors are treated as exogenous factors, this begs the question of their origins, which is likely to lead to other views of the ethnic landscape, including demographics, cognitions, and institutions.

Hybrid Approaches

A relatively new set of approaches moves beyond purely demographic indices to incorporate a mix of the abovementioned conceptualizations. They retain a core interest in ethnic demography but introduce an emphasis on politically salient groups or relative group power, measured in either political or economic terms. These measures are based not only on the size and number of politically significant ethnic groups but also, for example, either on the institutional repression, inclusion, and exclusion of groups from political power or the extent to which economic inequality is clustered by ethnic group.

The general premise of these works is that ethnic diversity is more likely to have adverse political effects when demographic divides align with deficiencies in political

or economic power. The MAR project, for example, includes 283 "politically active" groups that are "at risk" of rebellion, protest, or repression. Cederman and Girardin (2007) develop an index called N*, which measures the extent to which "marginalized ethnic groups" are excluded from state power in states by comparing their demographic share to that held by the "ethnic group in power." Wilkinson's Ethnic Concentration Index (ECI) captures the concentration of ethnic groups in the armies, bureaucracies, and civil services of colonial states (Chandra and Wilkinson 2008). Similarly, Cederman et al. (2009) develop an Ethnic Power Relations (EPR) database, which represents politically relevant ethnic groups' degree of access to executive-level state power. Two of their central measures—found to be predictors of ethnic civil war in Wimmer et al. (2009)—are the share of the population represented by ethnically relevant and politically excluded groups, and the number of ethnic groups in power.

More recently, scholars have focused on a combination of ethnic demography and economic power, as measured by economic inequalities between ethnic groups. Ostby (2008), for example, develops measures of "Horizontal Inequality" for 36 developing countries from 1986 to 2004 that use survey data to attempt to capture the extent to which economic resources, measured by the household assets of respondents, and social resources, measured by respondents' years of education are clustered by ethnic group.[7] Baldwin and Huber's (2010) measure of Between Group Inequality, a weighted average of differences in the mean incomes across ethnic groups as reported in different surveys, attempts to capture a similar dynamic between groups. Cederman et al. (2011) use geographic data to develop a location-specific estimate of the "wealth" of the "politically relevant" groups identified in the EPR dataset, and develop group-level measures of "horizontal inequality" using a simple ratio of the difference between each group's own wealth and the national average.

Such indices provide more nuanced portraits of the ethnic landscape, incorporating constructivist insights about ethnicity—specifically, the notion that any given set of traits may *not* lead to ethnic political identification, organization, or competition—in a manner that can be studied systematically. It is important to be clear, however, that such measures still rely heavily on ethnic demographics and tend to make strong assumptions about the importance of relative group size. The theories with which they are associated are premised on the assumption that there is a high degree of general awareness about the ethnic headcounts of a population and that governmental representation in proportion to ethnic population and economic inequality across ethnic group lines is seen as critical. In other words, these measures suggest a high potential for conflict when political and economic resources are not allocated in proportion to ethnic demographics—which is a reasonable conjecture, but hardly a universal truism. Thus, such approaches retain many of the drawbacks of the demographic approaches in terms of valid and reliable measurement. Moreover, the hybridization of constructs may obscure the source of influence—for example, in a

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[7] The first measure is an extension of the Montalvo and Reynal-Querol (2005) and Esteban and Ray (1994) polarization indices, discussed in the section on "Demographic approaches," and captures the extent to which economic resources, measured by the household assets of respondents, and social resources, measured by respondents' years of education are clustered by ethnic group. Secondly, she introduces a two-group measure called HI (Horizontal Inequality), which ranges from 0 (perfect equality in resources between groups) to 1 (one group has all assets/education).

summary indicator, is conflict predicted because of the political relevance of groups, or the degree of fractionalization?

An Institutional Approach to the Study of Ethnic Politics

Rather than comparing counts and population shares of particular traits, or comparing (and interpreting) how people think and behave, institutional approaches contrast the rules and procedures by which ethnic groups are recognized and/or constituted. A focus on institutions hardly solves all of the problems of conceptualizing and measuring the ethnic landscape, but it does reduce much of the ambiguity associated with identifying the expression of ethnic categories in the political arena and has the virtue being measurable for long periods of time. As with the other approaches discussed above, important tradeoffs remain, and we do not propose a focus on institutions as a panacea to the challenges of scholarship on ethnic politics. However, while the other three types of approaches, as well as hybrid approaches, have generated a wealth of data across countries over time, we are surprised by the paucity of efforts to test theories of the causes and consequence of ethnic political competition using institutional data. This is especially striking in so far as a number of studies focusing on various historical periods and different parts of the world have highlighted the key role played by state institutions in the creation of ethnic identities and of mobilization and conflict along these lines.

Generations of scholars have shown, for example, how the taxonomic institutions of colonial authorities in Africa led to differentiation, mobilization, and conflict among groups that might not have even previously existed. In 1968, Apthorpe wrote that, "certainly in Anglophone Africa…the colonial regimes administratively created tribes as we think of them today" (cited in Young 1986: 43). Laitin (1986) traces how the British government's decision to administer Yorubaland in terms of the ancestral city affiliation led to this identification effectively trumping the "obvious" Muslim–Christian divide as the most politically relevant ethnic cleavage. More recently, Posner (2003) describes how the actions and policies of the British colonial state led to the remarkable consolidation of the Zambian linguistic landscape, from one characterized by a Babel of tongues to one containing just four (Bemba, Nyanja, Tonga, and Lozi).

A number of prominent studies showcase how state institutions shape racial relations. Marx (1998) argues that purely demographic theories of conflict would have led to erroneous predictions about the political signification of race relations in Brazil, South Africa, and the USA. In contrast, his comparative-historical study of these three countries leads him to conclude that "states made race" (1998: 2). Similarly, Nobles' (2000) research on the census in Brazil and the USA puts a spotlight on the close relationship between a particular state institution and broader and changing understandings of racial categories in those societies. There is also an important body of work on the decisive role of the policies and institutions of both colonial and postcolonial governments on ethnic politics in India (Fox 1985; Brass 1990; Kohli and Basu 1998).

There has, however, been little in the way of broader, multicountry analyses of the relationship between state institutions and ethnic salience. The few comparative

studies on the institutionalization of ethnic categories have tended to analyze single institutions, for example, the census (Kertzer and Arel 2002) and preference policies (Sowell 2004), and have tended to focus only on the most prominent positive cases of institutional effects with just a few cases. An obvious explanation for the absence of systematic, comparative analyses of the role of institutions in the study of ethnic politics is the absence of a clear operationalization and of cross-national, temporal data.

In line with constructivist theorizing, institutions can make particular sets of identities or social cleavages hegemonic in a manner specified by Gramsci (Laitin 1986). On an ongoing basis, governments face choices about whether to use ethnic categories in their various functions—counting the citizenry, identifying individuals, providing access to employment and education, or providing territorial or legal autonomy for group affairs. These choices can be critical in determining the emergence and endurance of ethnic identities. By consistently categorizing citizens along ethnic lines across different institutions, states can create or reify ethnic identities. Forcing citizens to time and again choose a particular ethnic identity is likely to make that identity salient. Citizens are more likely to adopt the ethnic labels used by the state in place of a more amorphous or hybrid identity. We follow scholars in a range of social science disciplines, including sociology, political science, and cognitive and social psychology who have all identified the role of boundary mechanisms (Barth 1969; Lamont and Molnár 2002; Tilly 2005; Tajfel and Turner 1986) as a basis for enduring social and political competition. When institutions make ethnic distinctions, they signal an "us" and "them" divide. This erects boundaries between ethnic groups and reduces the potential for permeability or assimilation. As ethnic boundaries crystallize, people are more likely to interpret events, frame their preferences and demands, and mobilize in ethnic terms rather than along any other cleavage.

We believe that it is almost impossible to fully comprehend ethnic cognitions or behaviors without an understanding of the ethnic institutions within a given society or polity. That is not to say that we believe there is any direct one-to-one mapping between an institutional type and attitudes and/or behaviors, but that without a set of generally accepted categories for differentiating groups, it would not be possible to imagine group-based politics emerging any more than we might expect a political divide say between green- and brown-eyed people. In these ways, like the other approaches, in so far as the creation and maintenance of institutions are theorized to generate conflict, we view an institutional approach as an attempt to capture the likelihood of ethnically based political competition.

Although several of the measures described in earlier sections, including EPR, ECI, and MAR are constructed in part with attention to some of the rules and patterns —especially concerning discrimination—that we discuss below, those approaches identify outcomes (i.e., the balance of actual power in a government), rather than the specific rules or procedures that may lead to such outcomes. In this sense, a purely institutional approach seeks to move back in the causal chain to identify the possible cause of such patterns, including which categories are used as the basis for ethnic political competition. The way and extent to which institutions distinguish citizens along ethnic lines is an important determinant of ethnic groups' access to political power. Measuring the degree to which ethnic boundaries are enshrined in institutions, therefore, sheds light on an important mechanism by which ethnic groups come to be included in or excluded from political power in the first place.

In these respects, it is important to seriously consider the role of formal state institutions. Although the nascent manifestation of ethnic groups almost always originates in the more informal institutionalization of cleavages and categories through a steady diffusion of ideas and social networks, state institutions can be uniquely powerful in their enduring and visible manifestation to social actors throughout society (Brubaker 2004: 42–43). States have historically had access to a well-established battery of instruments for the identification and categorization of their populations. Virtually all states seek to monitor their populations, regulate questions of citizenship, justice, and access to power. Consequently, they must choose to either recognize ethnic groups or to ignore them. When states create strong and consistent institutions, this has the powerful effect of diffusing the idea of ethnic difference, and reinforcing its salience as a stable social "fact," and when state authorities do not institutionalize nascent ideas about ethnic difference, this can be highly consequential for the (non) salience of those cleavages and categories (or groups) in the future. In addition, because of the high degree of institutional isomorphism cross-nationally and over time, formal, state institutions are especially attractive for comparative analyses.

Nonetheless, some ambiguities of interpretation are difficult to resolve in a consistent manner. Once written, the elimination of such rules must entail a deliberate act, which itself may further reinforce the potential salience of these categories as actors come to see the potential costs and benefits of such institutional change. In certain cases, *non*-recognition of socially salient categories may generate greater political salience than the counterfactual condition.

In addition, while we argue that the greater the institutionalization of ethnic identities in a country, the higher the likelihood that those ethnic identities will emerge as the basis of identification, mobilization, and competition in social and political life, we recognize that the institutionalization of ethnicity is also not an entirely exogenous process. Institutions might reflect the pre-existing ethnic boundaries in as much as they create or reinforce them. Again, it is worth reflecting again on the notion of an ethnic landscape as an interrelated ecology. Institutional rules are often created in response to real, existing ethnic conflicts. The literature on colonial rule (for example, Young 1994; Uvin 2002), however, highlights the extent to which such institutions were often created in response to very little prior ethnic mobilization or consciousness.

Measuring the Institutionalization of Ethnicity

We offer a strategy for measuring the institutionalization of ethnic categories. While one could imagine many alternatives for systematically comparing the extent of institutionalization of ethnicity, we begin with a simple additive index ranging from 0 to 9 that captures the degree to which states use the same set of ethnic categories for any given ethnic cleavage. Ultimately, this leads to the creation of an "institutionalized ethnicity index" (IEI), by country, cleavage, and time period. In Table 2, we identify a set of nine key state institutions that historically, a vast majority of states have used to regulate citizens, sometimes in terms of ethnic categories, and summarize our theoretical expectations for the way in which the institutionalization of ethnicity in each is likely to increase or decrease the likelihood of ethnically based political competition

Table 2 State institutions that may distinguish ethnic categories

Institution type	Institution	Evidence of institutionalization of ethnic categories
Counting and identifying	Census	Any mention of ethnic categories or labels on questionnaire or enumeration form
	ID cards/passports	Any mention of ethnic categories or labels on documents
Authority structures	Delegation of autonomy	There is any legal provision for separate laws or authority for ethnic groups
	Voting and civic engagement regulation	Voting rights and responsibilities are differentiated in any way through ethnic categories
	Leadership regulation	The government reserves certain executive, judicial, or legislative positions based on ethnic quotas or preference policies
Space and personal interaction	Spatial separation of people	The government legalizes any separation of people by ethnic group in terms of residential areas or use of public facilities
	Marriage law	The government makes any legal prohibitions on marriage across ethnic lines
Opportunities for personal advancement	Employment regulation	Official sanction of use of ethnic identity for hiring decisions
	Education regulation	Official sanction of ethnic identity for selection/admissions

in terms of these categories. In general, we anticipate that the greater the frequency with which state institutions enshrine ethnic distinctions, the more likely it is that we will observe intense ethnically based political competition because those institutions increase the likelihood that ethnic categories are or will be salient and that inequalities within society will be identified in ethnic terms.

First, we consider "counting and identifying" institutions. Virtually all modern states use a variety of techniques to count and to identify their citizens. For our purposes, a central question is the extent to which in *addition to* identifying national citizenship or membership, these institutions also distinguish among various subnational ethnic categories. Several scholars have already convincingly described the ways in which such categorizations both reflect and reproduce those categories as the basis for political competition (Nobles 2000; Kertzer and Arel 2002). Our fundamental premise here is that in order for citizens to believe that ethnic-based injustices exist or to consider mobilization of grievances along these lines, there must be some information about those groups, and group members must be identifiable. While other instruments are obviously available for such tasks, the census, both the act of carrying it out and the data it generates, and also identity documents that label citizens, are particularly important.

Recent scholarship emphasizes that the counting of ethnic groups is by no means a neutral exercise. The act of enumerating ethnicity can itself shape the categories used

in ethnic classification within society. Scholars claim that official census categories not only reflect national understandings of ethnicity but also mold ethnic identities (Bailey and Telles 2006: 3). Of course, decisions about census rules, like any other decisions about institutional design, may also be the product of particular mobilizations, but once constructed, they are likely to endure. A recent, cross-sectional survey of census questionnaires indicates that a large proportion of countries now categorize their populations by ethnic group (Morning 2008).[8]

While many studies are concerned with the size of the groups counted by the national census, our primary concern is with the prior question of whether or not the census actually makes distinctions according to ethnic categories. The choice on the part of state leaders to *not* enumerate ethnicity reflects either a common sense that such information is not important, or it is a deliberate attempt to mitigate the possibilities for ethnic mobilization and conflict based on the process of such counting or the results of the census. Country cases where ethnicity is not a central or salient dimension of political life, or where state leaders would like to eliminate ethnicity as a basis for mobilization, are less likely to use the census to count individuals in terms of their ethnicity.

Virtually all states also issue a national identification document to their citizens in the form of passports and/or a national identity card. These documents help to sort the national from the non-national other, and particularly in the case of the passport, are required for travel outside of, and return into one's own country (Torpey 2000). Again, we are concerned with whether the national identity card or passport also states a citizen's ethnic identity and consequently marks persons not merely as nationals but also as members of a particular group. At an extreme, the statement of a citizen's ethnicity, specifically whether she was Hutu or Tutsi, on Rwandan national identity cards is widely seen as a factor that greatly facilitated the ethnic genocide in the country in the early 1990s (Uvin 2002). National identity cards issued by the Sri Lankan government, which specify whether the bearer is Tamil or Sinhalese, are widely documented to have been used to target individuals during violence associated with the ethnic conflict that has plagued the country for the past couple of decades.

Second, we consider the institutions that regulate how authority is distributed within a territory. The very idea of the national state implies an attempt to unify the population behind a cohesive identity. But again, when the idea of ethnic difference becomes central within society, states may make clear distinctions about the nature of political authority that depend upon individual ethnic affiliations, both from the perspective of ordinary citizens and of leaders. We investigate the institutionalization of ethnic autonomy, political participation, and access to positions of leadership. When political authority is officially parsed out in terms of ethnic groups, this can provide the basis for enduring identification and mobilization along such lines.

A primary concern is with the degree to which the state itself projects power uniformly across all citizens or if power is institutionally delegated to particular ethnic groups and associated leaders. In classifying whether ethnic autonomy is institutionalized, we ask whether autonomy is afforded to ethnic leaders of at least

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[8] We seek to identify particular cleavages and to code censuses in earlier decades, and therefore, we could not simply use Morning's data for our purposes.

one distinct ethnic group to regulate marriages, judicial hearings, or other personal behaviors. Because we are interested in the ways in which state institutions create and reinforce specific group boundaries, the mere recognition of chieftaincy on the part of the state would not be relevant in our classification scheme, unless the state's institutional recognition of chieftaincy itself clearly distinguished at least one particular group or ethnic category from any others.

Along these lines, we are also interested in official restrictions on voting or any form of civic engagement (organizing, protesting, etc.) based on ethnic identities. Prohibitions against the organization of ethnically hateful or discriminatory groups would not count unless such prohibitions applied explicitly to the behavior of certain ethnic groups but not others.

We also consider any distinctions made in terms of gaining leadership positions. In order to be consistent, and reliable in our classification, we are concerned with identifying only explicit—written or explicitly articulated—rules concerning the ethnic identities of voters or office-holders in the executive or the legislature. Analogous to job and education preference policies (see below), we look for institutions that attempt to balance ethnic participation, such as formula-based power-sharing quotas. We also look for restrictions that deny members of an (otherwise legally resident) ethnic group from obtaining a leadership position.

The explicit division of political power in terms of law, vote, or leadership signifies the centrality of ethnic boundaries, and the hypothesized effects on continued identification and claims-making requires little elaboration. Nonetheless, we should reiterate that we are centrally concerned with explicitly ethnic boundaries. For example, if the use of poll taxes *effectively* eliminated certain ethnic groups from voting, but according to the rules, certain members of the "in" group were also incidentally disenfranchised and/or if a small handful of "out" group members were able to vote, we would not count this as an ethnic boundary. On the other hand, because of the centrality of space or territory to the constitution of many ethnic groups, where space is used as a clear connotation of ethnic difference (e.g., "North," "South," or "federal territory"), such labels should be interpreted as ethnic categories. For example, if representation in a national legislature is allocated by federal units, and if at least one of those units is explicitly ethnic—what we describe below as ethno-federalism—we consider this a case where leadership is also ethnically institutionalized.

Third, we consider the extent to which states mediate the movement and interactions of people in their personal lives through the legal regulation of space, residence, and personal contact. Clearly, such restrictions imply a high salience for ethnic categories and provide foundations for conflict or may be viewed as solutions to prior conflict. At certain times in history, some states have implemented policies of ethnic separation as regards the use of public places and residential areas. The most striking instances of this are racial segregation in the first part of the twentieth century in the USA and in apartheid South Africa. It is important to note here that while there are many instances of ethnic groups facing effective restrictions as regards the utilization of public facilities and common spaces across the world, we are concerned here with instances where this restriction is state-imposed. In particular, we identify cases in which certain facilities, such as schools, are reserved for the explicit use of members of *particular* ethnic groups. Other forms of de facto residential segregation

may stem from the mechanism of socioeconomic difference, and to the extent that such differences are not rigidly enforced and/or named, we hypothesize that they will play a much weaker role in the constitution of distinctly *ethnic* boundaries. Moreover, for the purposes of cross-national comparison, the identification of de facto residential segregation is much more difficult to measure, and thus subject to greater reliability concerns.

As a separate form of institutionalization, we investigate whether the state prohibits marriage or sexual contact across ethnic lines.

Fourth, we consider those institutions that regulate individual educational and employment opportunities. Ethnic divisions of labor (Hechter 1978) and/or divisions of educational opportunities are often particularly important bases for social and political mobilization, which at the very least reinforce widespread perceptions of ethnic difference. However, we are concerned with instances in which these divisions are legally mediated and/or mandated by the state. For both work and education, states may attempt to reinforce or to redress ethnic inequalities, but in either case, the use of ethnic distinctions in regulating these sets of opportunities reflects and creates bases for ethnic political competition. Again, it is tempting to try to differentiate such approaches in terms of their fundamentally just or unjust qualities, but our intent is simply to expose where there may be bases for mobilization, and so we avoid such assessments. Whatever the cause or rationale of their creation, for our purposes, the very existence of reservations for individuals based on their ethnic identity constitutes an important source of institutionalization.

While helpful, this approach does not completely eliminate all sources of ambiguity. In many countries and time periods, preference policies are drawn up in somewhat coded language. For example, the Nigerian constitution often refers to mandates for government employment to reflect the "federal character" of the country. When preference policies are articulated in a manner that is consistent with the institutionalization of the spatial separation of people, we classify these as being instances of ethnic preferences.

In so far as our approach is based on an explicit set of rules applied to identifiable, publicly available official documents such as census enumeration forms, identity documents, constitutions, and texts of relevant legislative, executive, or judicial policies, it is relatively less vulnerable to investigator interpretation and bias.[9] As a further move towards increased reliability, our approach only features those institutions that *explicitly* make ethnic distinctions. Many institutions may have the effect of prioritizing or discriminating against ethnic groups. However, unless the policy clearly differentiates between different ethnic groups, we do not include it in our approach, irrespective of the long-term causal effects. Again, with an eye towards increased reliability, we have attempted to strip away normative assessments of fairness, prejudice, oppression, or discrimination.

Our institutional approach also manages to avoid the many thorny issues associated with the counting and grouping challenges implied by demographic approaches

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[9] In order to determine if institutions codified ethnicity, we attempted, wherever possible, to obtain actual primary documents. As a second step, we tried to attain authoritative secondary sources based on primary analyses of relevant documents and data and/or by contacting foreign nationals, diplomatic representatives, and scholarly authorities.

—whether to count all or only sociopolitically salient ethnic groups; which cleavage (language, religion, race, tribe), or in the case of the cross-cuttingness measures, which two cleavages, to count groups along and at what level of aggregation (Should religion in India, for example, be counted in terms of Hindu, Muslim, Christian or in terms of Shaivites, Vaishanvites, Sunni, Shia, Catholic, Protestant?)—by simultaneously investigating the multiple cleavages that might be recognized by the state. For each country, we examine six different sets of possible ethnic categories (language, religion, caste, indigenous, race, and ethnic/other).[10] This focus on institutionalized categories rather than ethnic groups also allows us to avoid "groupism," the "decidedly nonconstructivist" tendency to assume that ethnic groups are "givens," out there to be enumerated, that Brubaker (2004) argues even avowedly constructivist approaches fall prey to. Institutional approaches begin, in a sense, at the constructivist "first principle" that ethnicity is constructed and focused on arguably the most important constructivist insight, namely, the influence of state institutions on patterns of ethnic identification and competition.

Earlier, we identified some of the conceptual limitations of an institutional approach, and there are also some measurement challenges. For a start, we focus on formal state institutions, but there is a strong case to be made for the way in which the enshrining of ethnicity in informal institutions also plays an important role in generating ethnic political competition. By their very nature, informal institutions are simply more challenging to measure in a systematic manner across time and space. Moreover, the collection of data on the institutionalization of ethnic cleavages cross-nationally and historically can be a painstaking and time-consuming process. Unlike demographic approaches, which usually simply entail the analysis of population shares extracted from standardized source books, our approach requires the close perusal of official documents, some of which, especially as one goes further back in time, are difficult to locate and many of which require careful reading and translation. There is also the possibility of measurement error for countries with weaker historical records and secondary sources, especially when coding periods further back in time. Finally, our index treats all institutions "equally" in the sense that the presence of the institutionalization of ethnic categories for any given cleavage contributes 1 point to the index score, when, arguably, some institutions might be more consequential than others as a general pattern, under certain conditions, or when formulated in particular

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[10] While religious and linguistic categories are largely self-explanatory, we classify race categories as those ethnic categories explicitly described in terms of physical characteristics (for example, color) and/or referred to as "race" by given state institutions; caste categories as those linked to a codified caste system, recognized from religious scripture or those referred to as "caste" by state institutions; indigenous categories as those groups referred to as "indigenous," "original inhabitant," or "natives," by institutions, except when the group(s) are also commonly linked to one of the other categories already described (for example, "Natives" are considered a race group in South Africa), and ethnic/other is a residual category used when state institutions refer to specific ethnic or "tribal" groups that could not be classified in one of the abovementioned categories (for instance, an ethnic group that is not distinguished by use of a single language). For each category, we employed standardized sourcebooks to identify any evidence that the second largest group constituted at least 1 % of the population at any moment in time and, if not, we ignored that category for the purposes of our analysis. In other words, if more than 99 % of a country belonged to a particular religious faith, we did not investigate and do not report data on institutionalized ethnicity in terms of religion because it is not a potential boundary between substantially large groups of citizens.

ways. These are all valid points that would need to be considered in future research and highlight the limits of developing a single institutional approach.

Comparing Approaches: Assessing Tradeoffs and Measurement Validity

In this section, we compare what can be gleaned from each of the demographic, cognitive, behavioral, and institutional approaches, as well as hybrid approaches, when considering the extent to which each might predict intensified ethnic political competition. There is no consensus among political scientists about the best way to assess measurement validity, particularly when we lack absolute agreement on the quality of related measures. Both Posner (2004) and Chandra and Wilkinson (2008) take what Adcock and Collier (2001) seem to take to be the "AHEM" approach to testing measurement validity—that is, they assume a particular hypothesis (with respect to the effects of ethnic political competition on economic policy and civil war respectively) to be true and evaluate the measure, such that if the measure of interest demonstrates a tighter association with the outcome of interest, they conclude it is a superior, or at least largely valid measure.

By contrast, we engage in case-oriented content validation (Adcock and Collier 2001: 539) of various conceptual and measurement approaches. This involves the assessment of indicator scores in relation to a broader qualitative understanding of particular cases. We consider a series of paradigmatic positive and negative cases of ethnic political conflict, and we investigate how well various conceptual foci and a select group of associated measures do as the basis for predicting those outcomes. We look at two countries from each of the developing regions of South Asia, Sub-Saharan Africa, and Latin America, selecting cases for which we had sufficient familiarity to be able to critically assess the implications of particular scores. This discussion highlights what we argue above—that at least to a degree, each measure provides valuable but distinct insights concerning the ethnic landscape and that they inform how we might interpret one another. Our point is not that one can use an institutional approach to the exclusion of others, but that it provides substantial value added in shedding light on the origins and dynamics of increasing or decreasing the salience of particular cleavages. It is also important to clarify that our theory is stochastic—we only argue that more institutionalization makes conflict more likely, not necessary. In addition, our point is that institutionalization is cumulative—the greater the number of institutions that enshrine ethnicity, the higher the likelihood of conflict breaking out along that cleavage. We identify India, Sri Lanka, and Rwanda as cases of high levels of ethnic political competition and those of Burkina Faso, Brazil, and Costa Rica as low. We also discuss how patterns of change, especially in Rwanda and Brazil, are best captured through an institutional approach. We depict trends in the IEI for each of six potential cleavages for each of the six cases in Fig. 1.

In the discussions that follow, we demonstrate the interactive relationship between the four systematized approaches to the study of ethnic political competition. We also highlight the advantages of a focus on the institutional approach for greater transparency in measurement and for identifying moments of human agency, as institutional change is a deliberate and historically observable phenomenon.
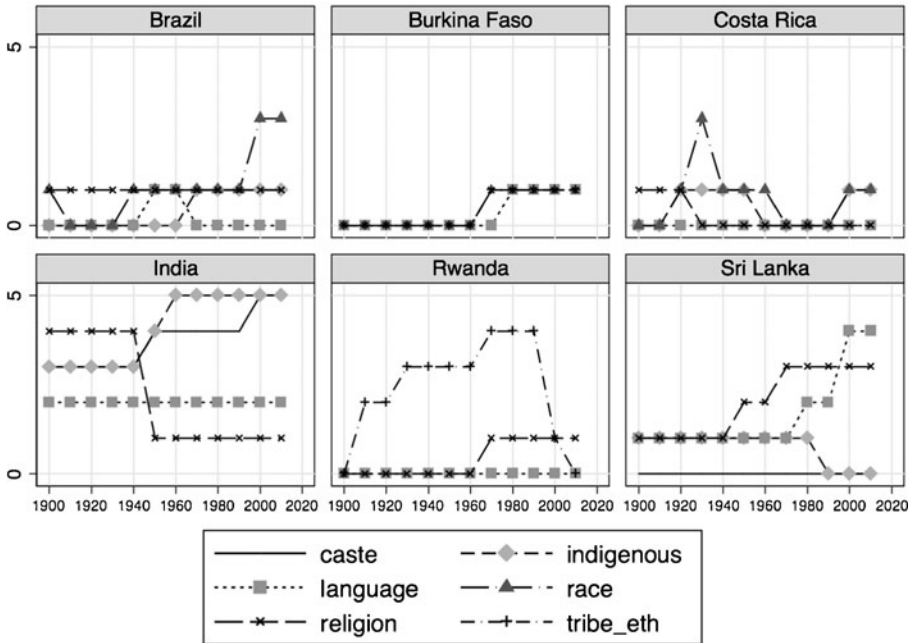
Fig. 1 Institutionalized Ethnicity Index for six countries (1900–2010)

In Table 3, we highlight how countries score on 15 different indicators of ethnic political competition and consider country scores relative to the mean score for which country-level data are available. We darkly shade cells for which a country scores "high" on a particular ethnic indicator, lightly shade those cells that are at or near the mean (typically within one standard deviation), and do not shade those cells that are "low." In certain cases, data were not available for a particular country for a particular indicator. With respect to available data, the table reflects several cases of convergence (India, Sri Lanka, and Costa Rica) and several of divergence (Rwanda, Burkina Faso, Brazil, and Sri Lanka), which we discuss in turn below.

India

As shown in Table 3, demographic, cognitive, behavioral, and institutional approaches would all correctly predict a highly competitive dynamic of ethnic politics in India. The various fractionalization indices indicate a high degree of ethnic diversity; there is less cross-cuttingness and more clustering of the linguistic–religious cleavages as compared to the cross-national mean; there is a high degree of between group inequality, and while the EPR identifies little ethnic exclusion in this democratic country, it does identify 14 ethnic power-sharing partners. Data on ethnic attitudes from the World Values Survey suggest a high degree of animosity towards members of other ethnic groups. India has also been characterized by striking behavioral manifestations of ethnicity including a large number of ethnic parties, which garner a substantial share of the votes and seats in national and state legislatures; ethnic mobilization as reflected in the MAR data, as well as ethnic violence, as captured, for example, by the Varshney–Wilkinson dataset on Hindu-Muslim

Table 3 Comparison of approaches to the study of ethnic political competition in 6 countries (1990–1994)

Dem	Cog	Beh	Inst	Measure	India	Sri Lanka	Rwanda	Burkina Faso	Brazil	Costa Rica
•				ELF (ANM)	0.89	0.47	0.14	0.68	0.07	0.07
•				ELF (Fearon 2003)	0.81	0.43	0.2	0.70	0.55	0.24
•				Ethnic Polarization (Montalvo Reynal-Querol 2005)	0.35	0.75	0.40	na	0.77	0.42
•				Cross cuttingness (Selway 2011)	0.65 lang-religion	0.32 lang-religion		0.83 lang-religion	0.89 race-income	0.9 race-income
•	•			Between Group Inequality (Baldwin and Huber 2010)	1.28	na	na	na	1.92	na
•	•			Horizontal Inequality (Ostby 2008)	na	0.25	0.41	0.02	0.15	na
	•			Population share objecting to neighbors.. "of a different race/ethnicity/ caste" (WVS)	49%	na	37%	na	5%	na
	•			…"of a different religion"	49%	na	37%	na	7%	na
	•			…"who speak a different language"	45%	na	4%	na	9%	na
		•		Group organization (MAR)	Yes	Yes	Yes	No	Yes	Yes
		•		Inter-communal conflict (MAR)	Yes	Yes	Yes	No	Yes	No
•		•		Cultural Fractionalization (Fearon 2003)	0.67	0.39	0	0.35	0.02	0.08
•		•		PREG (Posner 2004)	na	na	0.26	0	na	na
•			•	Share of ethnically relevant pop excluded from Power (EPR)	0.01	0.11	0.15	0	.44	0.02
•			•	Number eth rel power-sharing groups (EPR)	14	3	1	0	1	1
•			•	Mean number of "at risk" groups (MAR)	9	2	2	0	2	1
•			•	Mean percent population at risk (MAR) (max/min)	0.03 (0-.12)	0.09 (0.06-0.12)	0.38 (0.14-0.84)	0	0.03 (0-0.06)	0.03
			•	Maximum Institutionalized Ethnicity Index (figure 1)	6	3	4	1	1	0

Dark shade: "high" (>0.5 standard deviations *above* mean of countries with available data); light shade: "medium" (within 0.5 standard deviations of mean of countries with available data); no shade: "low" (>0.5 standard deviations *below* mean of countries with available data); *na* not available

violence. Finally, from the colonial period to the present day, state institutions in India have tended to enshrine linguistic, religious, caste, and indigenous cleavages across a range of state institutions.

On the whole, the case of India, therefore, affirms the ability of each of these approaches to predict an intense level of ethnic political competition. However, we

believe that the institutional approach sheds critical light on the roots and mainte-nance of ethnic political competition. Religion and caste are generally considered to be the two most conflictual cleavages in India (Wilkinson 2008). Conflict around these two cleavages, as well as around the indigenous cleavage, has clearly institu-tional origins.

Within the religious cleavage, the most intense conflict has been between Hindus and Muslims. At its very moment of independence from colonial rule, India was racked by horrific Hindu–Muslim riots, triggered by the partition of the subcontinent along religious lines, which claimed at least 300,000 lives. Many scholars have traced the rise of Muslim separatism and the crystallization of divisions between Hindus and Muslims—culturally distinct communities, which had co-existed peacefully for centuries—to the British institution of separate electorates for Muslims through the Government of India Act of 1909. Separate electorates facilitated political organization among an otherwise atomized Muslim minority in Uttar Pradesh (Brass 1974: 170; Misra 2001: 32, 40). Upon independence, the Indian government abolished separate electorates for Muslims but did continue to enumerate religion in the census and granted Muslims the autonomy to be governed by their personal law. Since the 1990s, the Indian government has institutionalized reservations for Muslims in state educational insti-tutions and employment. This institutionalization, especially the separate civil code, has played an important role in the continued and often bitter competition between Hindus and Muslims in contemporary India. Over the past five decades, Hindu–Muslim violence has occurred with frequency and, often, ferocity across a number of Indian cities (Varshney 2002).

The intense competition around caste is also best understood in terms of the deep institutionalization of the cleavage in both the colonial and postcolonial periods. Scholars such as Appadurai (1993) and Dirks (2001) have pointed out that the counting and classification of caste in the colonial censuses solidified caste bound-aries that had previously been more fluid (cited in Dudley-Jenkins 2003: 93). In the postcolonial period, caste has continued to be institutionalized in the census—incidentally, 2011 witnessed the conduct of the first official "caste census" since 1931—as well as in politics and authority, space and personal interaction, and opportunities for personal advancement. Preference policies in employment and education for lower caste groups, particularly the introduction of affirmative action policies for the so-called lower castes has triggered intercaste competi-tion and conflict. The critical role of the institutionalization of caste in fostering intercaste competition is recognized by state institutions, including the Supreme Court, which "expressed anguish at the manner in which communities were competing with each other for quota benefits" and "hinted" that this might lead to "caste war" (Mahapatra 2007).

In addition to religion and caste, contemporary India has also witnessed conflict around the indigenous cleavage. A first set of conflicts has been concentrated in Northeast India, where at different points since the late colonial period, a number of different indigenous groups, such as the Bodos, Nagas, Meiteis, and Mizos have been involved in secessionist movements. A second set of conflicts is associated with the Maoist insurgency, which began in Naxalbari in the 1970s and which has, in recent years, spread across large

parts of the country, posing a grave security threat to the country.[11] The consistently high degree of institutionalization of the indigenous cleavage in the colonial and postcolonial periods, through enumeration in the census, quotas in educational institutions, government employment, legislative positions, and the delegation of autonomy has played an important role in the outbreak of both these kinds of conflict. However, it is important to note that the relatively small and concentrated nature of the demography of the indigenous groups has meant that mobilization by indigenous actors and organizations has, for the most part, been confined to a particular region and conflict along the indigenous cleavage is more limited than religious or caste conflict. This is indicative of the importance of supplementing the institutional approach with other approaches.

Sri Lanka

Much like India, Sri Lanka has been characterized by severe ethnic political competition, including an ethnic civil war (1980–2009), between Sinhala and Tamil groups over the past half-century. As shown in Table 3, the cross-cuttingness index, EPR data, and behavioral and institutional measures do a much better job of signaling this reality than the fractionalization indices, which indicate only a moderate degree of ethnic diversity, and the inequality indices that show a moderate degree of inequality in socioeconomic assets between ethnic groups. On the basis of the high degree of clustering, the cross-cuttingnes index would correctly predict conflict along the linguistic and religious cleavages. EPR data identify three power-sharing partners and the fact that the excluded Sri Lankan Tamils represent 11 % of the population, while the MAR data identify them as an ethnonationalist group, who are expected to continue to engage in political violence. The institutional approach explains the Tamil–Sinhala conflict in terms of the state enshrinement of the mutually reinforcing religious and linguistic cleavages, as almost all Tamils are Hindu and an overwhelming majority of Sinhala speakers are Buddhist.

Like in the case of India, colonial institutionalization of ethnic identity in Sri Lanka formed the backdrop for ethnic mobilization and conflict. During the late nineteenth and early twentieth centuries, the British administration followed a policy of "communal representation," by which Tamils occupied government jobs and enjoyed political representation far in excess of their proportion of the population. The discontinuation of such communal representation in 1928 reduced Tamils to "a weakened minority" and is widely seen as the catalyst for the emergence of Tamil nationalism (Herath 2002: 43; Rajasingham 2001). Tamil organizations campaigned for the restoration of the ratio of Tamils to Sinhalese in the legislature, but their petitions were denied, which bred resentment. In this respect, the institutional approach reflects the emphasis of Wimmer et al. (2009) on the exclusion of Sri Lankan Tamils as a key factor for the conflict.

The institutional approach also highlights the significance of the deepening of the Tamil–Sinhala divide in the postcolonial period through the enumeration of religious and linguistic groups in the census, the marking of Tamil identity on birth and death

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[11] While the question of the "agency" of the adivsasis in the Maoist insurgency is a deeply contested one (Nigam 2010); this is a conflict that is at the very least fought in the name of the indigenous people and the combatants are drawn overwhelmingly from indigenous groups.

certificates, and the granting of autonomy to ethnic and religious groups to practice their own customary law. In 1956, the Sri Lankan state replaced English with Sinhala as the only language of Sri Lanka triggering a major uproar on the part of the Tamils and resulting in the abrogation of the act and the institutionalization of both Tamil and Sinhala as official languages in 1987. State institutionalization of the Tamil–Sinhala distinction not only laid the foundation for the civil war but also facilitated its conduct. Reminiscent of the Rwandan genocide, the decision by the Sri Lankan government to specify the bearer's linguistic–religious identity on national identity cards issued after the 1970s, allowed Sinhalese mobs to target Tamils during riots in Colombo in the 1980s.

Unfortunately, the largest comparative survey with relevant questions about ethnic attachment—the World Values Survey—has not been fielded in Sri Lanka, Costa Rica, or Burkina Faso, a problem that again reflects on the challenges of using cognitive approaches to study theories of comparative ethnic political competition.

Costa Rica

At the other extreme from India and Sri Lanka, with respect to Costa Rica, virtually every indicator suggests that we should not expect much ethnic competition, a characterization we believe most country experts would confirm. This is to a large extent because, as indicated by the fractionalization indices in Table 3, Costa Rica is a relatively ethnically homogeneous country (93 % of the population is of European descent). There is a high degree of cross-cuttingness between race and income, reducing the likelihood of divisions along these cleavages. The EPR dataset identifies "Afro-Costa Ricans" (approximately 2 % of the population) as a small, excluded group, seeking autonomy, while the MAR data set highlights the "Antillean Blacks," as at a low risk of protest. Only 5 % of respondents in a recent Latin Barometer survey said that of all the reasons people are not treated equally, the ones that affected them most were "discrimination due to skin color" and "discrimination against immigrants." There are no ethnic parties in Costa Rica but the MAR data set does indicate the presence of ethnic organizations.

Each approach provides a useful nuance for understanding the dynamics of ethnic political competition, but we also find substantial value added from an institutional approach. In particular, an institutional history sheds light on dynamics of change: As Fig. 1 indicates, one can identify the de-institutionalization of ethnic categories after the 1950s (the removal of questions about home language and race from the census) and its re-institutionalization starting with the 2000 census, which asks, "Do you belong to this culture…1. Indigenous; 2. Afro-costa rican/black; 3. Chinese; 4. None of the above." It is also interesting to note that it was only in 1957 that the University of Costa Rica included black graduates, and black professionals would begin to enter the work force (Helmuth 2000: 18), and this came after a period of substantial discrimination throughout Costa Rican society (Purcell and Sawyers 1993). Thus, an institutional approach helps to identify that a deliberate process of nation-building, including a single-language policy, as well as a more recent move towards the recognition of ethnic groups have shaped the quality and dynamics of ethnic political relations in Costa Rica.

Rwanda

The Rwandan case is a stark illustration of the limits of most purely demographic approaches, which would, as Table 3 indicates, have predicted consistently peaceful ethnic relations because in comparative perspective, the country appears relatively homogeneous. Only the ethnic polarization index—better suited to identifying the potential for "bipolar" conflict—would provide any suggestion that the ethnic composition might lead to the atrocities that occurred within a 100-day period in 1994, when over 500,000 Tutsis and their moderate Hutu sympathizers were slaughtered. Cognitive approaches such as the 2005–2007 wave of the WVS indicate some ethnic tensions as nearly 40 % of the respondents stated an objection to living beside a member of a different racial/ethnic group—and behavioral approaches such as the MAR project correctly identify Hutus and Tutsi as "communal contenders." The horizontal inequality index indicates a high degree of unevenness in socioeconomic assets between Hutus and Tutsis. Relatedly, the EPR data identify the political marginalization of the Tutsis in postcolonial Rwanda, and this exclusion of Tutsis from political power formed the basis for the Tutsi-dominated Rwandan Patriotic Front's attack on the Hutu-led government in 1990, which triggered the Rwandan Civil War and formed the backdrop for the genocide of 1994. However, as in the case of Sri Lanka, the relatively small size of the excluded minority (approximately 15 % in Rwanda), which forms the basis for the EPR measure of exclusion, does not suggest the depth of the divide relative to that found in other countries.

Moreover, the cognitive, behavioral, and hybrid approaches still beg the question of why two communities that share a common language, cultural traditions, and religious affiliation and frequently intermarried came to be antagonists? The work of a number of scholars of Rwanda (Dallaire 2005; Destexhe 1995; Gourevitch 1998; Longman 2001; Mamdani 2001), suggests that a focus on the state's institutionalization of the Hutu–Tutsi distinction provides a deeper understanding of the conflict and the origins of those divides. Colonial policies that "fixed group identities, arranged groups in a hierarchy, and instilled in the Rwandan groups a hatred and distrust of one another" are often identified to be at the root of the 1994 genocide (Longman 2001). The decision by Rwanda's first president Gregoire Kayibanda to continue the institution of ethnic identity documents begun by the Belgian colonists reinforced the Hutu–Tutsi divide. Postcolonial policies of ethnically based quotas in education and employment further exacerbated ethnic tensions. The direct role of the institutionalization of ethnic identity in the Rwandan genocide is brought out by the numerous reports, testimonies of survivors, as well as confessions of former Hutu militia men, which confirm that government-issued identity cards, which marked the bearer's ethnic identity, were regularly used to identify and target Tutsis.[12]

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[12] Even though there were physiological stereotypes associated with the Hutus and Tutsis, the task of distinguishing individuals from the two communities was complicated by the high rates of intermarriage. The practice of marking the bearer's ethnic origin on official identity documents greatly facilitated the conduct of the genocide by making it "easy to identify Tutsi" (Longman 2001: 355). Longman writes that "Since every Rwandan was required to carry an identity card, people who guarded barricades demanded that everyone show their cards before being allowed to pass. Those with "Tutsi" marked on their cards were generally killed on the spot" (Longman 2001: 355).

The Rwandan government's decision to discontinue ethnic classification on identity cards in the wake of the massacre exemplifies a not uncommon institutional response to instances of conflict. (The Sri Lankan state, for example, revoked the controversial and divisive "Sinhala only" law of 1956 in 1978, in response to widespread and intense Tamil mobilization.) The Rwandan case brings out the way in which institutions can be "ethnic dividers" but can also be used by states in their attempts towards "ethnic healing," and the trends for the Rwandan case in Fig. 1 show this clearly. In response to a question posed by our research assistant about ethnic markers on identity cards, an official at the Rwandan Embassy said, "Please let me stress to you—Rwandans are one people. Hutus and Tutsis are one and we do not do such things anymore. Please write this in your research project".

Burkina Faso

Burkina Faso is in many ways the mirror image of the Rwandan case in the sense that it is highly diverse—and in most theoretical treatments, the associated fractionalization scores tend to be interpreted as predicting high levels of ethnic conflict. On the other hand, the cross-cuttingness index and behavioral and hybrid approaches suggest little in the way of tension. There is a very high degree of overlap between linguistic and religious identities, little socioeconomic inequality among ethnic groups, and both the EPR and the PREG datasets identify no politically relevant ethnic groups in Burkina.

An institutional approach helps to explain this disconnect. Official institutions in Burkina Faso have very rarely made distinctions along ethnic lines, as reflected by the fact that the IEI score does not rise above 1 for any cleavage, and the state has implemented a single language policy in the face of great linguistic heterogeneity. It is worth noting that even in the case of counting on the census, the relevant questions asked after the 1970s are with respect to home language and religion and not, "what is your ethnicity?" Complementing the Rwandan case, in which institutions helped to explain why a country with low levels of diversity developed such strong ethnic tensions, this case suggests how amidst high levels of diversity in a region surrounded with ethnic conflict (e.g., in Ivory Coast and Nigeria), it was possible to reduce the salience of ethnic difference in the political arena. While informal institutions, such as that of the West African practice of *cousinage* or "joking cousins," have surely played a role (Galvan 2006; Lieberman 2009; Dunning and Harrison 2010), the choice to *not* substantially institutionalize ethnic distinctions adds to our understanding of low ethnic political competition in that country.

Brazil

Despite widely observed associations between skin color, cultural practices, and income inequality, all of which could be the basis for ethnic conflict, there has been minimal overt political competition or conflict along ethnic lines in Brazil in the twentieth century. Brazil, however, is a complicated case, and the lack of congruence across measures reveals some of the challenges of existing approaches. For example, while the Atlas Naradov Mira and Fearon's cultural fractionalization index both indicate relative homogeneity, Fearon's standard fractionalization indicator suggests

more diversity, and the ethnic polarization index implies very high potential for conflict. The cross-cuttingness index for the racial and income cleavages is roughly equivalent to the average for the 69 countries Selway produces for this measure. There is a moderate degree of inequality between ethnic groups. The MAR dataset classifies the Afro-Brazilians as an "ethnoclass" that is "unlikely to rebel against the state"[13] and indicates the presence of ethnic organization and intercommunal conflict. Meanwhile, the EPR dataset identifies 44 % of the population as being from ethnic groups excluded from power—by far the largest share of any of the cases discussed in this article.

Cognitive approaches also suggest some ambiguity. For example, on the WVS, 95 % of Brazilians reported having no objection to living beside people of a different race. Most observers would agree, however, that a degree of "cordial racism" (Turra and Venturi 1995; Telles 2004) exists in the country, and the society is hardly "color blind."

An institutional approach helps to explain the relatively uncompetitive racial dynamic in modern Brazilian history based on the absence of consistent racial distinctions in most state institutions, though it also suggests some recent patterns of change and the sources of ambiguity revealed by alternative approaches. Marx (1998) compared the racial dynamics in the USA, South Africa, and Brazil and traced the relatively peaceful ethnic landscape to institutional variables, explaining that unlike in the USA or South Africa, modern Brazilian institutions never imposed racial segregation or defined racial-group membership in a sharp or consistent manner. Until recently, the only Brazilian institution with an ethnic dimension was the census, which in most decades since 1940, enumerated the population according to race and religion, but even here, as Nobles (2000) points out, there has been substantial fluctuation in the use of categories and racial data. Beyond the omission of ethnic categories in most state institutions in Brazil, the positive use of a single language policy has also been important in promoting an integrated polity. Huge populations of African-, German-, Italian-, and Japanese-descended people live in Brazil, but most speak Portuguese, and only Portuguese, causing them to identify as Brazilians rather than in ethnic terms.

Institutional change is likely to be critical to broader longitudinal patterns of ethnic political competition. Owing to a range of factors, including repeated scholarly analyses finding clear relationships between skin color, socioeconomic deprivation, as well as international influences and trends, in 2001, the Brazilian government instituted historically unprecedented quotas for racial groups for jobs and university admissions, which combined with a census that enumerated by race, led to an IEI score of 3. To be certain, this reflects a real shift in the prospects for ethnic political competition in Brazil, but it remains to be seen whether such institutional recognition will lead to substantial conflict and if so, in what form.

Conclusion

Scholarship on comparative ethnic relations remains a vibrant field of inquiry. Like for other macrolevel phenomena of great substantive and scholarly interest, including

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[13] The MAR dataset also identifies a "moderate" risk for rebellion against the state by the Amazonian Indians.

"development," "democracy," and "governance," there is little consensus concerning exactly how to define or to operationalize "ethnic politics." In this article, we have sought to bring greater conceptual clarity to this field by identifying four approaches to what we call the "ethnic landscape." We have argued that while demographic, cognitive, behavioral, and institutional approaches are each distinct, within a large body of scholarship, they are all implicated in theories in which ethnic political competition is the mechanism that leads to patterns of distribution, violence, etc. In so doing, we have tried to clarify the relationship between these conceptual approaches and to highlight various tradeoffs in using one or another, especially with respect to the challenges of measurement. We have tried to demonstrate that one possible approach—an explicit focus on the state's institutionalization of ethnic categories—is an important complement to extant approaches.

While future research will be needed to assess the explanatory power of various constructs, questions of conceptual clarity and measurement validity ought to precede large-scale empirical testing. When considering macrolevel phenomena, such assessments should be made on the basis of logical persuasion, and the matching of specific historical cases to the systematized indicators generated by different empirical approaches, as recommended by Adcock and Collier (2001). We have demonstrated that an institutional approach, previously employed in only a few "small-N" comparative analyses, holds great promise for the development of reliable and valid comparisons. For example, by focusing on how *the same* key state institutions make distinctions along the *same* ethnic categories across countries over time, an institutional approach facilitates the testing of hypotheses about the causes and consequences of ethnic politics in comparative, cross-national analyses. The more substantial challenge in this regard will be to accumulate sufficient historical documentation across time and space to describe patterns of institutionalization in the manner we have done for just a few cases.

Further study will also be needed to theorize and empirically test the relationships between the various dimensions of ethnic politics that we have identified above. While we are skeptical that it will be possible to determine that one single dimension —demography, cognition, behavior, or institutions—will emerge as the "most exogenous" predictor of ethnic political competition, it may be possible to identify consistent patterns and relationships, including those that jointly predict more or less ethnically based competition and many of the outcomes—typically negative—that are associated with such dynamics. Rather than treating these as separate islands of inquiry, we envision greater complementarity as scholars continue to collect more and richer data.

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