The Salience of Ethnic Categories:

Field and Natural Experimental Evidence from Indian Village Councils

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Abstract: Scholars of ethnic politics often suggest that electoral institutions, political leadership, and the sanctioning of particular ethnic categories by the state may all shape political attitudes and behaviors, as well as the salience of different forms of ethnic identification. Evaluating such claims, however, is typically beset by selection problems that make causal inference challenging. This paper studies the impact of election of village council presidents from marginalized castes and tribes in the Indian state of Karnataka, using a research design in which the causal effects of electoral institutions and political leadership can be identified. By exploiting a rule that rotates caste-based electoral quotas across village councils on the basis of the population proportions of lower castes and tribes, I used a regression-discontinuity design to construct a study group of 160 village councils, located in the Indian state of Karnataka, in which reservation is plausibly assigned "as-if" at random; to measure the causal effect of different *kinds* of caste relationships on political preferences, I then implemented a field experiment in these same constituencies. Using this research design to estimate the interactive effect of quotas on individual caste-based preferences, I can investigate how the restriction of the set of candidates to members of a larger composite category (here, Scheduled Castes and Scheduled Tribes) affects preferences over candidates from the different component categories (individual castes and tribes). While I find some evidence for both *competition* and *solidarity* effects among members of the same larger ethnic category but different sub-categories, the latter effect appears perhaps surprisingly strong.

I. Introduction

Scholars of ethnic politics often suggest that electoral institutions, political leadership, and the sanctioning of particular ethnic categories by the state may all shape political attitudes and behaviors, as well as the salience of different forms of ethnic identification (Laitin 1986; Chandra 2005; Posner 2005). An abundance of observational evidence seems to support this basic proposition. For instance, the recent election of Bolivia's first indigenous president, Evo Morales, coincides with a large increase in the percentage of Bolivians who identify as indigenous in public opinion surveys (LAPOP 2008: xxx-xxiii; Madrid 2008: 485, 490). In the United States, the creation of a census category for Hispanics is seen to have created a unifying identity, around which people of disparate national origins—Dominican, Ecuadorian, Argentine, and so on—can mobilize politically (Rodríguez 2000). Students of African politics emphasize the role of both colonialism and post-independence political competition in shaping the salience of tribal and other ethnic categories (Bates 1983, Laitin 1986, Posner 2004, 2005). Finally, the election of black mayors in white-majority cities in the United States is viewed as reducing prejudice on the part of whites towards African Americans (Hajnal 2001).

Evaluating such causal claims, however, is typically beset by selection problems that make *causal* inference challenging. In brief, voters who elect politicians from particular ethnic groups may be unlike those who do not, in ways that matter for patterns of ethnic identification and political behavior; the sanctioning of particular ethnic categories by the state also does not typically occur at random. The examples mentioned above illustrate the point. The growth of indigenous identity in Bolivia is the fruit of successful but only relatively recent mobilization along ethnic rather than class lines (Yashar 2005), which may be responsible both for secular changes in the proportion of Bolivians who identify as indigenous and for the election of the

country's first indigenous president. The creation of census categories such as Hispanic typically reflects active campaigning by pressure groups who seek to shape the way that the state conceptualizes and measures ethnic categories (Nobles 2000). Finally, European colonialists hardly found a tabula rasa from which to construct linguistic or tribal identities in Africa, while the election of African-American mayors by white communities may reflect different underlying dispositions (or differential changes in those dispositions) in communities that do and do not elect black mayors. While we can make some progress by controlling for confounding variables, comparing similar jurisdictions exposed to different kinds of leaders, or exploiting difference-in-differences estimators, testing causal claims about the effects of institutions or political leadership is typically challenging. Thus, the extent to which changes in the salience of various ethnic categories reflect other confounding processes, rather than innovations in electoral rules or the sanctioning of ethnic categories by the state, therefore remains an open question.

This paper studies the impact of election of village council presidents from marginalized castes and tribes in the Indian state of Karnataka, using a research design in which the causal effects of electoral institutions and political leadership can be identified. In brief, by exploiting a rule that rotates the "reservation" of the presidencies of village councils—a kind of electoral quota for candidates from lower-castes and tribes—on the basis of the population proportions of lower castes and tribes, I use a regression-discontinuity design to construct a study group of 160 otherwise-similar village councils, in which reservation is plausibly assigned "as-if" at random.[1] The main advantage of this natural-experimental approach is that it allows me to attach causal interpretations to ex-post (post-reservation) differences across reserved and unreserved councils

[1] An additional 40 villages were selected for an initial, smaller experiment and survey, as described below.

(known in India as panchayats).[2] To measure the causal effect of different kinds of caste relationships on political preferences, I then implemented a field experiment in these same 160 constituencies.[3] Respondents of various castes were recruited via a stratified random sample and were shown videotaped speeches, given by actors posing as candidates for a village council. The experimental manipulation consisted of what subjects were told about the candidate's surname; because surnames indicate the candidate's caste, changing the candidate's surname manipulates the caste relationship between subjects and candidates.

The question the research seeks to answer is how (if at all) the political empowerment of marginalized castes and tribes shapes voters' preferences for candidates with whom they share different *kinds* of caste identities. Scholars of ethnic politics often point out that people usually have multiple dimensions of identity—for example, race, language, caste, religion, and so on—on which they may base their political preferences and behavior (Laitin 1986, Chandra 2005, Posner 2005). Moreover, ethnic or other categories are often nested within a hierarchical structure. Just as the ethnic category of Hispanic in the United States combines people of disparate national origins (such as Dominicans, Ecuadorians, and Argentines, and so on), in India the larger categories on which political quotas are based—namely, the Scheduled Castes[4] and

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[2] Another advantage is that while I can only estimate causal effects for the village councils included in the study group, there is little a priori reason to think that the regression-discontinuity design produces a highly unrepresentative sample of panchayats. In addition, because of the way in which reservation is determined, there is a large range in the study group in the proportion of the panchayat population comprised by Scheduled Castes and Scheduled Tribes, which helps with external validity concerns; see discussion below.

[3] In each selected village, there was also a survey of the council president, two other council members, and the executive secretary (a local bureaucrat); these data are analyzed elsewhere.

[4] Individual castes are included among the Scheduled Castes or Scheduled Tribes by government "schedules" appended to official legislation (hence the names Scheduled Caste and Scheduled Tribe). Many but not all of the Scheduled Castes are Dalit or formerly "untouchable" castes. Inclusion on the list

Scheduled Tribes—combine individual castes (called *jatis*) and tribes as constituent components of these larger categories.[5] Thus, just as the privileging of the larger category of "Hispanic" in the United States may strengthen or weaken the political role of subordinate categories such as Dominican or Ecuadorian, the reservation of elected offices for members of the Scheduled Castes and Scheduled Tribes might increase or decrease the political salience of the constituent caste and tribal identities. How, then, does the reservation of offices for politicians from the larger category shape voters' preferences for candidates from their own individual caste, from a different caste but the same larger category, and from a different larger category altogether?

The literature on ethnic politics makes at least two competing predictions here. On the one hand, following a literature that asserts that voters and political actors seek to build *minimum winning* ethnic coalitions in order to extract benefits from the state, the restriction of the set of eligible candidates for council president to members of the larger category should intensify competition between members of different sub-groups (castes) but the same larger category. If so, we should observe that reservation increases the preference of members of the reserved category for candidates from their individual caste, while making candidates from the same larger category—but a different individual caste—less attractive. On the other hand, a range of social-psychological and other theories suggest that in making the larger category more salient, reservation would reduce in-group differentiation and produce greater solidarity between members of the same larger category—even if they come from different individual castes. In the

allows members of the groups to run for office in constituencies restricted for one of the larger categories; it also entails group eligibility for employment and educational quotas.

[5] In some settings, such identity dimensions are cross-cutting, in that members of the same group on one dimension of identity are members of a different group on a separate dimension; in others, they are overlapping, in that members of one group on one dimension also share group membership along a different dimension.

next section, I can further compare and contrast the theoretical bases of what I call the *competition* and *solidarity* effects.

My empirical results suggest some support for both the competition and solidarity effects, but the latter is perhaps surprisingly strong. Experimental treatments that tap subjects' expectations over the receipt of benefits do suggest that reservation increases the distinctions subjects draw between candidates from their own sub-category and those from the same larger category but a different sub-category, as the minimum winning coalition argument would predict. By and large, however, electoral quotas based on the larger caste category tend to *reduce* the distinction that subjects in the field experiment draw between candidates from different sub-categories, instead increasing the attractiveness of a given candidate to all members of the same larger category. Reservation of political offices for candidates from the larger category does indeed increase the political salience of this larger category.

In contrast to several findings in the previous literature, here we can be relatively confident that such effects are *causal*. Beyond its substantive contribution, then, the research presented here has important methodological implications. In many studies, experiments are conducted in different institutional settings, and differences in estimated effects are compared across these divergent contexts. Yet because of pre-existing differences across these settings, and because features of these settings are not subject to intervention, we cannot easily attach causal interpretations to any different effects we find. In this study, by contrast, the causal effect of electoral institutions and political leadership on the experimental effects can be estimated; due to the combination of the natural and field experiments, electoral quotas are both manipulated

and as-if randomly assigned to experimental subjects. To my knowledge, this is one of the first studies to combine natural and field experiments in this manner.[6]

II. How Do Electoral Quotas Shape Caste-Based Political Preferences?

A substantial body of research has assessed the consequences of reservation—that is, electoral quotas for Scheduled Castes (SCs), Scheduled Tribes (STs), or other groups such as women—in India. "Scheduled" refers to an official list of sub-caste names, the list being attached as a schedule to legislation passed by the Indian states; inclusion of particular castes on the list of those eligible for reservation is sometimes the object of lobbying and political mobilization. "Reservation" of an office means that all voters in a constituency may vote but that the elected officeholder must come from the religious or caste category for which the office is reserved (Hasan 1998). With the extension of the principle of reservation to local village councils, known as *gram panchayats*,[7] after the passage of the 73rd constitutional amendment in 1993, much scholarly attention has focused on whether and how reservation tilts distributive policy in favor of reserved groups, such as SCs and STs. Council members and the council president have responsibility for deciding local development projects and allocating benefits

[6] Beaman et al. (2008) exploit the as-if random assignment of female council presidents in India and conduct experimental Implicit Association Tests to examine how exposure to women presidents shapes prejudice. Arceneaux, Kousser, and Mullin (2009) combine a randomized get-out-the-vote campaign with an alleged natural experiment that assigns voting by mail. Chauchard (2009) has presented a research design that combines a regression-discontinuity approach with experimental evidence to study the effects of caste reservation at the local level in Rajasthan.

[7] In this article, it is often convenient to use the term *gram panchayat* or simply *panchayat* instead of village council or council; whereas the latter terms refer only to the elected body, the former terms indicate both the elected body and the constituency that elects the body.

from many central and state-government welfare schemes;[8] while central and state governments mandate that some funds be used for particular purposes, in practice, much local spending through the panchayats has a discretionary character, with even spending on apparent public goods such as roads and water pumps playing the role of quasi-private transfers. For example, a section of road might be improved, or a water-pump installed, near a temple used by residents from one or another caste.[9] Since previous research suggests that the council president has strong agenda-setting powers, reservation of the council presidency might well affect the perceptions or preferences of local voters along caste lines.[10]

However, reservation of the council presidency for Scheduled Castes or Scheduled Tribes implies a heterogeneous set of potential political candidates—because these larger categories are themselves comprised of many eligible castes or tribes. Indeed, much of the anthropological and political science literatures on village politics focuses not on categories such as Scheduled Castes or Scheduled Tribes but on the political role of the individual castes or *jati* that comprise these larger categories (Manor 1989, Charsley and Karanth 1998, Weiner 2001). Reservation, however, empowers larger categories of disparate groups, such as the often-heterogeneous

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[8] Although panchayats raise a small proportion of their funds from local taxes and fees, most resources come from transfers from central and state governments.

[9] Dr. SS Meenakshisundaram, Interview, Bangalore, January 17, 2009. Discrimination can make such apparent public goods excludable, as well as rival: for instance, former Untouchable castes are sometimes banned from high-caste temples.

[10] For instance, Besley, Pande and Rao (2004, 2007a) find that the identity of the president shapes patterns of public good provision and allocation of resources across villages, with the council president's village tending to receive greater resources (see also Palaniswamy and Krishnan 2008), while Bardhan et al. (2005), Bardhan and Mookherjee (2006), and Banerjee and Pande (2007) also provide evidence on the targeting of benefits by village councilors. Duflo and Topalova (2004) find that women presidents provide public goods that are more valued by female citizens, while Beaman et al. (2008) find that reservation of the presidency for women has an effect on perceptions of female politicians. On the effects of reservation in state assemblies, see also Pande (2003) or Prakash (2007).

category of Scheduled Castes, but leaves open the question of the distribution of power within the larger group. For example, the law often mandates that a portion of funds be spent on projects for Scheduled Castes or Scheduled Tribes without specifying which *particular* caste or tribe shall benefit. This raises the question of how reservation affects the nature of caste voting; in particular, how does reservation of the council presidency for a larger caste category shape the political salience of this category, relative to the individual castes that comprise it?

The literature in ethnic politics makes at least two competing predictions here. On the one hand, many recent analyses in comparative politics and other fields assert that voters and other political actors seek to acquire resources, often from the state, and that building a coalition with fellow group members to put someone from their own group in a position of power is the best way to obtain resources (Bates 1983, Chandra 2004, Posner 2005). Given this presumption, actors should in general seek to structure political competition around the dimension or level of identity—race, tribe, language, and so on—that promises them maximized benefits. In particular, they should seek to build minimum winning coalitions, that is, coalitions in which they have to share the minimum amount of resources with other groups, subject to the constraint that the coalition be large enough to allow their group to gain political power. Indeed, Posner (2005) makes precisely this kind of argument in his discussion of tribal and linguistic politics in Zambia: when political competition was forced down to the local level, during a period of one-party control at the national level, candidates competed and voters voted along tribal lines, since they all (locally) shared the same linguistic ethnicity.[11]

[11] Posner (2005) argues that with the restoration of competitive democracy at the national level, political competition instead took place at the level of the larger, linguistic category. Other students of African politics emphasize the role of both colonialism and post-independence political competition in shaping

This minimum winning coalition argument thus generates a clear prediction in the context of Indian village councils. When the presidencies of local village councils are reserved for members of Scheduled Castes or Scheduled Tribes, electoral competition and antagonism between members of the same larger category—but different sub-categories—should intensify. Just as political competition took place at the tribal level in Zambia when political competition was only local, and thus coalitions at the linguistic level were not available (because the relevant set of voters all shared the same language), when the set of candidates is restricted to members of a particular larger category such as Scheduled Caste, competition between the individual castes that comprise that grouping should become more intense.

Yet there are empirical as well as theoretical reasons to interrogate this prediction further. At the empirical level, in many other settings, effects appear go in the opposite direction than that predicted by a minimum winning coalition idea. For example, the creation of a census category for Hispanics in the United States and the allocation of public benefits or educational quotas for Hispanics as Hispanics—rather than reinforcing competition between Hispanic sub-groups—is seen to have created a single, unifying identity around which people of disparate national origins can mobilize politically (Rodríguez 2000). The election of Evo Morales in Bolivia does not appear to have engendered greater competition between Aymaras and Quechuas, the two main sub-groups that comprise the larger "indigenous" category in the Bolivian highlands. Thus, rather than undercutting political allegiances based on the larger shared identity, then, conditioning political competition on a politically-salient superordinate

the relative salience of linguistic, religious, and other ethnic categories (Bates 1983, Laitin 1986; see also Posner 2004).

category sometimes seems to engender greater solidarity between the members of a larger social category's component groups.

There are also several theoretical reasons why premising political competition on a larger caste category, rather than increasing antagonisms, might drive greater solidarity between members of different castes which are part of this same larger category. One idea comes from the social-psychological literature on minimal groups (and extensions thereto), which argues that making a single category salient—whatever that category may be—reduces cognitive differentiation in evaluations of in-group members while driving distinctions between those included in a larger category and those excluded from it (Tajfel 1981, Tajfel & Turner 1979; see Crisp and Hewstone 2007). This tendency, according to which making a larger category salient drives solidarity among members of the larger group, might be particularly strong among groups that comprise the Scheduled Castes, many of which are former Untouchable castes (now called Dalits) and as such share a history of discrimination and ritual humiliation at the local level. In many villages in Karnataka as elsewhere in India, Dalit castes still cannot access non-Dalit temples and are denied access to village wells used by dominant castes (see Chauchard 2006 for discussion). In India, as I discuss below, scholars have described the importance of the "politics of dignity," according to which the psychic and symbolic gains from political empowerment are most important for lower-castes (Kohli 2001: 16; Rao and Walton 2004; Varshney 2003; Weiner 2001: 219-20); since groups that share a history of discrimination at the village level may share this same politics, the empowerment of any one of the discriminated castes may to some extent provide a psychic source of gain to all.

Beyond social-psychological explanations, there may be political economy reasons for groups to support each other, if for instance members of different castes among the Scheduled

Castes anticipate forming part of the same political or electoral coalition over time. As we discuss below, however, such expectations seem less plausible in village councils in Karnataka, where Scheduled Castes and Scheduled Tribes typically comprise a small part of the village electorate. (On average, SCs comprise 18 percent of panchayat populations in Karnataka). Most political economy explanations would thus tend to predict more antagonism between castes that form part of a larger caste category, when the set of candidates is restricted to members of that larger category.

Whatever the source, however, it is clear that two distinct theoretical predictions emerge from the literature. On the one hand, there is what I will call a *competition effect*, according to which restricting the set of candidates should lead to greater competition and antagonism between members of different castes, in the same larger caste category. On the other hand, we can talk of a *solidarity effect*, according to which reservation, by making the larger category more salient, should reduce in-group differentiation and drive solidarity between members of different castes but the same caste category.

I should be clear that these are opposite predictions, but they are not necessarily incompatible. For example, it may well be that on some dimensions of political conflict—for instance, those involving the distribution of benefits—the competition effect is more important; while on other dimensions—such as those involving symbolic or psychic benefits—the solidarity effect is more weighty. Part of the point of developing the tests presented below is precisely to assess the conditions under which one or the other effect becomes more important.

The state of Karnataka provides a valuable case in which to test these competing theories, because of the caste structure in the state. First, a predominant role tends to be played in both

village and state politics by two dominant backward sub-castes, the Vokkaligas and the Lingayaths (Manor 1989, Charsley and Karanth 1998, Shastri 2009).[12] These sub-castes are formally "backward" (that is, less marginalized than Scheduled Castes but more disadvantaged than forward castes such as Brahmins), but the relative scarcity of forward sub-castes and the concentration of Vokkaligas and Lingayaths in Karnataka make them the dominant political groups in the state (Shastri 2009).[13] Weiner's (2001: 221) general observation that "some of the most acute conflicts take place not between Dalits [former Untouchables included among the Scheduled Castes] and Brahmins and other forward castes, but between Dalits and OBCs and other intermediate castes" is particularly apt in Karnataka.

Second, in Karnataka's villages, the Scheduled Caste category also tends to be comprised of two main sub-caste groups, the Holayas and the Madigas.[14] As Charsley and Karanth (1998: 38) put it, "Karnataka is the state with the longest list of Scheduled Castes and a frequent conviction that there are only two which are really Untouchable." There is some history of competition and even antagonism between these two distinct jatis, both comprised of former Untouchables. For example, each group tends to have distinct heroes (with the Scheduled Caste

[12] These two castes tend to be both prevalent and especially dominant in the districts from which the villages in the experimental population were selected, in the southern (Mysore) region of Karnataka as well as the central and western parts of the state.

[13] While sub-caste groups may in general be too small to play a dominant role as a basis for coalition or party formation in state elections (Chhibber 1999), in Karnataka the dominance of Vokkaligas and Lingayats implies a predominant influence of these groups on state politics.

[14] These terms can carry pejorative connotations but are the most widely used; alternatives include Adi-Karnataka and Adi-Dravida, respectively.

leader Dr. Ambedkar tending to be especially celebrated by Holayas), and residential segregation occurs in many villages, with Holayas and Madigas often living in separate colonies.[15]

Yet despite this possible competition among sub-castes, both Holayas and Madigas are eboth mpowered by political reservation—and they are not empowered as Holayas and Madigas, but as members of the Scheduled Castes. Eligibility for government benefits or for election to reserved seats in the village council depends on being a member of the Scheduled Castes, and politicians in Karnataka and elsewhere (such as Ambedkar himself, or Mayawati in the state of Uttar Pradesh) have mobilized individual Dalit sub-castes, not in terms of their distinct sub-caste identities but rather as members of the Scheduled Castes. Just as Vokkaligas and Lingayaths may compete for political power at the village or state level but also share interests as the dominant castes in the state, Holayas and Madigas may compete as sub-castes but also share interests or identities as members of the Scheduled Castes.[16] Thus, whether sub-caste identities or larger caste categories exert a more important influence on political preferences is an open question.

The structure of caste relations in Karnataka thus permits a ready comparison of the influence of sub-caste identities and larger categories, using the field experimental approach described in the next section. I can then compare across reserved and unreserved villages and—because reservation is assigned as-if at random in the study group of

[15] See discussion in the chapters of the Charsley and Karanth (1998) volume. While accompanying two Holaya research assistants to villages in Davanagere district, they recounted the improprieties of Madigas, who (I was told) are mostly drunks.

[16] Although I focus much of the analysis below on the four sub-castes mentioned above—two dominant Backward Classes and two Scheduled Castes—and although the experimental population came predominantly from these groups, I do also examine the relative salience of categories for other groups as well, including Scheduled Tribes as well as other backward and forward caste groups.

panchayats—investigate the causal effect of reservation on the relative salience of sub-caste and larger caste categories. In the next section, I describe the rationale and procedure for the selection of the 160 panchayats included in the study group and then further describe the field experiment implemented in those panchayats.

III. Empirical Strategy: Combining Natural and Field Experiments

A Regression-Discontinuity Design

Inferences about the effect of political leadership or of electoral quotas on the salience of caste categories may be subject to selection bias, if panchayats that elect Scheduled Caste or Scheduled Tribe presidents or that are subject to quotas are different from those that do not. For example, in panchayats with less competition between the sub-castes that comprise the Scheduled Castes, such sub-castes might be more likely to coordinate on electing a single candidate from one of the sub-castes to the village council; inferences about the effect of reservation on the salience of sub-caste versus caste category ties would then be misleading. Panchayats in which such sub-castes are more numerous might also be more likely to wind up with Scheduled Castes presidents. In addition, since reservation of council presidencies depends on the proportion of the panchayat population from the Scheduled Castes and Scheduled Tribes, unadjusted comparisons of reserved and unreserved councils are likely to be misleading.

However, I can make unbiased inferences about the causal effect of reservation by exploiting the system of rotation through which reservation is assigned. In the state of

Karnataka,[17] the proportion of panchayat presidencies to be reserved for Scheduled Castes and Scheduled Tribes within each "taluk" (an administrative unit smaller than a district that contains, on average, about 35 village councils in my sample) is given by the proportion that each group comprises of the taluk population, as measured by the census. Having determined this overall proportion, the bureaucrat in charge of reservation[18] lists panchayats within each taluk in descending order, by the number of council members' seats reserved for the relevant group. (In other words, he or she makes one list in descending order for Scheduled Castes and another list for Scheduled Tribes). The number of council members' seats reserved for each group acts as a proxy for each group's proportion of the panchayat population, since the latter in fact determines the former (see further discussion below).

In the elections held in 1994 (after the passage of the 73rd Constitutional Amendment and the Karnataka Panchayat Raj Act of 1993), bureaucrats were required by state law to reserve the presidencies of panchayats at the top of the Scheduled Caste and Scheduled Tribe lists for members of those respective groups (Karnataka Panchayat Raj Rules, 1998).[19] In subsequent elections, reservation of the presidency rotated among panchayats, in descending order of these lists.[20] In other words, if N panchayat presidencies were to be reserved for Scheduled Castes in

[17] Similar systems of rotation are used in other states, but the details differ: the 93rd constitutional amendment left the details of implementing panchayat reservation to the states.

[18] This is typically a district level official such as a Deputy Commissioner, who has responsibility for allocating reservation to panchayats in all the taluks in the district.

[19] In case a single Gram Panchayat appeared among the top N councils in both the Scheduled Caste and Scheduled Tribe categories, the presidency was reserved for Scheduled Castes, with reservation subsequently rotating to the Scheduled Tribes (Order of the State Election Commission No. 54 EGP 99, February 16, 2000; interviews, State Election Commission, January-February 2009).

[20] There is also reservation of 1/3 of seats for Backward Classes; since the census does not record data on Backward Class proportions at the level of village, the same procedure based on population proportions is

a given taluk, the N panchayats at the top of the Scheduled Caste list were reserved in 1994; in 2000, the date of the next election, the next block of N panchayats on the list was reserved. (In principle, elections for village councils occur every five years; the election of 2000 was delayed by one year, creating a six-year interval between 1994 and 2000). Because of new rules effective beginning in 2000 that required rotation of the presidency twice in each five-year council term, rotation of reservation occurred in 2000, 2002, 2005, and 2007.[21]

Table 1 gives a hypothetical example of how this works, for a taluk with ten panchayats. (This hypothetical taluk has far fewer panchayats than the average of around 32 panchayats per taluk in our sample; the numbers are kept small to keep the example simple.) Suppose that 20 percent of the population of this taluk as a whole is Scheduled Caste.[22] In this case, the presidencies of two out of the ten taluks must be reserved for Scheduled Castes in each electoral term (that is, in 1994, 2000, 2002, 2005, and 2007). Suppose furthermore that two of the taluk's ten panchayats have four seats reserved for SC members; three panchayats have three seats reserved for SC members; four panchayats have two seats reserved for SC members; and one panchayat has one seat reserved for an SC member.

[TABLE 1 ABOUT HERE]

not used. 80 percent of posts reserved for Backward Classes are allotted to BC category A and 20 percent to category B (which includes Vokkaligas and Lingayaths).

[21] In some taluks, bureaucrats will have cycled through the list for a given category across the five electoral terms, at which point they return to the top of the list. This gives rise to the possibility that unreserved councils in my study group could have been exposed to reservation in the past (though probably not within the previous decade). A history of past reservation in the unreserved councils could conceivably weaken contrasts between reserved and unreserved panchayats.

[22] For simplicity, we assume this taluk has no or negligible Scheduled Tribe residents, so that there is no reservation of presidencies for STs; below we consider the additional procedures that must take place when presidencies are reserved for ST as well.

To choose which two of the ten panchayats will have reserved presidencies in any given term, the bureaucrat would follow the following hypothetical rotation procedure. In 1994, the bureaucrat would pick the top two panchayats on the list to have reserved presidencies; since only two presidencies must be reserved in any electoral term, she could stop there. In 2000, she would move down the list and select two of the three panchayats that have three members' seats reserved for SC. Here, however, because the number of panchayats in this category exceeds the number of presidencies to be reserved, the bureaucrat would select two of the three eligible panchayats at random, by drawing lots. In 2002, she would pick the remaining panchayat with three members' seats reserved for SC and then select at random, again by drawing lots, one of the four panchayats with two members' seats reserved for SC. In 2005, she would select, again by lot, two of the three remaining panchayats with two members' seats reserved for SC. Finally, in 2007, she would take the remaining panchayat with two members' seats reserved (i.e., the panchayat in this category that had not yet had its presidency reserved) as well as the remaining panchayat with just one member's seat reserved for SC. In this example, all ten panchayats would have their presidency reserved once for a member of the Scheduled Castes, over the course of the five rotations of the presidency; in other examples, the bottom of the list would not have been reached by 2007, while in some instances, reservation would have rotated back to the top of the list. This depends both on the number of panchayats in a given taluk and the proportion of SC residents in the taluk (which in turn determines the number of panchayats the presidencies of which must be reserved for SCs in any term).

How does this play out with real data? Table 2 shows the history of reservation since 1994 in Chamarajanagar Taluk, using data that we acquired from the Karnataka State Election Commission. The first column lists panchayats in descending order by the proportion of the

population that is Scheduled Caste, as per data from the 1991 census reported in the second column. In the other columns to the right, we report the reservation status of the presidency in each of the relevant electoral terms: 1994, 2000, 2002, 2005, and 2007. Panchayats in which the presidency is reserved for Scheduled Castes in a given electoral term are marked with a "1"; otherwise, the corresponding cell is left blank.

[TABLE 2 ABOUT HERE]

We can see that in Table 2, the pattern of reservation closely follows a diagonal pattern, in which the 1's move from the top left of the table to the bottom right. That is, in a given electoral term, the panchayats that are reserved for SC presidents are clustered at the same part of the list, since they share similar SC population proportions; in the subsequent term, the panchayats are clustered in the next block down in the column to the right.[23] Note that some small gaps (i.e. unreserved panchayats that appear in the middle of a "cluster" of 1's indicating reserved panchayats) do appear in the clusters for each electoral term. This occurs because, as discussed above, panchayats with reserved presidencies are often selected at random from among the set of panchayats having the same numbers of members' seats reserved for SC. Since the relationship between population proportions and numbers of reserved members' seats is only weakly monotonic (i.e., panchayats with somewhat different SC population proportions can have

[23] Note that in the example in Table 2, the cluster of ones returns to the top rows of the table in 2007, but in other taluks, the list would not have been worked all the way through by 2007; whether reservation has cycled back up to the high-SC proportion panchayats depends on the number of panchayats as well as the proportion of the SC population in the taluk as a whole.

the same number of members' seats reserved for SC), this random selection creates small gaps in the cluster of panchayats that have reserved presidencies in a given term.[24]

Several other points about the process of reservation are useful to note. First, in any electoral term, presidencies are also reserved for Scheduled Tribes, using exactly the same procedure as for Scheduled Castes: once the panchayats to be reserved for SC are selected, then panchayats are sorted in descending order by the number of members' seats reserved for Scheduled Tribes, and the required number of panchayats are selected for reservation of the presidency for STs.[25] Note, however, that in most (but not all) taluks, the number of Scheduled Tribe reserved presidencies is relatively small (just one or two panchayats), since Scheduled Tribes typically comprise a small proportion of the taluk population, except for in "tribal" areas. Second, in one-third of panchayats in which the presidency is not reserved for Scheduled Castes or Scheduled Tribes, the presidency is reserved for Backward Classes; however, since the census does not record data on Backward Class proportions at the level of village, the same procedure based on population proportions is not used.[26] As discussed in a footnote above, since Backward Classes tend to be dominant in villages in Karnataka (rather than, say, forward castes), we treat "unreserved" (General category) and "reserved for BC" as analytically equivalent in our

[24] One additional minor source of error in Table 2 is that for presentational purposes, we use 1991 census data to rank the panchayats. However, for 2005 and 2007, bureaucrats used 2001 census data; when we order panchayats using 2001 census data, reservation in 2005 and 2007 follows a pattern even closer to that we expect.

[25] In case a single Gram Panchayat appeared among the top N councils in both the Scheduled Caste and Scheduled Tribe categories, the presidency was reserved for Scheduled Castes (Order of the State Election Commission No. 54 EGP 99, February 16, 2000; interviews, Karnataka State Election Commission, January-February 2009.)

[26] 80 percent of posts reserved for Backward Classes are allotted to BC category A and 20 percent to category B (which includes Vokkaligas and Lingayaths).

discussion below. Finally, within each of the reservation categories (SC, ST, BC, and General), one-third of presidencies are also reserved for women, also using a population-proportion rule.[27]

In Karnataka, various institutional safeguards help to protect the integrity of this reservation procedure by making the selection criteria transparent. For instance, the list of panchayats whose presidencies are selected for reservation are presented to council members in taluk-level assemblies; there, the rules used to determine reservation must be explained by a bureaucrat appointed by the District Commissioner (Order of the State Election Commission, No. SEC 54 EGP 99, February 16, 2000, Annexure dated February 23, 2000). We verified through qualitative fieldwork that such meetings had been held and that the selection procedures had been explained in public fora, limiting the potential for lobbying on the part of council members regarding the council reservation status. Another factor that likely limits the utility of lobbying is rotation itself: no council can be reserved for the same category in subsequent elections. Finally, we obtained data on the history of reservation for all Gram Panchayats in the state of Karnataka since 1993 (similar to that presented in Table 2 for Chamarajanagar Taluk), which, together with the census data used by bureaucrats, allows us to verify whether this procedure was in fact followed.[28]

[27] Within each category of caste reservation in a taluk, panchayats are listed in descending order of the proportion of women; to determine assignment to reservation, bureaucrats appear to work down these lists just as for caste reservation. Thus, in Karnataka, reservation for female presidents is *not* randomly assigned, contrary to what is apparently the case in some other Indian states such as West Bengal (see Duflo et al. 2004). To study the effect of caste reservation for women in Karnataka, a regression-discontinuity design similar to the one we propose may be needed.

[28] In the absence of such safeguards, characteristics of panchayats other than the covariate determining reservation (that is, the population proportions of the relevant group) could be related to selection into reservation, which would bias inferences about the causal effect of reservation.

The fact that rotation is based on the population proportions of Scheduled Castes and Scheduled Tribes in each panchayat allows use of a regression-discontinuity design, in which reservation of the presidency is assigned as-if at random among the councils in our study group (Freedman 2006, Gerber and Green 2008, Dunning 2008a).[29] In any taluk, the panchayats the SC or ST population proportions of which are just above the floor for inclusion among the group of reserved councils in a given election, are very similar on average to panchayats just below the floor. Indeed, factors other than reservation that influence the response variables of interest should be locally independent of whether the council presidency was in fact reserved. Suppose, for example, that in a given taluk and a given election, the floor of the Scheduled Caste population proportion required for reservation of the presidency is 26 percent. Whether 26.1 percent of panchayat residents are from the Scheduled Castes—thus prompting reservation of the presidency—or instead just 25.9 percent are SC, thereby leaving the panchayat presidency unreserved, is akin to a coin toss. In the neighborhood of the threshold, measured or unmeasured variables such as the salience of caste politics at the gram panchayat level should not be associated with reservation.

The randomness of treatment assignment near the threshold for reservation is also bolstered in Karnataka, because in allocating reserved presidencies to panchayats, bureaucrats use the number of reserved council members from each category as a measure of each group's population proportion (because reservation of members' seats is also based on the panchayat-wise population proportions of each group). If, in any electoral term, the number of panchayats

[29] A growing literature has sought to take advantage of the apparent natural experiment provided by reservation of Gram Panchayat seats and presidencies (e.g., Munshi and Rosenzweig 2008). Note, however, that reservation does not in fact appear to be randomly or "as if" randomly assigned in most Indian states but rather depends on the population proportions of the relevant groups.

with an equivalent number of members' seats reserved for a particular category is greater than the number of presidencies to be reserved for that category, then the panchayat presidencies to be reserved are determined by lottery. Thus, in any electoral term, any two panchayats with the same number of seats reserved for members of a certain category—but one of which has a reserved presidency and the other of which does not—have actually been randomized into treatment.

To select councils for inclusion in the study, I mimicked the reservation procedure as nearly as possible. First, in order to provide some variation on caste relations and thereby to gain purchase on evaluating possible sources of heterogeneous treatment effects, I purposively sampled six districts in southern Karnataka: Bangalore Rural, Chamarajanagar, Mangalore (formerly Dakshin Kannada), Davanagere, Mandya, and Ramanagar. Then, for the taluks in each of these districts, I sorted gram panchayats in descending order of the population proportions of Scheduled Castes and Scheduled Tribes and marked which had their presidencies reserved for each category starting in 2007. (The Karnataka State Election Commission provided data on the reservation of council presidencies). Unfortunately, I lacked data on the number of members' seats reserved for each category; however, I used census data on the proportion of Scheduled Castes and Scheduled Tribes in each panchayat, since this ultimately determines reservation for members (and thus, by extension, reservation for presidents). Indeed, use of the census data provides a finer-grained measure of the covariate that determines treatment assignment than does data on reservation of members' seats.

For each taluk, I then chose the reserved and unreserved councils nearest to the threshold of the covariate determining reservation—that is, I chose pairs of reserved and unreserved councils with very similar proportions of Scheduled Caste and Scheduled Tribe residents,

respectively. For Scheduled Caste reservation, I adopted the rule that the difference in the population proportions for each pair of reserved and unreserved councils had to be less than one percent, though in most cases the difference was substantially smaller: the mean difference across reserved and unreserved pairs is 0.33 percent, while the median is 0.25 percent. For Scheduled Tribe reservation, a more permissive band of 1.5 percent was adopted, because there are typically fewer reservations for Scheduled Tribes in each taluk and thus it can be difficult to find matches very near to each other on the forcing variable (in this case, Scheduled Tribe population proportions). However, even the Scheduled Tribe panchayats are well matched, with the average difference between reserved and unreserved pairs being just 0.49 percent, with a median of 0.29 percent. In most cases, following the logic that bureaucrats move down lists of panchayats sorted in descending order of population proportions, the reserved council had a slightly higher proportion of Scheduled Caste or Scheduled Tribe residents than the unreserved council; in a few pairs, however, the closest match to the reserved council had a slightly higher proportion of residents in the relevant category.[30] Using this process, I thus constructed a study population of 200 village councils in which reservation for Scheduled Castes or Scheduled Tribes is essentially randomly assigned, 100 of which had presidencies reserved for these categories, the other 100 of which were unreserved for any caste or were reserved for Backward Classes.[31] I selected 40 of these councils for a smaller, initial experiment (as described below),

[30] This could occur if, for instance, several councils that would have been reserved by following the descending order had been reserved in the previous electoral term for the other category (SC or ST). In total, the unreserved council had slightly higher population proportions than the reserved council in 13.8 percent of Scheduled Caste pairs and 21.4 percent of Scheduled Tribe pairs.

[31] As mentioned in a footnote above, there is reservation of 1/3 of seats for Backward Classes (80 percent for BC "A" and 20 percent for BC "B"). Because these backward groups include the most politically-dominant groups in both village and state politics—the Vokkaligas and the Lingayaths—the relevant comparison is between councils reserved for Scheduled Castes or Scheduled Tribes and the rest of the councils, including those reserved for Backward Classes or for the general category.

leaving 160 panchayats (81 of which had reserved presidencies) for the field experiment described in this paper.[32]

To assess the claim of as-if random assignment, Table 3 presents a randomization or balance check, comparing reserved and unreserved villages on measured pre-treatment covariates. As the table shows, reserved and unreserved villages are statistically indistinguishable on these covariates, which is a necessary condition for a valid natural experiment (Dunning 2008). In particular, reserved and unreserved villages are balanced with respect to population, as well as all other pre-treatment variables drawn from the census, such as the mean number of literates, the mean number of workers, the mean number of marginal workers, the number of households, and the male and female population aged 0-6. Reserved and unreserved villages are also tightly balanced on the assignment covariates (SC and ST proportion) used to construct the regression discontinuity, reflecting their location near the threshold for reservation.

[TABLE 3 HERE]

In principle, there is one risk involved in the method I used to mimic the procedure by which reservation is determined. The use by bureaucrats of the *number* rather than *proportion* of members' seats reserved for each category may tend to place larger councils at the top of the list (each panchayat is typically required to have one additional member for each 400 village

[32] It is useful to note that this procedure produces a study group of panchayats with a large range in the proportion of each group in the panchayat population. In my sample, the minimum Scheduled Caste proportion is 0.8 percent and the maximum is 49.4 percent, while for the Scheduled Tribe proportion the minimum is 0 percent and the maximum is 51.7 percent. This occurs because some panchayats were closer to the top of the list of population proportions in their respective taluks in 2007, while others were closer to the bottom of the list.

residents).[33] Since I selected reserved and unreserved villages with similar population proportions of Scheduled Castes and Scheduled Tribes, it is possible in principal that reserved councils included in the study group could be systematically larger than unreserved councils. However, the randomization check in Table 1 shows this is not the case: the difference in the populations of reserved and unreserved villages selected for the study group is not statistically different from zero, and the reserved villages are in fact smaller by about 371 residents, on average.[34]

Field Experimental Design

In the field experiment, implemented in each of the panchayats in the study group from January-February 2009, videotaped political speeches were shown to experimental subjects. Subjects were told that the speechmaker was considering running for a local gram panchayat and that he would like to be the council president.[35] We then asked subjects to evaluate the quality of the speech and the attractiveness of the candidate along various dimensions. Although we presented speeches with two distinct scripts, and while we used one actor in the southern and central parts of the state and a different actor in the western part of the state (due to differences in accents in spoken Kannada), speeches viewed by the subjects were otherwise identical.[36] The

[33] Unfortunately, the use by bureaucrats of the number rather than the proportion of members' seats only became apparent to me once councils were selected and the field experiment was in process; interviews, State Election Commission, January 2009.

[34] In addition, analysis of census data show that the correlation between panchayat size and proportion of Scheduled Castes is only 0.009 across the whole state of Karnataka.

[35] The credibility that our actor could be a candidate for a local panchayat is bolstered by the fact that most panchayats consist of several villages, so it is conceivable that a resident in one village does not know all the residents of other villages in the panchayat.

[36] I used speeches with two different contents in the experiment, one a more "programmatic" message and another a more "clientelistic" message, and subjects were assigned at random to one of the two

translated text of the speech and other aspects of the field experimental protocol are posted online.[37]

The experimental manipulation consisted of what subjects were told about the politician's surname. Because last name conveys information about the sub-caste (*jati*) to which the politician belongs, and because belonging to a particular *jati* also implies membership in a larger caste category, varying the politician's last name generates the three treatment conditions depicted in Table 4. In the first condition, subjects and politicians belong to the same *jati* and the same caste category. In the second, they belong to the same sub-caste but to different caste categories. Finally, in the third condition, the subject and politician belong to different caste categories, as well as to different sub-castes.[38] Experimental subjects were assigned at random with equal probability to these three treatment conditions.

[TABLE 4 HERE]

To expose each subject to the appropriate stimulus—that is, to a politician's patronym that corresponds to the relevant cell of Table 4, for a given subject's *jati* and caste category—I reviewed the secondary literature (see, e.g., Charsley and Karanth 1998) and conducted interviews with experts on caste in Karnataka. I then catalogued surnames associated with each

contents. There were no discernible effects of speech content; in the analysis below, I pool across the two treatments involving different versions of the speech.

[37] The URL is http://research.thaddunning.com.

[38] In experimental research with a similar design conducted in Mali, Dunning and Harrison (2008) included two control conditions, including one in which no ethnic information about the politician was offered. I did not do this here, since estimating the effect of ethnic identification relative to baseline evaluations of candidate quality, absent information about caste, seemed of limited interest. Instead, it made more sense to bolster statistical power by allocating a greater number of subjects to the three conditions in which the candidate's surname was provided.

of the treatment conditions, for the common sub-caste and caste groups I expected to encounter in our selected villages in Karnataka, and tested these surnames in a smaller, initial experiment.[39] In many cases, in the experiment reported here, I simply used the surname that gives the caste its name, such as Holaya or Madiga.

Each row of the matrix depicted in Table 5 therefore corresponds to a subject *jati* and caste category, and each column gives the politicians' surnames associated with the appropriate treatment condition.[40] After learning subjects' *jati* from a screening questionnaire that included various other questions, and after using a list of pseudo-random integers to assign subjects to one of the three treatment conditions, field investigators selected the appropriate name from Table 5. They then introduced the politician's name to each subject, prior to showing the videotaped speech, and repeated the politician's surname in every post-speech question asked about the politician.[41] Thus, the experimental manipulation was introduced by the field investigators.

[TABLE 5 HERE]

Subjects were recruited from the villages in which the headquarters of each of the 160 panchayats are located. In each village, 10 respondents were selected at random: four Scheduled

[39] I used a smaller experiment in 40 panchayats (N=312 participants), selected from the pool of 200 respondents, to test and refine a preliminary version of these surnames; feedback from the initial experiment suggested that it would be best to use the surname that gives the name to the caste.

[40] Some cells of Table 3 have multiple entries. For example, a Holaya subject assigned to the third, "different *jati*, different caste category" condition could be exposed either to Gowda (a very common surname for the Vokkaliga *jati*) or to Lingayath. In cells with multiple names, the politician's last name was selected at random from the names listed in the cell.

[41] I expected field investigators to encounter a preponderance of Nayaka tribes among the Scheduled Tribes; using a non-Nayaka ST surname for the different *jati*, same larger category condition might thus sacrifice realism. I therefore opted to use SC surnames (Madiga and Holaya) for STs (Nayakas) exposed to the "different *jati,* same category" condition. The results reported below are largely robust to excluding all subjects except for Holayas and Madigas (the two main SC groups) and Lingayaths and Vokkaligas (the two dominant backward castes).

Caste residents (ideally, two from the Holaya sub-caste and two from the Madiga sub-caste), one Scheduled Tribe resident, and five from the general and backward caste populations.[42] Because villages in rural Karnataka tend to be residentially segregated along sub-caste lines, stratifying the population for sampling purposes was relatively straightforward. In recruiting a Holaya respondent, for example, field investigators were told to go to the Holaya colony in the village (or, in villages where no sub-caste colony existed, to the Scheduled Caste colony), pick a house at the corner of the lane or street corresponding to the caste category in question, attempt to recruit a respondent, and then skip two houses before recruiting another.[43] The experimental study group thus consists of a probability sample of the residents of local villages, with an oversample of Scheduled Castes (who comprise less than 18 percent of the population of Karnataka, rather than 4 in 10 as in the sample) and Scheduled Tribes (who comprise well less than 1 in 10 residents in the selected villages).[44] The distribution of ethnicities in the experimental study group is depicted in Table 6.[45]

[TABLE 6 HERE]

[42] If necessary, investigators were permitted to substitute sub-castes from among caste categories. For example, in communities with very few Madigas, three Holayas and one Madiga might be recruited; where no Scheduled Tribe residents existed, students could substitute a fifth Scheduled Caste participant.

[43] The interviews were conducted by around forty field investigators, most of whom are M.A. students in political science at Bangalore University, working in teams of two; including the 40 villages in the pilot study, the twenty teams therefore visited on average ten villages each. I accompanied two teams of investigators to villages in Chamarajanagar district (Kollegala taluk) and Davanagere district (Harapanahalli taluk); many teams also typically included one more senior and experienced investigator.

[44] Of course, the population being sampled is limited to those residents from the sub-castes in the first column of Table 5. However, these sub-castes comprise the vast majority of the population of rural villages in the areas in which fieldwork was conducted.

[45] The study population for the field experiment is 1,444 citizens; it does not reach its intended size of 1,600 participants due to coding error and to the presence of villages in which fewer than 10 subjects were recruited. However, missingness is unrelated to reservation status of the panchayat and to treatment assignment in the field experiment.

IV. Analysis and Results

I now turn to the experimental analysis, which is conducted in terms of Neyman's (1923) potential response model. For each post-treatment question and each of the two speeches, subjects have one response if assigned to view a speech by a politician from their own sub-caste and caste group; another response if assigned to view a speech by a politician from a different sub-caste but from their own caste group; and a third response if assigned to view a speech by a politician from a different sub-caste and caste group.[46] Responses are deterministic, and only one response is observed for each subject. For any two treatments, the average causal effect is the difference between the average response, if all subjects were assigned to the first treatment, minus the average response of all subjects, if all were assigned to the second treatment. This is the "intention-to-treat" parameter. An unbiased estimator for this parameter is the average response of subjects randomly assigned to the first treatment, minus the average response of subjects randomly assigned to the second treatment. After viewing the videotaped speech, subjects were asked the extent to which the politician's speech made them want to vote for the candidate, on a scale of 1 to 7.[47] Descriptive statistics on responses to this and all other post-treatment questions are presented in Table 7.

[TABLE 7 ABOUT HERE]

[46] A minor issue is that some subjects, for some treatments, are assigned to one of two politician last names (see Table 2). The model is easily extended in this case: for instance, each such subject has one response for one last name and another response for the other last name. A similar extension handles the fact that two speech texts were used.

[47] Respondents were shown a ladder with 7 steps asked "Now, suppose the first step of the ladder means 'no, not at all' and the 7th step means 'yes, completely.' Where would you put your answer to the following question: Does the speech of (*name of politician*) make you want to vote for this candidate?"

The evidence demonstrates a causal effect, as shown in Figure 1, and it underscores the overall importance of caste (*jati*): on average, respondents assigned to view a speech by a politician from their own caste rate their likelihood of voting for the candidate at 4.46, significantly higher than they rate politicians from a different caste but the same caste category (4.24) and politicians from a different caste category altogether (4.26). At a little less than one-quarter of one standard deviation, the estimated effects—0.22 points relative to the second treatment (with a standard error of 0.10) and 0.20 points relative to the third treatment (with a standard error of 0.09)—are fairly small, but they are in the neighborhood of the estimated effects of co-ethnicity in other contexts in which the same question was asked and similar experimental designs were used (see Dunning and Harrison 2008). On the other hand, subjects' evaluations of candidates who come from a different *jati* but from the same caste category are statistically indistinguishable from their evaluations of candidates who come from both a different caste and a different caste category.[48] I also found similar results for other questions, such as those asking for overall evaluations of the quality of the speech. In the experimental population at large, then, the results suggest the primacy of caste (*jati*) rather than caste category in shaping voters' preferences over candidates.

[FIGURE 1 HERE]

The field experimental results also shed some light on factors that lead to co-caste preferences. In addition to the questions regarding overall candidate and speech evaluations, subjects were asked to evaluate candidates along a range of dimensions (see Table 7). I combine

[48] This difference holds not only for the whole experimental population but also for the sub-population of Scheduled Caste and Scheduled Tribe respondents (though sample sizes are smaller in these sub-groups, and the estimated effects of sharing a *jati*, relative to the other two conditions, are significant only at the 0.1 level).

various questions into several linear indices, all normalized to run from 0 to 1. Questions tapping the candidate's likeability, competence, intelligence, and impressiveness are included in *affection*, a variable measuring affective evaluations. Evaluations of the candidate's trustworthiness, motivations, capacity to face the challenges of office, likelihood of doing a good job if elected, and willingness to fight for his ideals and defend others are combined in *credibility*, a variable that taps subjects' expectations about the politician's post-election behavior.[49] (Dunning and Harrison, forthcoming, use similar indices in their study of co-ethnicity and cousinage relations in Mali). The variable *monitoring* combines separate questions about whether the subject would know if the candidate broke his campaign promises, and whether the subject could hold him accountable; *preferences* taps whether the candidate is perceived to care about people like the subject, and also care about the same things as the subject; and *benefits* measures the likelihood that the subject would gain access to benefits (welfare schemes) or government jobs if the candidate were elected.

The first three rows of Table 8 report average values of these variables by treatment assignment category; the final three rows conduct difference-of-means tests to estimate the causal effect of treatment assignment. On the one hand, several different kinds of mechanisms seem to explain why politicians from one's own sub-caste are preferred to politicians from a different category altogether (penultimate row of the table): the difference-of-means is significantly different for *affection*, *credibility*, *monitoring*, *preferences*, and *benefits*, with only

[49] In an important recent contribution, for instance, Munshi and Rosenzweig (2008) suggest that voters in Indian villages may be able to discipline and sanction elected politicians from their own sub-castes, if politicians diverge from the policies preferred by the median member of the sub-caste. However, although these authors speculate that increased information flows associated with endogamous marriage rules may reduce commitment problems within sub-caste groups (see Munshi and Rosenzweig 2008, 9), the ability of politicians to commit to voters in their sub-caste (but not to other voters) is a modeling assumption; neither the fact of co-ethnic commitment nor the mechanisms that would allow co-ethnics greater ability to commit to policies are tested empirically.

answers to the *monitoring* questions statistically indistinguishable from zero.[50] The size of the effects range between one-sixth and one-fourth of a standard deviation. On the other hand, expectations about distributive benefits do seem to play a relatively larger role in distinguishing politicians from the same sub-caste and category from politicians of different sub-castes but the same larger category: among the summary indices, only the *benefits* variable statistically distinguishes these two treatment conditions. Note also that subjects from a different sub-caste but the same caste category are found more credible—that is, subjects have more positive expectations about post-election performance—than subjects from a different category.

[TABLE 8 HERE]

V. The effects of reservation

How does reservation shape the effect of caste relationships on evaluations of politicians and, in particular, the salience of different caste categories? To investigate this topic, I conduct the intention-to-treat analysis reported in Tables 5 and 6 separately for reserved and unreserved panchayats. Note that I do not compare councils with lower-caste presidents and those without; the latter is a comparison subject to selection bias, since panchayats that choose to elect lower-caste leaders may be unlike those that do not, in ways that matter for the outcomes I analyze. Comparison of councils with reserved and unreserved presidencies is the intention-to-treat analysis and provides an unbiased estimator for the causal effect of reservation, provided that

[50] The limited role of *monitoring* is also striking. A number of theoretical and empirical accounts emphasize the superior ability of co-ethnics to monitor one another (e.g., Fearon and Laitin 1996; also Habyarimana et al. 2008). It is therefore surprising, in a setting like rural villages that should be favorable to monitoring, to find that caste relationships do not influence the ability to monitor. Of course, the favorability of the setting could be the issue: average levels of monitoring are very high across all treatment conditions, substantially higher than for the other variables in Table 6.

reservation is "as if" randomly assigned. The difference in treatment effects across reserved and unreserved councils thus estimates the effect of reservation on the effect of caste relationships. Figure 2 shows results for the vote choice variable.

[FIGURE 2 ABOUT HERE]

There are several ways to look at the findings depicted in Figure 2. The first is simply to ask whether subjects' evaluations of politicians in the three treatment conditions—same jati, same caste category, and different caste category—differ in reserved and unreserved panchayats. Table 9 reports those differences. As the table shows, there is indeed a statistically and substantively significant effect of reservation on evaluations of politicians, across the three treatment conditions.

[TABLE 9 ABOUT HERE]

Table 10 suggests a different way to look at the results in Figure 2. This table reports difference-in-difference effects for this variable as well as the five linear indices discussed above. The analysis suggests several interesting findings. First, reservation appears to heighten the influence of caste relationships on candidate preferences. With one exception, the treatment effects estimated in the field experiment are only statistically significant in reserved panchayats (compare columns 1 and 2 of Table 10). In other words, the sub-group analysis demonstrates that the aggregate findings discussed above are driven mostly by the greater salience of caste in reserved villages. One caveat, as the third column of Table 10 shows, is that the estimated differences in treatment effects across reserved and unreserved villages are not all significant; however, reservation does have a significant estimated effect on affective evaluations of politicians from other castes, and on the extent to which politicians of various castes are

perceived to share residents' preferences. In sum, reservation for lower-caste groups does appear to heighten the general role of caste in shaping political preferences.

[TABLE 10 ABOUT HERE]

Second, reservation also appears to shift the relative salience of different caste categories, increasing the overall importance of larger caste categories at the expense of sub-caste relationships. In particular, as Table 8 suggests, reservation intensifies distinctions between politicians from a different sub-caste, but subjects' own caste category, and politicians from a different caste category: in reserved panchayats, the former are evaluated significantly more positively than the latter, at least for the *affection* and *preferences* variables, whereas in the aggregate, such politicians were statistically indistinguishable.

Moreover, distinctions among politicians from the same larger category are also blurred. In reserved panchayats, politicians from subjects' own sub-castes are no longer significantly preferred to politicians from different sub-castes but the same caste category (though, of course, the smaller sample size in each group does limit statistical power), whether we consider the vote preference variable or the various linear indices (see the first column of Table 8). Relative to unreserved councils, where politicians from a different sub-caste are evaluated the same whether or not they are from subjects' caste category, in reserved councils politicians from the same larger category (but different sub-caste) receive a boost.[51]

Only for one post-treatment variable does reservation not blur distinctions between politicians from the same larger category: this is the *benefits* variable. Recall that this variable

[51] In Figure 2, politicians from a different caste category appear to receive a boost in reserved councils as well—but the difference with unreserved councils is not significant.

combines two questions about whether subjects expect to receive jobs or benefits if the politician in the video were elected. Moreover, the estimated effect on *benefits* is significant in reserved panchayats but insignificant in unreserved panchayats. This may provide at least some evidence that reservation heightens competition between sub-caste groups who belong to the same larger caste category. As a whole, however, reservation seems most strongly to shape affective evaluations of politicians, and in particular to give a boost to politicians from a different sub-caste but the same caste category.

The evidence thus suggests two contrasting effects. On the one hand, subjects deem themselves significantly more likely to get a government job or benefit from a politician of their own sub-caste, relative to a politician from a different sub-caste but the same caste category, but this is only true in reserved panchayats. (Interestingly and somewhat puzzingly, however, this finding holds both for subjects from Scheduled Castes and Scheduled Tribes—that is, the reserved groups—and for subjects from dominant Backward Castes—the unreserved groups.This evidence suggests that reservation can make competition for resources between sub-castes more intense, consistent with the idea that ethnic groups or entrepreneurs construct minimum winning coalitions (Bates 1983, Posner 2004).[52] There is indeed some evidence of a *competition effect.*

On the other hand, the evidence for a *solidarity effect* appears even stronger. Reservation has at least as large an effect on affective evaluations; for these variable, indeed, reservation produces greater solidarity among members of the same caste category who come from different sub-castes. Figure 4, which compares treatment response among Scheduled Caste participants in reserved and unreserved councils, makes perhaps the strongest case for a solidarity effect. What

[52] Note, however, that reservation does not seem to shape effects on *vote preference*, where the comparison is between own-sub-caste and different sub-caste-but-same-category politicians.

we can see is that evaluations of politicians from a different caste category—here, politicians from a dominant Backward Caste—are high in council presidencies and also (though not quite as much) in unreserved council presidencies. But what is truly striking is the sharp increase in evaluations of candidates from subjects' own caste category in reserved councils. Remarkably, the boost brings candidates from a different *jati* but the same caste category—who are favored less than own-*jati* candidates in unreserved councils—up to parity with candidates from the subjects' own caste, in councils with reserved presidencies. This is perhaps the most striking evidence for the causal effects of reservation.

While perhaps puzzling from a strictly materialist point of view, the evidence presented in Figure 4 is consistent with observations of a number of experts about the "politics of dignity" in Indian villages. Weiner (2001: 219-20), for instance, asserts that "at the local level, Dalit [former Untouchable] activists…are concerned less with getting benefits from the state and changing public policies than they are in promoting the mobilization of scheduled castes against upper-caste domination…The cry for 'social justice' is as much a demand for respect and equal treatment in ordinary everyday relationships as it is a demand for economic benefits." As Kohli (2001: 16) also puts it, "the politics of caste is often the politics of dignity; goals sought are less broad-based education or health, but more respect, equality of treatment, and symbolic gains. As a result, inclusion of caste leaders into visible positions of power has often satisfied…the demands of lower-caste groups" (see also Varshney 2003, Rao and Walton 2004).

It is important to emphasize that the evidence does not necessarily support the claim that caste is unimportant in unreserved panchayats. Treatment effects are plausibly weak in the field experiment for a number of reasons; for instance, there are many ways in which the stimulus is somewhat artificial (watching videotapes speeches is obviously different from attending a real

political rally) and thus may not fully stimulate perceptions of caste on the party of experimental subjects. What is important here is the *relative* size of treatment effects in reserved and unreserved panchayats: since the experimental stimulus is equally artificial in both sets of panchayats (and thus estimated treatment effects in the experiment could conceivably be smaller than the true effects of caste in both reserved and unreserved councils), evidence that treatment effects are systematically different in reserved panchayats constitutes evidence that reservation shapes the salience of caste.

Thus, the evidence is most solid when we compare across reserved and unreserved panchayats to assess the effect of reservation on the salience of caste politics. This evidence suggests, on balance, that reservation does intensify preferences along caste-based lines. Perhaps most interestingly, reservation shapes the relative salience of sub-caste and caste categories, plausibly intensifying competition for resources between members of different sub-castes and the same caste category while also creating greater affective solidarity between members of the same caste castegory but different sub-castes.

Before closing, we turn to one final piece of evidence for the causal effect of reservation, by way of a kind of "placebo test." While, according to our theories, reservation for Scheduled Caste candidates should shape preferences of Scheduled Caste subjects over candidates, reservation for *Scheduled Tribes* should not really have an effect on how Scheduled Caste respondents evaluate candidates from their own caste and caste category (Holaya or Madiga, respectively), versus candidates from the dominant Backward Castes. Figure 5 shows mean responses to treatment among Scheduled Caste respondents, comparing across Scheduled Tribe reservation—and indeed, here we see little apparent effect of reservation. This placebo test thus

confirms the validity of our empirical approach and supports the claim for a causal effect of reservation.

[FIGURE 5 ABOUT HERE]

VI. Conclusion

Analysts of ethnic politics have emphasized that ethnic identification, and even the ethnic categories that are politically salient, are endogenous to political competition, electoral rules, and the sanctioning of particular ethnic categories by the state. In India, the reservation of national, state, and local offices for politicians from particular caste categories is said to promote political mobilization along caste-category lines, rather than along the lines of the sub-caste that compose each category. Yet such causal claims are typically difficult to evaluate empirically, because the relative salience of ethnic categories and patterns of ethnic identification can themselves shape political competition and political institutions.

In this paper, by embedding a field experiment that measures co-caste preferences inside a natural experiment, in which a regression-discontinuity design is used to construct a set of village councils in which reservation of the presidency for lower-caste groups is assigned as-if at random, I am able to identify the effect of reservation on the political salience of sub-caste and caste categories. The results suggest that reservation does has an effect, both in intensifying caste preferences and in shifting the type of caste relationship that is relatively salient. The results contribute to our understanding of the effects of reservation in India, where the role of competition between individual castes (*jatis*) appears understudied in some respects. While individual castes may arguably not be numerous enough, at least in some Indian states, to

provide the basis for broader political coalitions relevant for state or national politics (Chhibber 1999)—though in Karnataka, where the Vokkaliga and Lingayath have played a dominant role, they might—reservation of elected office for Scheduled Castes at the *village council level* should presumably engender competition for benefits between individual castes. Yet while political mobilization on the basis of larger categories such as Scheduled Caste has been extensively studied (Chandra 2004), the effect of reservation on competition between the individual castes (*jatis*) has not been extensively studied.

However, the results also raise several questions. One concerns external validity. On the one hand, the regression-discontinuity design should produce a reasonably representative sample of councils, within the selected districts. For example, there is substantial observed heterogeneity in the study group of panchayats on many observed variables, including the proportion of Scheduled Caste or Scheduled Tribe residents (because in some panchayats, the selected taluks were nearer to the top of their respective lists in 2007, while some were closer to the bottom). On the other hand, the districts themselves were chosen purposively and may not be representative of Karnataka as a whole, let alone other parts of India. In other work, the regression-discontinuity and field experimental designs developed here could be exploited elsewhere in the state and in the country to investigate to what extent the effects of reservation differ by context.

Another question concerns the mechanisms that explain co-caste preferences. Consistent with previous work on caste and ethnic politics in other settings, I do find that expectations about the receipt of government benefits drives distinctions between politicians from subjects' castes and out-group members. Yet I also find a particularly strong role for in-group preferences and for affective factors, which contrasts with several recent experimental studies—for instance,

Habyarimana et al. (2007) or Dunning and Harrison (2008)—in which co-ethnic altruism or affective evaluations were not found to be key sources of co-ethnic advantages in providing public goods or in seeking votes. One reason this could be, which I am exploring in related work using surveys of secretaries, members, and council presidents in panchayats in my study group, could have to do with the surprisingly limited policy effects of reservation of the council presidency. In any case, the results underscore score the utility of experimental replication in disparate contexts, allowing results to be accumulated, compared and eventually explained.

Finally, the paper's empirical approach draws attention to both the utility and some of the potential limitations of combining field and natural experiments to bolster causal inferences about institutional innovations. On the one hand, some of the challenges involved in pursuing this kind of work are evident in this paper; for instance, the Karnataka example demonstrates the necessity for close attention to the idiosyncracies of procedure rules in constructing a regression-discontinuity design. On the other hand, as in other contexts in which experiments have been used at multiple levels of analysis (Beaman et al. 2008; Fearon, Humphreys, and Weinstein 2009), using both field and natural experiments provides an effective measurement strategy through which the causal effect of institutions such as reservation can be estimated. This difference-in-differences approach, in which the effect of an institutional innovation on the effect of an experimental treatment is estimated, may offer one promising research design for other future work.

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Table 1: Hypothetical Example of Reservation Procedure Using Members' Seats

Number of Members' Seats Reserved for SC	Year of presidency reservation
4	1994
4	1994
3	2000 or 2002 (by lottery)
3	2000 or 2002 (by lottery)
3	2000 or 2002 (by lottery)
2	2002, 2005, or 2007 (by lottery)
2	2002, 2005, or 2007 (by lottery)
2	2002, 2005, or 2007 (by lottery)
2	2002, 2005, or 2007 (by lottery)
1	2007

In this hypothetical example, there are ten panchayats, the presidencies of two of which will be reserved for SC candidates in any electoral term. The number of seats reserved for SC members in each panchayat is given in the left column, while the right column reports the year or years in which reservation of that panchayat may occur.

Table 2: History of Reservation in Chamarajanagar Taluk (1994-2007)

PANCHAYAT NAME	PROPORTION SC (1991)	RESERVED SC 1994	RESERVED SC 2000	RESERVED SC 2002	RESERVED SC 2005*	RESERVED SC 2007*
ATTAGULIPURA	0.5913	1				1
HEBBASUR	0.4523	1				
HONGANOOR	0.4323	1				1
MASANAPURA	0.4135	1				
SHIVAPURA	0.4007		1			
MUKKADAHALLI	0.3968					
BISALAVADI	0.3739		1			
PUNAJANUR	0.3713	1				
JYOTHIGOWDA P.	0.3646	1				1
KUDERU	0.3433			1		
SANTHEMARA H.	0.3203	1				1
ERASAVADI	0.3193		1			
BHOGAPURA	0.3115			1		
BAGALI	0.3049		1			
KAGALAVADI	0.2858		1			
NAVILUR	0.2490		1			
NAGAVALLI	0.2467		1			
ALUR	0.2277		1			
DEMAHALLI	0.2016			1		
UMMATHUR	0.1972				1	
MADAPURA	0.1933			1		
KEMPANAPURA	0.1922			1		
HONNAHALLI	0.1892				1	
VENKA. CHATRA	0.1846			1		
BADANAGUPPE	0.1839				1	
HEGGOTARA	0.1827				1	
AMACHAVADI	0.1774				1	
KULAGANA	0.1698					1
YARAGANHALLI	0.1597				1	
MANGALA	0.1561			1		
CHANDAKAVADI	0.1487				1	
KUDALUR	0.1446			1		
GULIPURA	0.1412					1
ARAKALAVADI	0.1380				1	
MALIYURU	0.1305					1
UDIGALA	0.1288				1	
KOTHALAVADI	0.1126				1	
NANJEDEVANA P.	0.0986					1
HARAVE	0.0587				1	
SAGADE	0.0471					1
HARADANAHALLI	0.0372					1
DODDAMOLE	0.0269					1

1=Reserved for Scheduled Caste; Scheduled Tribe reservation not shown. See text for explanatory notes.

Table 3. Reservation in Surveyed Village Councils: "As-If" Randomization Checks

	Group 1: Reserved for SC or ST **(A)**	Group 2: Unreserved or reserved for OBC **(B)**	Difference of Means **(A)- (B)**	p-value (two-sided)
Mean population	5675.62	6055.30	-379.68	0.17
(Standard error)	(205.94)	(180.60)	(273.74)	
Mean male population	2869.12	3064.41	-195.29	0.17
(Standard error)	(105.75)	(92.96)	(140.72)	
Mean SC population	1119.21	1114.16	5.05	0.96
(Standard error)	(91.91)	(67.84)	(114.23)	
Mean ST population	505.52	444.85	60.67	0.40
(Standard error)	(56.70)	(43.86)	(71.69)	
Mean population aged 0-6	698.54	755.61	-57.1	0.13
(Standard error)	(27.52)	(25.39)	(37.43)	
Mean number of literates	3076.63	3315.61	-238.98	0.14
(Standard error)	(111.46)	(114.5)	(159.79)	
Mean number of workers	2860.12	3017.59	-157.47	0.26
(Standard error)	(103.03)	(92.41)	(138.40)	
Mean number of marginal	644.77	631.59	13.19	0.83
workers (Standard error)	(41.84)	(43.28)	(60.22)	
Assignment Covariates:				
Mean SC proportion	0.18	0.18	0.00	0.97
	(0.01)	(0.01)	(0.02)	
Mean ST proportion	0.09	0.08	0.01	0.26
	(0.01)	(0.01)	(0.01)	
N	100	100	200	

The unit of analysis is the Gram Panchayat. Data are from the 2001 census. P-values give the probability of observing a t-statistic as large in absolute value as the observed value, if Group 1 and Group 2 have equal means. Other covariates that also passed randomization tests include the number of households, total female population, male population aged 0-6, female population aged 0-6, and illiteracy rates (tests available upon request).

Table 4. Experimental Design: Treatment Conditions

	Subject and politician are from same caste category	**Subject and politician from different caste categories**
Subject and politician are from same sub-caste (*jati*)	N=458	
Subject and politician are from different sub-castes (*jatis*)	N=470	N=525

Table 5: Politician Surnames Used in Each Treatment Condition

Subject's subcaste (*jati*)	Subject's caste category	**Condition 1:** Subject and politician are from same *jati* and caste category	**Condition 2:** Subject and politician are from different *jati*, same caste category	**Condition 3:** Subject and politician are from different *jati* and caste category
Madiga	SC	Madiga	Holaya	Gowda (Vokkaliga) Lingayath
Holaya	SC	Holaya	Madiga	Gowda (Vokkaliga) Lingayath
Lambani	SC	Lamani	Madiga Holaya	Gowda (Vokkaliga) Lingayath
Nayaka or other tribe	ST	Nayaka	Madiga Holaya	Gowda (Vokkaliga) Lingayath
Lingayath	BC	Lingayath	Gowda (Vokkaliga)	Madiga Holaya
Vokkaliga	BC	Gowda (Vokkaliga)	Lingayath	Madiga Holaya
Kumbara	BC	Kumbara	Gowda (Vokkaliga) Lingayath	Deshpande
Bunt	BC	Bunt	Gowda (Vokkaliga) Lingayath	Madiga Holaya
Brahmin	Forward	Deshpande	Gowda (Vokkaliga) Lingayath	Madiga Holaya

SC = Scheduled Caste. ST = Scheduled Tribe. BC = Backward Caste. Forward caste respondents (Brahmins) are grouped with the dominant Backward Castes for treatment assignment purposes.

Table 6: Distribution of Experimental Population by Caste

Caste category	Sub-caste (*jati*)	N	Percent
Scheduled Caste	Holaya	331	22.9
	Madiga	228	15.8
	Lambani	23	1.6
Scheduled Tribe	Nayaka	133	9.2
Dominant Backward Castes	Lingayath	267	18.5
	Vokkaliga	246	17.0
	Bunt	42	2.9
Other Backward Castes	Kumbara	77	5.3
Forward Caste	Brahmin	97	6.7
Total	--	1,444	99.9

Table 7. Descriptive Statistics, Post-Treatment Variables

Variable Name	Survey Question/Definition	Range	Mean (Standard Deviation)
Quality of Speech	"Please look at this ladder, which has 7 steps. Suppose the first step of the ladder means 'very bad,' and the 7th step means 'very good.' On what step would you place the quality of the speech of (*name of politician*) that you just heard?"	1-7 (ascending scale)	4.73 (1.35)
Vote Preference	"Now, suppose the first step of the ladder means 'no, not at all' and the 7th step means 'yes, completely.' Where would you put your answer to the following question: Does the speech of (*name of politician*) make you want to vote for this candidate?"	1-7 (ascending scale)	4.34 (1.42)
Likeable	"In your opinion, is the politician in the video, *(name of politician),* very unlikeable, unlikeable, neither likeable nor unlikeable, likeable, or very likeable?"	1-5 (ascending scale)	2.99 (1.16)
Intelligent	"In your opinion, is the politician in the video, (*name of politician*), not at all intelligent, a little intelligent, intelligent, quite intelligent, or very intelligent?"	1-5 (ascending scale)	2.76 (0.91)
Competent	"In your opinion, is the politician in the video, (*name of politician*), not at all competent, a little competent, competent, quite competent, or very competent?"	1-5 (ascending scale)	2.68 (0.97)
Trustworthy	"In your opinion, is the politician in the video, (*name of politician*), not at all trustworthy, a little trustworthy, trustworthy, quite trustworthy, or very trustworthy?"	1-5 (ascending scale)	2.75 (0.98)
	THE FOLLOWING INSTRUCTIONS WERE GIVEN FOR THE REST OF THE POST-TREATMENT QUESTIONS: "Please look again at the ladder with seven steps. Suppose that the first step means 'I do not agree at all' and the 7th step means 'I agree completely.' Where on the ladder would you place your degree of agreement with the following statements?		
Impressed	"You were impressed by the candidate, (*name of politician*)"	1-7 (ascending scale)	4.39 (1.43)

Ideas	"You agree with the political ideas of (*name of politician*)"	1-7 (ascending scale)	4.63 (1.50)
Motives	"The candidate, (*name of the politician)*, has good motives for running for office."	1-7 (ascending scale)	4.83 (1.44)
Challenges	"The candidate, (*name of the politician)*, will be capable of facing the challenges of office."	1-7 (ascending scale)	4.66 (1.40)
GoodJob	"If he were elected, (*name of the politician)* would do a good job in office."	1-7 (ascending scale)	4.17 (1.47)
FightIdeals	"If he were elected, (*name of the politician)* would defend others and fight for his ideals."	1-7 (ascending scale)	4.25 (1.51)
BrokenPromises	"If he were elected, (*name of the politician)* would keep his promises."	1-7 (ascending scale)	4.33 (1.53)
BrokenPromisesKnowledge	"If (*name of the politician)* broke his promises, people like you would know about it."	1-7 (ascending scale)	4.76 (1.59)
HoldAccountable	If (*name of the politician)* broke his promises, people like you could hold him accountable."	1-7 (ascending scale)	4.64 (1.73)
CaresPeopleLikeMe	"The candidate, (*name of the politician)*, cares about people like you."	1-7 (ascending scale)	4.28 (1.61)
CaresSameThings	"The candidate, (*name of the politician)*, cares about the same sorts of things as you do."	1-7 (ascending scale)	4.40 (1.5)
WelfareSchemes	"If (*name of the politician)* were elected, people like you would receive more benefits from the welfare schemes of the government."	1-7 (ascending scale)	4.39 (1.53)
GovernmentJob	"If (*name of the politician)* were elected, people like me would have a better chance of getting a job with the government."	1-7 (ascending scale)	4.20 (1.67)
Affection	Linear scale combining **Likeable**, **Intelligent**, **Competent**, and **Impressed**	0-1	0.49 (0.16)
Credibility	Linear scale combining **Trustworthy, GoodMotives, FaceChallenges, GoodJob,**	0-1	0.56

	and **FightIdeals**		(0.18)
Monitoring	Linear scale combining **BrokenPromisesWouldKnow** and **HoldAccountable**	0-1	0.62 (0.24)
Preferences	Linear scale combining **CaresPeopleLikeMe** and **CaresSameThings**	0-1	0.56 (0.23)
Benefits	Linear scale combining **WelfareSchemes** and **Government Job**	0-1	0.55 (0.24)

The table reports average values across all three treatment conditions.

Figure 1: Average Voting Preferences, By Treatment Assignment

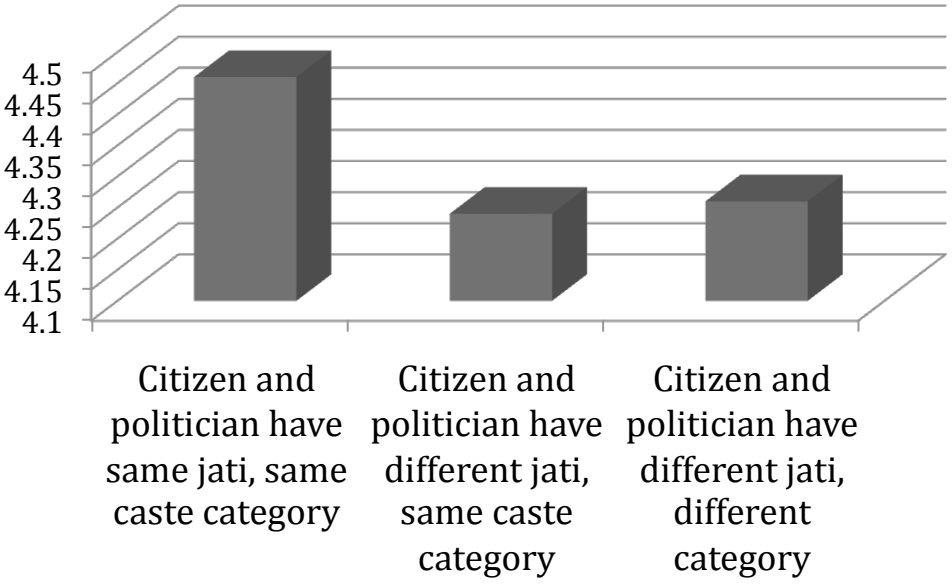

Table 8. What Explains the Effects? Summary Indices, by Treatment Assignment

	Affection	***Credibility***	***Monitoring***	***Preferences***	***Benefits***
Subject and politician from same *jati* and same caste category **(1)**	0.51 (0.01)	0.58 (0.01)	0.63 (0.01)	0.57 (0.01)	0.58 (0.01)
Subject and politician from different *jati* but same caste category **(2)**	0.49 (0.01)	0.56 (0.01)	0.61 (0.01)	0.55 (0.01)	0.54 (0.01)
Subject and politician from different *jati* and caste categories **(3)**	0.48 (0.01)	0.54 (0.01)	0.61 (0.01)	0.53 (0.01)	0.52 (0.01)
Difference of Means (1-2)	0.01 (1.04)	0.02 (1.73)	0.02 (1.11)	0.02 (1.42)	**0.06 (3.64)**
Difference of Means (1-3)	**0.03 (2.79)**	**0.04 (3.84)**	0.02 (1.00)	**0.04 (2.89)**	**0.04 (2.33)**
Difference of Means (2-3)	0.02 (1.76)	**0.02 (2.06)**	-0.00 (-0.15)	0.02 (1.52)	0.02 (1.20)

Standard errors are in parentheses in the first three rows of the table. In the final three rows, t-statistics are in parentheses. Boldface type indicates that the estimated effect is significant at standard levels ($p<0.05$).

Figure 2: The Effects of Caste on Voting Preferences, Reserved and Unreserved Panchayats

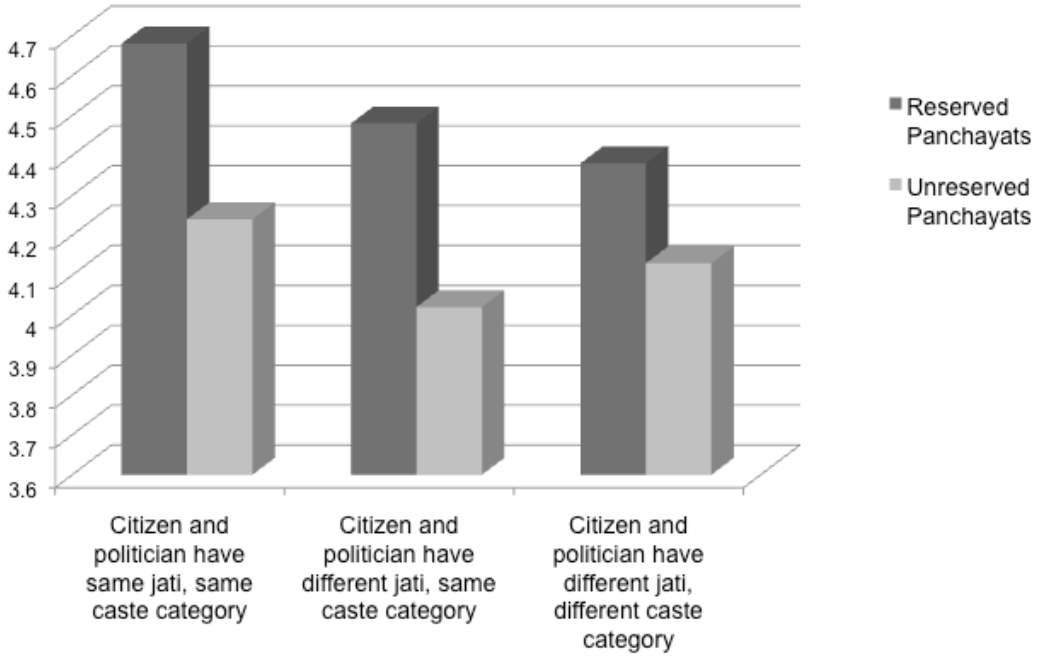

Table 9: Effects of Reservation on Evaluations of Candidates, by Treatment Condition

	Reserved GPs	Unreserved GPs	Difference of Means	p-value (two-sided)
Subject and politician from same *jati* and same caste category (1)	4.68 (0.10)	4.24 (0.09)	**0.44** **(0.14)**	**0.002****
Subject and politician from different *jati* but same caste category (2)	4.48 (0.10)	4.02 (0.09)	**0.46** **(0.13)**	**0.000*****
Subject and politician from different *jati* and caste categories (3)	4.38 (0.09)	4.13 (0.09)	**0.25** **(0.12)**	**0.043***

Mean values are in cells, standard errors are in parentheses. Reserved GP means "reserved for SC or ST." Unreserved GP means "General category or reserved for BC." * $p<0.05$ ** $p<0.01$ *** $p<0.001$

Table 10: The Effect of Reservation on the Experimental Effects of Caste

(1: same *jati* and group; 2: Different *jati*, same group; 3: different *jati* and group)

	Estimated effect, reserved panchayats **(A)** (t-statistic)	Estimated effect, unreserved panchayats **(B)** (t-statistic)	The effect of reservation **(A-B)** (t-statistic)
Vote preference (1-2)	0.20 (1.45)	0.23 (1.77)	-0.02 (-0.11)
Vote preference (1-3)	**0.31** **(2.30)**	0.12 (0.91)	0.19 (1.03)
Vote preference (2-3)	0.10 (0.77)	-0.11 (-0.88)	0.21 (1.18)
Affection (1-2)	0.03 (1.50)	-0.00 (-0.06)	0.03 (1.15)
Affection (1-3)	**0.06** **(4.07)**	-0.00 (-0.06)	**0.06** **(2.93)**
Affection (2-3)	**0.04** **(2.48)**	-0.00 (-0.00)	0.04 (1.79)
Credibility (1-2)	0.03 (1.82)	0.01 (0.62)	0.02 (0.88)
Credibility (1-3)	**0.06** **(3.63)**	**0.03** **(1.93)**	0.029 (1.28)
Credibility (2-3)	0.03 (1.76)	0.02 (1.30)	0.01 (0.05)
Monitoring (1-2)	0.02 (1.13)	0.01 (0.46)	0.01 (0.43)
Monitoring (1-3)	0.03 (1.30)	0.01 (0.25)	0.02 (0.70)
Monitoring (2-3)	0.00 (0.14)	-0.01 (-0.23)	0.01 (0.27)
Preferences (1-2)	0.01 (1.12)	0.02 (0.85)	0.01 (0.23)
Preferences (1-3)	**0.07** **(3.28)**	0.02 (0.72)	**0.06** **(1.94)**
Preferences (2-3)	**0.05** **(2.29)**	-0.00 (-0.18)	0.05 (1.79)
Benefits (1-2)	**0.05** **(2.17)**	0.02 (1.11)	0.03 (0.79)
Benefits (1-3)	**0.08** **(3.72)**	0.03 (1.49)	0.05 (1.63)
Benefits (2-3)	0.01 (0.32)	0.03 (1.48)	0.02 (0.81)

In reserved panchayats, the council presidency is reserved for Scheduled Castes or Scheduled Tribes. In unreserved panchayats, the presidency is open (general category) or reserved for Other Backward Castes (categories A or B). Boldface type indicates that the estimated effect is significant at standard levels ($p<0.05$).

Figure 4. The "Politics of Dignity": Effect of SC Reservation on Vote Preferences of SC Subjects

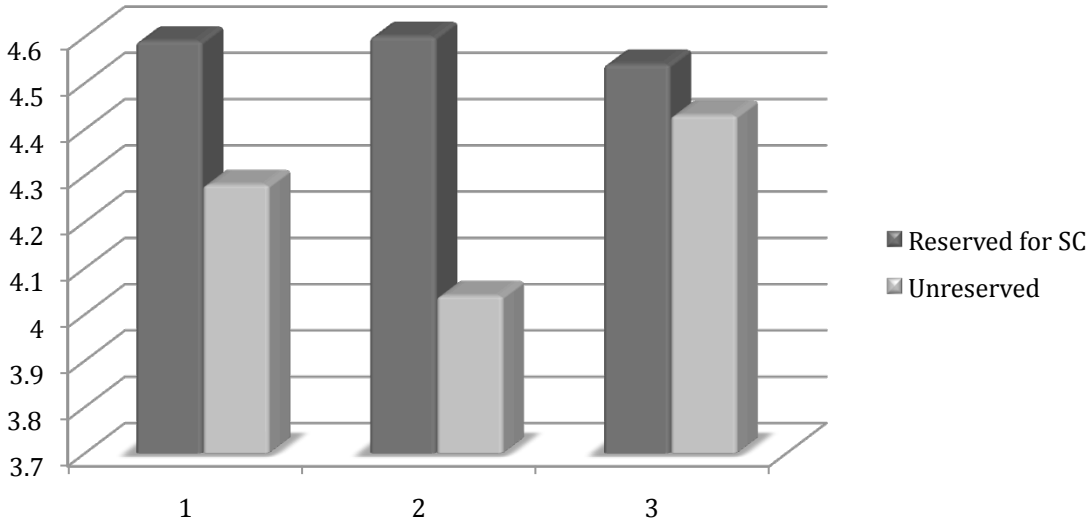

Figure 5. PLACEBO TEST:
SC RESPONDENTS AND ST RESERVATION