STRATEGIC VOTING FOR ETHNIC PARTIES

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The presumption in the theoretical literature on ethnic mobilization is that voting for ethnic parties is a purely expressive act, driven by strong psychological attachments and not subject to cost-benefit calculations. Models of strategic voting, meanwhile, make no reference to the ethnic identity of voters and parties, and have been developed and applied mainly within post-industrial societies. They have so far not explored whether and to what extent we should expect strategic voting for ethnic parties in democracies in Asia, Africa, and much of the post-communist world. My dissertation, which investigates the question of why ethnic parties succeed, develops an argument that predicts high levels of strategic voting for ethnic parties in "patronage democracies." I would like to present this argument at LICEP, and some data investigating it from Scheduled Caste voting patterns in India. I expect to revise the dissertation over the next year, and would like to ask LICEP members for feedback on 1) the specification of the model 2) on evaluating one of the empirical tests that I have performed so far, using Gary King's Ecological Inference Method 3) on designing further tests and 4) on selecting further cases through which to investigate the argument in a cross-national context.

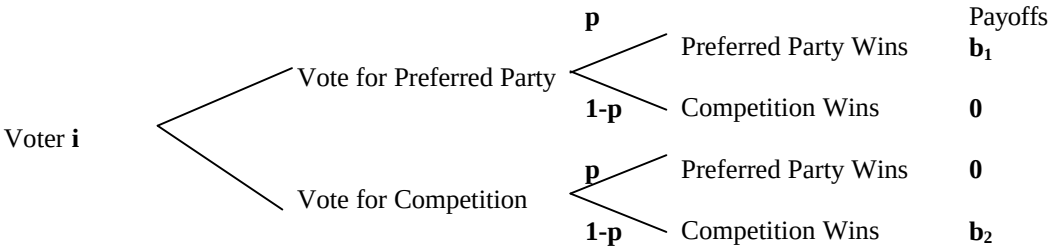
I. Model: Strategic Voting in "Patronage-Democracies"

By the term "patronage-democracy, I mean a state-dominated democracy in which elected officials enjoy significant discretion in the allocation of state resources and services. The term applies to a large family of cases in the post-colonial and post-Communist world, including, to cite only a few examples, India, Sri Lanka, Georgia, Nigeria, Pakistan, and Zambia (the last three intermittently). The model below relies upon three propositions about voting in patronage-democracies which I develop in the dissertation but will simply list here as assumptions:

1. Voters in patronage-democracies are instrumental actors who use their vote primarily to secure benefits from those who control the state apparatus.
2. Such voters expect to obtain greatest access to these benefits from politicians belonging to their "own" ethnic group.
3. They formulate preferences across parties by counting heads belonging to their "own" ethnic categories across parties. They prefer that party which has the largest concentration of co-ethnics.

Given these assumptions, the discussion below outlines the conditions under which we should expect these preferences to actually translate into votes.

Imagine a voter in a patronage-democracy faced with the choice of whether to vote for his preferred party or for the competition. The decision tree below captures the decision problem faced by Voter *i*.



Voter i has two courses of action: to vote for his preferred party or for the competition. The preferred party has a probability **p** of winning the election or exercising leverage over someone else's victory or loss. The competition has a probability **(1-p)** of winning the election or exercising leverage over someone else's victory or loss.

Voter i's access to patronage benefits depends upon the electoral outcome. A victorious party will have control over state resources and so have the means with which to "pay" him for his vote. A party that does not win, but influences someone else's victory or loss will also indirectly acquire the resources with which to pay him. In this scenario, the winner will have an incentive to protect his winning margin by "buying off" the kingmaking party. Consequently, it will channel patronage resources in its direction, which it can then use to "pay" supporters. But a party that neither wins nor exercises leverage will have nothing to offer its supporters.

The benefit-seeking voter, therefore, has an incentive to end up on the winning side. If his preferred party is victorious or influential after the election, and he votes for his preferred party, he obtains benefit $\mathbf{b_1}$. This is the best possible scenario for him, since his preferred party is likely to offer him more benefits than the competition, even after we take the cost of defection into account. If the competition is victorious or influential after the election, and he votes for the competition, the voter obtains benefit $\mathbf{b_2}$. This benefit is likely to be small, since the competition will be responsive primarily to voters from some other ethnic category. However, it is better than nothing. In other words $\mathbf{b_1 > 0}$, and $\mathbf{b_2 > 0}$, but $\mathbf{b_1 > b_2}$.

The worst-case scenario for the voter is to vote for a party that is neither victorious nor influential. If he votes for his preferred party and it emerges neither victorious nor influential after the election, it will have nothing to distribute to its supporters. The voter in this scenario will obtain a payoff of zero, and his vote will have been wasted. And if he votes for the competition and it emerges as neither victorious nor influential, he also obtains no benefits. Politicians from his preferred party will not "pay" him since he did not vote for them, while the competition will have nothing to offer. In some cases, furthermore, this payoff might even be negative, if there is a threat of retaliation from either the competition or the preferred party.

Note that this discussion applies only to situations where successful deception is not possible. The subversion of the secret ballot is a common occurrence in patronage-democracies. However, wherever electoral reforms or administrative oversight are able to safeguard the secret ballot effectively, voters should be able to preserve their access to benefits by practicing deception.

The expected payoff for voter i for voting for the preferred party is:

$$\mathbf{p(b_1) + (1-p)(0) = pb_1} \qquad (\mathbf{1})$$

The expected payoff for voter i for voting for the competition is:

$$\mathbf{p(0) + (1-p)(\ b_2) = b_2 - pb_2} \qquad \mathbf{(2)}$$

The voter will vote for his preferred party only when the expected payoff from voting for his preferred party is greater than the expected payoff from voting for the competition. In other words, when:

$$\mathbf{pb_1 > b_2 - pb_2} \qquad \mathbf{(3)}$$

Rearranging the terms, we get:

$$\frac{\mathbf{(p)}}{\mathbf{(1-p)}} > \frac{\mathbf{b_2}}{\mathbf{b_1}} \qquad \mathbf{(4)}$$

We know from the preceding discussion, that:

$$\mathbf{0} > \frac{\mathbf{b_2}}{\mathbf{b_1}} > \mathbf{1} \qquad \mathbf{(5)}$$

We can draw the following conclusions from this model:

When **p=0** (the preferred party has no probability of securing either victory or influence after the election), voter i will never vote for his preferred party. This is because we know from (**4**) that the only conditions under which voter i will vote for his preferred party when **p=0** is if $\mathbf{b_2/\ b_1 < 0}$. However, we know from (**5**) that this will never be the case.

When **p>=.5** (the preferred party has a 50% chance or more of securing either victory or influence after the election), voter i will always vote for his preferred party. We know from (**4**) that the condition under which voter i will vote for his preferred party when **p>=.5** is if $\mathbf{b_2/\ b_1 < 1}$. We know from (**5**) that this is always the case.

When **0<p<.5**, the voting decision of the voter depends upon the degree to which $\mathbf{b_1}$ is greater than $\mathbf{b_2}$. The more substantial the difference, the lower the value of **p** must be for the voter to vote for his preferred party. The smaller the difference between $\mathbf{b_1}$ and $\mathbf{b_2}$, the higher the value of **p** must be for the voter to vote for his preferred party. For example, when **p=.25**, the voter will vote for his preferred party only if $\mathbf{b_1}$ is more than three times as large as $\mathbf{b_2}$ (i.e. $\mathbf{b_2/\ b_1 < .33}$) and so on. In other words, if the competition offers only negligible benefits to voters from ethnic categories not well represented in its party organization, these voters will defect to the party which represents their co-ethnics even when it has a very low threshold of winning or leverage. However, the more it offers such underrepresented voters, the higher that the threshold of winning or leverage for their preferred party has to be before they are likely to defect. In this situation, even though such voters do worse under the competition then they would have under a party which represents members of their ethnic category, a sizable "payment" in benefits can prevent them from defecting.

It is not necessary to describe voting behaviour under all possible scenarios. The main point that I wish to make here is that the rational benefit-seeking voter is also a strategic voter. His voting decision, in other words, depends upon an assessment of the probability that his preferred party has of obtaining victory or leverage after the election. When this probability is high enough, he will vote in a manner consistent with his preferences. When this probability is low, however, he will vote contrary to his preferences in order to secure at some access to benefits.

How in turn might voters in patronage-democracies formulate expectations about the likely electoral outcome? How, in other words, do they estimate the value of **p** in the model above? Studies of strategic voting suggest that voters formulate expectations about the competitive position of "their" party based on opinion polls.[1] Opinion polls, the argument runs, provide information about the preferences of other voters. And based on this revealed information, individual voters formulate expectations about how others will vote and so adjust their own behaviour accordingly. Where such polls do not exist, or where voters do not have access to these polls, the argument implies that voters cannot formulate these expectations.

However, if voters formulate preferences across parties by counting heads belonging to their "own" ethnic category across parties, then sufficient information is available about other voters' preferences and likely voting behaviour independently of opinion polls and election surveys. Voters from any one ethnic category know that just as they prefer that party which represents members of their own ethnic category to the greatest degree, so will voters from other ethnic categories prefer those parties which represent members from their own categories. By counting heads from each ethnic category in the population and imputing to them preferences across parties, they can assess the relative position of each party if all voters voted according to their preferences. They can then estimate whether, if all voters from their "own" ethnic category coordinated on voting for their preferred party, they would be sufficient to make their party a possible winner or kingmaker.[2] They can also estimate whether even en masse coordination on their part would not take their preferred party past the threshold of either winning of leverage.

Formulating expectations by counting heads, it should be obvious, is a process that carries with it a great deal of uncertainty. Ethnic demography is not always known. Secondly, even where ethnic demography is known according to one set of categorizations, it is not clear which categorizations are the most salient. Thirdly, even where the categories are agreed upon and the ethnic demography clear, there remains a great deal of uncertainty about turnout rates between different ethnic categories. Fourth, while the preferences of those who are best represented in each of the parties can be inferred with confidence, the preferences of voters from ethnic categories which are universally underrepresented are highly uncertain. Fifth, where there is more than one party representing members of one ethnic category, it is not clear which way members of that ethnic category might lean. However, the main point is that counting heads provides voters with the information to make *some* prediction about the electoral outcome (whether or not this prediction is uncertain or even wrong), and adjust their voting decision accordingly.

If benefit-seeking voters vote strategically, then we should expect an en masse vote by voters from any given ethnic category in favour of their preferred party if they believe it to be a likely winner or kingmaker. Conversely, where even an en masse vote by all co-members of an ethnic category is not likely to result in victory or influence for their preferred party, we should not expect to see many vote for their preferred party. As a result, the voting behaviour of particular ethnic categories is likely to change with the competitive configuration. Where the competitive position of the preferred party is stable across elections, the voting behaviour of voters should also be stable. But where the preferred party's competitive situation fluctuates, we should also see considerable volatility in voting behaviour. In this latter scenario, we should see a pattern of "forward cascades" when voters believe that coordinated action on their part might take the preferred party from a losing position to victory and influence, and "reverse cascades" when

[1] Cox (1997), 79.
[2] The idea of ethnic collective action as a coordination game is from Laitin (1998)

voters believe that continued coordinated action on their part will not preserve their preferred party's winning or kingmaking position.

If supported by the data, the argument here highlights three important areas of theoretical and empirical investigation for the literature on strategic voting:

First, it suggests that in patronage democracies, the levels of strategic voting may be even higher than in post-industrial democracies. The extensive literature on strategic voting in Britain, for example, indicates that the percentage of voters who vote strategically may in fact be quite low. The estimates of strategic voters in these studies range from 5 to 23%.[3] While the extent of strategic voting in patronage-based societies remained to be investigated empirically, the logic I have outlined here suggests that the numbers of voters voting strategically in patronage-based societies should be significantly higher, since the stakes attached to the vote in such societies are significantly higher.

Secondly, it suggests that the forms that strategic voting may take are likely to differ between patronage-based and post-industrial democracies. Cox notes, for example, that strategic voters have no incentive to vote for a locally hopeless party that is nationally competitive.[4] By locally "hopeless", Cox means a party that has no chance of winning. Cox's reasoning is that voters concerned about the efficacy of the vote have no incentive to vote for a locally hopeless party since such a vote will not change the overall outcome. If voters are primarily motivated by the desire to change the overall outcome, then this reasoning is justified. However, if voters are primarily motivated by the desire to obtain benefits, then they have strong incentives to vote for a party that is competitive at the state or national level even when it is locally hopeless in order to signal the loyalties which would allow them to reap rewards in the form of benefits later. Further, as I have argued, benefit-seeking voters have strong incentives to vote for their preferred party if it promises them leverage even if such a party is unlikely to be a local winner.

Finally, the argument here highlights the importance of ethnic demography and the ethnic profile of political parties as an important variable structuring expectations about likely electoral outcomes. The ability of voters to vote strategically, as Cox points out, depends upon "the availability and clarity of free information regarding the relative standing of candidates."[5] The presumption in the literature on strategic voting is that opinion polls are the principal sources of such information. If this is true, then we should expect the phenomenon of strategic voting to be limited in both space and time: We should observe this phenomenon only after the advent of universal literacy and the introduction of election polling in the mass media, and it should be limited mainly to those societies with high levels of literacy and access to such media. However, if ethnic demography and the ethnic profile of political parties are important sources of information about likely electoral outcomes, then we should expect to find strategic voting to be a more widespread phenomenon, historically and spatially.

II Scheduled Caste Voting Patterns in Uttar Pradesh (U.P.)

Later in this paper, I present one test of the model above, using data from Scheduled Caste (SC) voting patterns in the north-Indian state of Uttar Pradesh. The term "Scheduled Caste" refers to castes historically treated as "untouchable" by Hindu society, who are now listed in a separate Schedule of the Constitution as being eligible for affirmative action benefits.

[3] For a summary of this literature and the range of estimates of strategic voting, see Cox (1997), 83-4.
[4] Cox (1997), 182.
[5] Cox (1997), 79.

Scheduled Castes constitute 21% of the population of Uttar Pradesh. Prior to 1984, Scheduled Castes were poorly represented in all political parties in the state. Faced with a choice between parties in which they were equally underrepresented, Scheduled Caste voters in Uttar Pradesh voted for the Congress party, which was dominated by Hindu-upper castes.

In 1984, the Bahujan Samaj Party (BSP), a new political party led and staffed principally by Scheduled Castes, emerged. Once the BSP presented itself as a viable option on the electoral market in Uttar Pradesh, Scheduled Caste voters had two possible choices: to defect to the BSP or to remain with the Congress. Since the BSP was staffed mostly by co-ethnics, especially at the higher echelons of the party organization, SC voters preferred the BSP to the Congress party. However, they faced the choice of whether to defect from Congress to the BSP in three possible scenarios: 1) they had a reasonable expectation that the BSP would be a governing party after the election; 2) they had a reasonable expectation that voting for BSP would give them leverage over the electoral outcome in their constituency even if it was unlikely that the BSP would be in government after the election; and 3) they had a reasonable expectation that the BSP was a clear loser, with no prospects of either governing the state or exercising leverage in the constituency. The benefits that they could expect from voting for their preferred party differed under each scenario. I describe these benefits below. Later in the paper, I discuss how Scheduled Caste voter expectations come to be formed.

IIa. Benefits of Defecting to the BSP When it is not in a Winning or Influential Position

By defecting from the winning Congress party to the BSP when the BSP is not likely to win the election or exercise leverage over the electoral outcome, Scheduled Caste voters risked losing their limited access to patronage benefits without any off-setting gains. India is a patronage-based democracy in which politicians routinely use their discretionary control over state resources to extract votes in return for expected benefits. Scheduled Castes are particularly dependent on such benefits, and as such are likely to weigh the risk of losing them more heavily than voters from other ethnic categories.

The story of one such voter, recounted in Lanjouw and Stern's ethnography of Palanpur village in Uttar Pradesh illustrates in concrete terms the dependence of the Scheduled Caste voter on the largesse of the state. Mahavir is a good example of the median Scheduled Caste voter in Uttar Pradesh, who is rural, illiterate, landless, and poor. 88% of the Scheduled Caste population in Uttar Pradesh resides in rural areas;[6] 79% is illiterate; only 42% of those with regular employment have access to land;[7] and according to the most recent government estimates, 58% of the Scheduled Caste population lives below the poverty line.[8] Dreze, Lanjouw and Sharma describe their meeting with him in the following terms:

> On 9 January 1987, during one of our sojourns in Palanpur, we received the visit of a man called Mahavir. The first half of January is a time of slack labour demand, and Mahavir, a landless labourer, had been unable to find work for several days. He told us that he had spent the whole morning trying to find someone who would lend him one rupee, so that he could at least feed his two children in the evening.
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> Mahavir is a well-known resident of Palanpur, who is in no danger of leaving the village, and, poor as he is, he would have had no difficulty in repaying a one-rupee loan later in the season. But no one agreed to lend him a rupee, He commented, "*garib aadmee ko*

[6] All figures, unless otherwise stated, from 1991 Census.
[7] According to the 1991 Census, 42% of the "main workers" in Uttar Pradesh are "cultivators," 38% are agricultural labourers.
[8] Government of India: *Basic Rural Statistics* 1996. (These are 1983-84 figures).

> *koi naheen deta*," "no one lends to a poor man." Eventually, he was able to obtain one kg of wheat (worth two rupees) from one of the village moneylenders with an interest of 50 percent in kind after the harvest – four months from then.
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> At that time, the local branch of the Prathma Bank (a state-run rural bank) was implementing the "Integrated Rural Development Programme," a scheme of subsidized credit intended for households below the poverty line. Loans of several thousand rupees could be obtained under this programme, at a nominal interest rate of 12 percent per year. The Scheduled Castes, of which Mahavir is a member, were one of the main target groups, and had to repay only two-thirds of the principal according to the programme's official guidelines. We asked Mahavir why he had not applied for a loan from Prathma Bank, but he dismissed this fanciful idea. To start with, he did not have the resources to bribe the headman, the village development officer, and the bank manager. Besides, he was afraid of being cheated. "These people," he said, "referring to the bank managers, "they tell you something and write something else."[9]

Even though a government sponsored credit programme existed which was tailored to his needs, Mahavir could not count on such credit without having either the material resources to bribe the government employees responsible for credit allocation, or presumably, the political influence with which to sanction them. Further, all available opportunities to improve his position led him back toward the discretion of public officials. [10] He might have attempted to obtain additional employment during the period of slack labour demand, under the government-run Jawahar Rozgar Yojna (JRY) employment scheme. Such schemes certainly existed in Palanpur. However, the village headmen in charge of implementing these schemes routinely violated the programme guidelines to employ skilled labour, and he would need the material or political resources with which to influence them.[11] Had he tried to escape his circumstances by securing regular employment in the public sector, he would have needed "contacts."[12] The option of securing a government loan to permit him to pursue a more lucrative occupation was, as we have seen, foreclosed already. The government in Palanpur possessed land, confiscated during the first land consolidation operations in the 1950s, for distribution to Scheduled Castes. However, any attempt to secure a land grant under policy legislation that earmarked such land for Scheduled Caste beneficiaries would have required him "to bribe the lekhpal [the record-keeper], the kanungo [revenue inspector], and the tehsildar" [the subdivisional district magistrate, responsible for the administration of the tehsil, or district subdivision].[13] Even if he had obtained land, he would have needed influence to ensure that it was secure. As another study of a UP village points out, Scheduled Caste beneficiaries of land grants or housing plots allotted by the village headman continued to wait for the registration papers which would make their control over the property official.[14] And had he managed to obtain secure control of land, he would be dependent upon the discretionary power of public officials to ensure access to water, seeds, fertilizer, farming equipment, credit, electricity, and so on.

Further, Mahavir's and his family's access to routine social services in Palanpur depended also upon influence with the administration. Subsidized food and provisions were sold

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[9] Dreze, Lanjouw and Sharma (1998), 506-7.
[10] He might have pressed for a higher wage during high season, so that the earnings from the period of employment would have tided him over during the slack period. However, as a single individual, he had no influence over the standard wage rate in Palanpur. (Dreze and Sharma, 86-87).
[11] Dreze, Lanjouw and Sharma (1998), 195-6.
[12] Dreze, Lanjouw and Sharma (1998), 129.
[13] Dreze, Lanjouw and Sharma (1998), 191, italics mine.
[14] Gupta (1998), 147.

by the manager of the government fair price shop for a fee.[15] Health care was available only to those with "clout."[16] Even access to education depended to some degree upon influence over the appointment of teachers. Scheduled Caste children in Palanpur had lower rates of school attendance than those from other caste groups, in part due to the attitude of the upper-caste village teacher, who "considers any for of direct contact with Jatab [a caste category included among the "Scheduled Castes"]children as repulsive."[17] The teacher's job however, was safeguarded through political connections: he was the son of the headman. He could not be challenged, therefore, without some rival source of political influence.

As Mahavir's story shows, Scheduled Castes' access to any of the basic necessities of survival and advancement depended upon the discretionary power of the local and state administration. Those among them who possess material resources, may be able to use them to bribe state officials in his favour. For most who, like Mahavir, do not have such resources, their best chance of obtaining these material benefits is through political intervention. By defecting from the Congress before the BSP was in a winning or influential position, they risked losing the limited political support they possessed in the Congress party.[18] In a society where securing the basic necessities of life depends upon access to the state, the loss of even these limited benefits is significant. As one respondent in Khare's ethnography of Lucknow Chamars notes: "Having a place to live, food to feed your children and clothes to cover us all with, are the things we want foremost. If it is difficult for caste Hindus, who run the society, to manage these minimum requirements, it is not going to be any easier for us, particularly if we have to challenge the Hindus outright, just as some others demand….will the radical reformer or a political leader come and supply us with these necessities? Who will lose?"[19]

Further, in a scenario where the BSP was not a likely winner or kingmaker, Scheduled Castes faced not only the loss of the limited patronage benefits under a Congress government, but also risked the cost of economic and political retaliation from the upper castes who dominated the Congress and also controlled their livelihood. The majority of the Scheduled Caste working population in Uttar Pradesh work as tenants or agricultural labour on land owned by the upper castes, or as petty labour in upper caste-owned enterprises (e.g. mining, construction, bricklaying). This majority faced the greatest costs in defecting from the Congress. In one district in Uttar Pradesh for example, Scheduled Castes labourers who voted for the BSP were prevented by Brahmin landowners from entering their farms. "There is no need for you to come to our farms anymore," they were told. "Why don't you go and work in Mayawati's [BSP leader]'s farms?[20] Once it was clear that these Scheduled Caste voters had voted for the BSP, they risked also a curtailment of their political rights. According to a Rajput candidate in the same district: "This time, the election will simply happen without them. We know they voted for Mayawati in the last election. This time nobody will let them vote."[21]

So far, I have not discussed the possibility of obtaining psychic benefits simply through the *act* of voting for the BSP, even if the BSP is a clear loser. Does the act of voting for the BSP

[15] Dreze, Lanjouw and Sharma (1998), 193;
[16] Dreze, Lanjouw and Sharma (1998), 193
[17] Dreze and Sharma (1998), 63-64.
[18] For a description of the limited benefits allocated to Scheduled Castes under Congress rule, see Brass (1965), Hasan (1989), Gupta (1998) and Weiner (1967).
[19] Khare (1984), 45.
[20] Interview, November 30 1997. Because this respondent belonged to the Congress party, and had no stake in misreporting, his account is more credible than it might have been had it come from a BSP voter, who may have wanted to exaggerate the retaliation.
[21] Interview, November 15, 1997.

not provide Scheduled Caste voters with at least *some* psychic satisfaction? It is, after all, an act of self-affirmation by openly rejecting the authority of those who belong to the dominant castes. For most Scheduled Caste voters, however, the act of voting is simply one episode in a series of interactions with the authority of the dominant group where they continue to play a subordinate role. Their subordination in these other arenas is a powerful force in creating and maintaining low self-esteem. According to Clark, "individuals "whose daily experience tells them that almost nowhere in society are they respected and granted the ordinary dignity and courtesy accorded to others will, as a matter of course, begin to doubt their own worth."[22] As a one-day interruption in this broader set of interactions, an act of rebellion at the polling booth is an insignificant source of self-esteem. An ineffectual vote, rather, is likely to compound feelings of inferiority further by underlining not just the material and social subordination of Scheduled Castes, but also their political impotence. As a statement from one Scheduled Caste attests, there is little capacity for self-assertion without political power: "If we send our man to parliament, whether he becomes the PM or sits in the opposition, he can speak up for us. But if we don't get a seat there, how will we be heard?"[23]

The argument above, I should emphasize, applies to Scheduled Caste *voters* rather than to Scheduled Caste *activists* who belong to the BSP. The key difference between voters and activists is the following: Voters are engaged with the BSP only at election time, while the rest of their world involves repeated interactions in which they remain subordinate. The world of Scheduled Caste activists, however, is an insulated one within the party organization, where they exist as equals. Within this world, they interact most densely with each other, and these interactions continue before and after the elections. For BSP activists, therefore, the act of voting is satisfying to the extent that it reinforces the feelings of self-worth that they have acquired in this alternative arena, without producing the disjuncture that it does for voters.[24] Secondly, because, unlike voters, they belong to a tightly knit group that will all act the same way, they are more likely to experience the satisfaction from participating in shared group activity.[25]

The difference between the psychic benefits of voting for the BSP between activists and voters is best illustrated in their own words: Arun Kumar,[26] a BSP activist, described his experience in the party in the following way: "There is enormous satisfaction and self-respect … No doubt we suffer in a material sense – but our self respect goes up."[27] Ramnath, a Scheduled Caste voter, however, revealed a different form of attachment to the party. In his own words: "First we were very resistant to the BSP people – we said Ambedkar [the Scheduled Caste leader from whom the BSP derives its ideology] is not a God so why should we believe in him. Most people here supported the Congress. Then later we shifted – There was no benefit from Congress for this village, and then, Congress was also getting weak."[28] Ramnath also emphasized the increase in self-respect and self-confidence among Scheduled Castes in his village that came with voting for the BSP. This self-respect, however, came <u>after</u> the BSP had established itself as a governing party in Uttar Pradesh.

All Scheduled Castes, I should point out, are not likely to be equally dependent on patronage benefits from Congress. Those who are educated or self-employed, or have relatives in

[22] Tajfel, n.d., citing Kenneth Clark, 10.
[23] *Economic and Political Weekly*, October 9 1999, "Uttar Pradesh: Rise of Smaller Parties."
[24] Tajfel (n.d.) describes such insulation as successful strategies of solving the problem of low self-esteem
[25] For the opposing argument, which makes no distinction between voters and activists, see Horowitz (1985), 324-5
[26] This and all other respondent names used in this paper are pseudnyms.
[27] Interview, New Delhi, Nov 23 1996.
[28] Interview, December 1 1997.

urban jobs are less dependent upon the upper castes. Such "better-off" Scheduled Castes have the skills, networks and mobility to seek alternative avenues of survival and advancement if the Congress patronage is withdrawn. Such voters, therefore, have less reason to make instrumental use of their vote and might be expected to vote sincerely according to their preferences. Further, deception is not equally difficult for all Scheduled Caste voters. Scheduled Caste voters who are literate and have a better understanding of electoral reforms, or Scheduled Caste voters who reside in constituencies where the law enforcement authorities have acquired a reputation for effectiveness, may practice deception without fear of reprisal. However, the majority of Scheduled Castes fall outside these categories and so face significant costs in defecting to the BSP from Congress when it is not in a winning or influential position without any offsetting gains.

IIb. Benefits from Defecting to the BSP When it is in a Winning or Influential position.

If the BSP is likely to be the governing party after the election, or a member of some governing coalition, the material costs that Scheduled Castes incur through defection would easily be offset by access to the state once the BSP was in power. Scheduled Castes who expect the BSP to have a chance of forming a government might easily forgo the meager patronage benefits of a Congress regime in expectation of greater patronage benefits from a BSP government. Indeed, during the three brief periods in which the BSP was in government between 1993 and 1997, the party acted swiftly to deliver benefits selectively to Scheduled Castes. Mayawati, the BSP Chief Minister, was forthright about the objective of her governments: "My single aim is to ensure that work meant for Dalits [Scheduled Castes] gets done. Everything else is towards that goal."[29]

What about when the BSP is not likely to obtain control of the state government but can expect to exercise "leverage" over someone else's win or loss? Voting for the BSP in this world is also likely to bring with it material and psychic benefits. The benefits produced by "leverage" are less in both cases than those provided by outright control of the state. However, they are still considerable. By voting for the BSP in close races, Scheduled Caste voters can indirectly put one candidate in the winning position or deny victory to another. As a broker for Scheduled Caste votes, the BSP leadership then can negotiate material benefits from the winning candidate. The grateful winner in this case has every incentive to offer particular rewards to these voters who were responsible for his winning margin and could conceivably revoke it unless they are offered inducements to remain loyal. The loser, on the other hand, has incentives to court the support of the same critical mass of voters in order to reverse the verdict in the next round of elections.

Voting for the BSP when it is in a kingmaking position actually increases the access of Scheduled Caste voters to patronage benefits compared to the status quo even though the BSP itself loses the election, by inaugurating a bidding war for their vote. Leverage is also a powerful, although a second-best source, of self-esteem. It reverses the customary roles of overlord and suppliant by giving Scheduled Caste voters power over the political future of an upper-caste candidate. Such power, especially because it must be openly acknowledged by dominant caste candidates forced to bargain with the BSP and its supporters in order to protect or improve their own positions, affords considerable self-esteem. In those constituencies where voting for the BSP carries with it the power of leverage, therefore, the expected benefits of voting for the BSP are higher than voting for the competition, although not to the same degree as when the BSP is likely to be in control of government.

[29] *India Today*, September 22, 1997.

I should emphasize here that Scheduled Caste voters are likely to exercise their influence *indirectly*, by voting for the BSP and affecting a third party's win or loss. They have little to gain by striking a direct bargain with either of the two likely winners. As a collection of individuals or small groups, they would have little to offer either candidate, and little capacity to enforce the delivery of benefits in return. By throwing their strength behind the BSP and delegating to it the power to act as a "broker" for their consolidated interests, however, Scheduled Caste voters would have greater influence over the electoral outcome, and greater power to extract and enforce the delivery of patronage benefits. In practice, the BSP routinely projects itself as a "kingmaker" party at the constituency and the state level. BSP leader Kanshi Ram distinguishes at his election rallies between elections in which the party's objective is to simply to register a presence (*haarne wala chunav*); *elections in which the party's objective is to get someone else to lose or win (harane wala chunav*); and elections in which the party's objective is to win outright (*jeetne wala chunav*). He, and the BSP leadership take pains to clarify which of these objectives they are seeking to achieve in any election.[30]

IIc Subversion of the Secret Ballot

The difference in expected benefits when the BSP is a losing, influential or winning position, arises only if the secret ballot is not effective. Under an effective secret ballot system, Scheduled Caste voters could easily vote for the BSP while promising their votes to Congress. As such, they could use deception to ensure that their access to patronage benefits was preserved. However, as I will show below, it is possible for politicians in many districts in Uttar Pradesh and in other Indian states to collect information about how voters vote. The frequent subversion of the secret ballot, and even more importantly, the fear of such subversion, is likely to minimize deception.

One mechanism through which the secret ballot is subverted is the right of political parties to designate "polling agents" at each voting booth. The ostensible function of the polling agent is to assure each candidate of a free and fair poll, and to assist voters by locating their names on the voter list. In practice, however, the polling agents are also the means through which candidates exercise surveillance. The polling agents are usually men from the village itself or from close by who know the identity of each voter. While they do not witness the actual vote, they know who shows up to vote and can report on turnout figures. As local men who know the voters well, they are able to provide politicians with a detailed description of voting patterns. The presence of polling agents, serves, furthermore, as a warning to the voter as he or she enters the polling booth that the candidate expects loyalty.

A second mechanism through which the secrecy of the ballot has been subverted in the past has been through the system of counting ballot papers and announcing each candidate's votes separately for each polling station. A polling station covers a very small section of the electorate, usually comprising no more than one or two villages. Combined with information about turnout rates gathered by polling agents, this system of counting permitted candidates to construct a fairly detailed picture of how particular communities voted. As Subramanian notes, in his study of ethnic mobilization in South India:

> Party representatives are intimately aware of the social composition of the population voting in their booth, and note the approximate numbers and social background (caste/class) of those who vote at different points in the day …. Contrary to official rules, poll officials often empty ballot boxes 'carefully' before counting so that votes are counted approximately in the order in which they were cast – The parties' election agents

[30] For instance, Kanshi Ram's speech at election rally at Hoshiarpur, January 25 1997.

> are given updates of the party-wise breakdown for the booth as the counting proceeds as well as the final tally. When correlated with notes about the groups which voted at different points, these figures give activists a fairly accurate picture of the sources of support for the major parties.[31]

This system of counting was eliminated by election reforms introduced before the 1996 Indian parliamentary elections and votes are now counted by mixing the ballot papers for the entire assembly constituency.[32] Over time, these reforms may make it more difficult for politicians to monitor voting behaviour. However, awareness about these reforms and their implications for the secrecy of the ballot is likely to trickle down far more slowly to voters.

Third, because monitoring the act of voting is so important, political parties invest significantly in creating a network of informers who inform them about voting behaviour in particular communities. All candidates that I interviewed reported that they were able to obtain information about voting behaviour retrospectively with relative ease, through panchayats, religious organizations, or neighbourhood leaders. According to one candidate: "See, for individuals it is very difficult. But for groups it is easy. In villages, castes live in different localities. Our workers see which locality is for whom."[33] Another worker from the Samajwadi party stated, with the same certainty: "We know which caste voted for whom in which village."[34]

Fourth, although a vast state machinery exists to safeguard the secret ballot, this machinery is frequently allied with the locally influential ethnic groups in each district.[35] The individual voter casts his or her vote at polling booths staffed by polling parties appointed by the state and guarded by a small police force. The polling parties, including the presiding officer are all local men, employed in petty government positions (clerk, schoolmaster, postman, watchman) in the district. Their relations with leaders from the dominant parties in the district are deferential, based on inferior social and economic status.[36] As such, they are vulnerable to attempts at intimidation or bribery from the locally powerful elite.

Fifth, the actions of the state, even when informed of such intimidation or bribery are unpredictable. As a result, elites can either find out how voters voted, or even more importantly, create the *perception* that they might find out. As a result, voters see themselves as constrained in their ability to practice deception. One incident from the 1996 assembly elections in Uttar Pradesh is illustrative.[37] At one polling booth during these elections, BJP supporters in an upper-caste dominated village prevented Scheduled Caste voters from entering the booth and stuffed the ballot boxes with bogus votes. The police constable stationed at the booth complained to the zonal magistrate in charge of overseeing the elections. When the zonal magistrate arrived at the spot, however, the polling party appointed by the state was unwilling to register an official complaint. By lodging an official report, the presiding officer knew that he exposed himself to reprisals by those who had stuffed the boxes, especially if they ended up on the winning side once the votes were counted. The zonal magistrate decided not to take punitive action for two reasons: 1) He guessed that he had arrived in time to prevent large-scale ballot stuffing. In his

[31] Subramanian (1999), 66, 39 n.
[32] Election Commission of India (1997)
[33] Interview, May 1 1996.
[34] Interview, April 11 1996.
[35] For the most detailed description of the ties between locally influential elites and the state, see Brass (1998) and (1965). See also Schenk (1989), and Weiner (1967).
[36] Schenk (1989)
[37] This account is based on fieldwork on the polling day (October 6 1996), and draws on interviews with the zonal magistrate, the polling parties and the polling agents of the parties.

experience of fraudulent voting across repeated elections, this was a relatively small-scale event. 2) Without an official complaint from the presiding officer, he lacked firm justification for taking punitive action. He left the spot after issuing a general warning to the crowd clustered outside the booth, and in all likelihood the ballot stuffing continued as before.

This was a minor incident which did not enter official reports or the press. More serious incidents of vote fraud are routinely reported in the press, along with accounts of the actions taken or not taken by government authorities in response. The critical point underlined by this incident and others like it is not that the state machinery is equally likely to look the other way in all cases, but that the possibility of subversion of the secret ballot is common enough, and the actions of the state unpredictable enough, for voters not to trust it. Regardless of how often such incidents of intimidation and bribery actually occur, the *possibility* of such subversion is real.

The fear of subversion is not uniform across states and across districts in India. In those states and districts where it occurs frequently, however, it is likely to generate widespread compliance with "patronage contracts" since few voters are likely to believe that successful defection is possible.

IId. Expectations

How might Scheduled Caste voters formulate expectations about whether the BSP is likely to win power or whether voting for the BSP is likely to give them leverage, or whether their vote is likely to be wasted? Studies of strategic voting suggest that voters formulate expectations about the competitive position of "their" party based on opinion polls.[38] Opinion polls, the argument runs, provide information about the preferences of other voters. And based on this revealed information, individual voters formulate expectations about how others will vote and so adjust their own behaviour accordingly. Where such polls do not exist, or where voters do not have access to these polls, the argument implies that voters cannot formulate these expectations.

Few Scheduled Caste voters in Uttar Pradesh have access to opinion polls. According to a post election survey conducted by the Center for the Study of Developing Societies in India, 82% of Scheduled Castes do not read the newspaper, 52.4% profess that they do not listen to the radio, 63.4% report that they do not watch TV, and 76% claim not having seen or heard of the opinion polls predicting the election outcome.[39] It would be a mistake to conclude from this lack of access to the mass media, however, that Scheduled Caste voters lack information about the preferences of others, and so lack the means to engage in strategic behaviour. If voters formulate preferences across parties by counting heads belonging to their ethnic group across parties, then sufficient information is available about other voters' preferences and likely voting behaviour independently of opinion polls and election surveys. Here, the Scheduled Caste voter attempting to figure out how others' preferences are distributed needs simply to count heads belonging to each ethnic category in the general population and then identify the party that members of each ethnic category are likely to prefer by counting heads in the party apparatus. He can then infer the likely electoral outcome if all voters vote sincerely, and formulate his own strategy accordingly. Polls and surveys might improve the level of information about ethnic demography and voting patterns. However, there is a great deal of knowledge even in their absence. The two examples below illustrate this claim.

[38] Cox (1997), 79.

[39] CDSD post-poll survey 1996 (n=380). These figures are slightly lower than for the general population in Uttar Pradesh and Punjab, of which 66.7% do not read the newspaper, 45% do not listen to the radio, 48.9% do not watch TV, and 69.5 have not heard of the polls(n= 1627)

Consider, for example, how Scheduled Caste voters might formulate expectations about whether the BSP is likely to be a governing party. In the elections for the legislative assembly in the state of Uttar Pradesh in 1993, there were four principal contenders: the BJP, dominated mainly by upper castes; the Congress, also dominated mainly by upper castes; the Janata Dal, dominated by backward castes; and an alliance between the SP, also dominated by backward castes, and the BSP, dominated by Scheduled Castes. In a four-cornered contest, the minimum percentage of votes which any party must exceed in order to be a "possible" winner is 25%. The actual number of votes necessary to win may in fact be much higher. The ethnic demography of the state of Uttar Pradesh, replicated to a lesser or greater degree in each constituency, is as follows: Upper castes (22%), Backward Castes (42%), Scheduled Castes (21%), Muslims (17%).[40] A head count of voters and party personnel would suggest the following distribution of preferences: Upper castes were likely to prefer either the Congress and the BJP; Scheduled Castes were likely to prefer the BSP-SP alliance; and backward castes were likely to be uncertainly distributed between the JD and the BSP-SP alliance. The preferences of Muslims, underrepresented in positions of power in all three parties, were most unpredictable. Since Backward and Scheduled Castes together constitute an almost two-thirds majority in almost every constituency, Scheduled Caste voters could reasonably expect that coordinated action on their part, coupled with even a small percentage of backward caste votes, would give the BSP-SP alliance a reasonable shot of winning control of the government.

Consider a second example, from Mukerian constituency in Punjab, about how Scheduled Castes might formulate expectations about whether or not they are likely to exercise leverage over the electoral outcome. Scheduled Castes in Mukerian constitute roughly 20% of the population.[41] Sikhs and Hindu backward castes form 20% each; and Hindu upper and intermediate castes constitute the remaining 40% of the population. In the 1997 elections for the state legislative assembly in Punjab, the two main competitors in Mukerian in addition to the BSP were the Congress party, and the Akali Dal-BJP. The Congress was dominated by the upper and intermediate castes, but its candidate in this case was one of its few prominent backward caste ministers. The Akali Dal was dominated by Sikhs, while the BJP by Hindu upper castes. The BSP was dominated by Scheduled Castes. It was clear in Mukerian that most Sikh voters would prefer the Akali-Dal and BJP alliance, most backward caste Hindus would prefer Congress, while the preferences of the remaining voters were somehow distributed between the two parties. As a party dominated only by Scheduled Castes, the BSP was preferred by only 20% of the electorate and so was clearly not in a winning position. However, in a fight between two evenly matched candidates, Scheduled Caste voters had a reasonable expectation of getting Congress to lose the election by voting for the BSP. In this case, counting heads revealed that they had a reasonable expectation of exercising leverage. In similar fashion, Scheduled Caste voters might also be able to formulate reasonable expectations about when their numbers would not be sufficient even to produce leverage.

III. "Leverage" and Scheduled Caste Voting Behaviour

In this section, I present one test of the model of strategic voting, based on constituency-level voting patterns among Scheduled Castes in three consecutive elections for the state legislative assembly between 1984 and 1991. In each of the three elections between 1984 and 1991, the BSP had no prospect of obtaining power at the state level in Uttar Pradesh. It did not form an electoral alliance in any of these elections, and without an electoral alliance, it could not win. The Scheduled Caste population, which was its principal target constituency, is simply not

[40] 1931 Census figures, from Hasan (1989)
[41] Interview, Chandigarh, February 11 1997

numerous enough to get a party dependent mainly on Scheduled Caste votes past the minimum winning threshold in any constituency. However, the Scheduled Caste population was large enough to exercise leverage in several constituencies. If Scheduled Caste voters were voting strategically, therefore, we should see a significantly larger proportion of Scheduled Castes voting for the BSP in constituencies where they expected to exercise leverage than in constituencies where they did not. If they were voting expressively, on the other hand, there should be no difference in the level of Scheduled Caste support for the BSP in constituencies where they expected to exercise leverage and constituencies where they did not. The remainder of this section conducts this test.

I obtain estimates of constituency-level voting behaviour among Scheduled Castes using EI, the method of ecological inference developed by Gary King.[42] EI is a method of estimating voting behaviour of groups in each constituency separately by borrowing strength from aggregate data on demography and voter turnout for all constituencies taken together. The appendix provides describes the method, and provides information about how to evaluate my use of it here.

The dataset I use here is comprised of electoral variables, variables coding the ethnic identity of BSP candidates, and demographic variables for the 425 legislative assembly constituencies in the state of Uttar Pradesh for the 1984, 1989 and 1991 legislative assembly elections. The electoral data was compiled from official reports published by the Election Commission of India and also from BSP official publications.[43] Data on the ethnic identity of BSP candidates for each election were compiled by me through interviews. Data on demographic variables at the constituency level in India are normally unavailable, with one important exception: Following the delimitation of constituencies in 1976, the Election Commission of India published figures on the percentage of Scheduled Castes in each constituency. The dataset also includes, therefore, constituency level demographic data on the percentage of Scheduled Castes. Data on all other demographic variables are available only for the "district," which in India is a census unit that does not coincide with electoral constituencies. Each district, however, perfectly contains between 1 and 14 assembly constituencies. For each constituency, therefore, I use data on demographic variables from the district to which it belongs as a rough indicator of the demographic profile of the constituency.

In order to test this hypothesis, I first categorize each constituency in each election according to whether Scheduled Castes have a reasonable expectation of leverage or not. The measure of leverage L_{it} that Scheduled Castes have in Constituency (i) for an election at time (t) is as follows:

$$L_{it} = X_i - M_{(it-1)}$$

where X_i is the percentage of Scheduled Castes in the electorate of constituency(i) (which remains constant across elections), and $M_{(it-1)}$ is the margin of win in constituency (i) in the previous election (i.e. Winner's vote share – Runner Up's vote share in constituency (i) in election at time (t-1)). I treat the margin of win in the previous election as an indicator of the likely distance between the winner and the runner up in the current election. This assumes that the structure of party competition and the relative strength of each party in each constituency is roughly constant across elections, While this assumption may not always hold in practice, it is the

[42] King(1997).

[43] Since the BSP was not officially registered in 1984, BSP candidates are listed as "independents" in the official results. I used the March 1986 issue of *Oppressed Indian*, an internal party publications to match the identity of "independents" with BSP candidates.

analyst's best guess of how close the race is likely to be in the current election in the absence of detailed information on a constituency-by-constituency basis. Where the percentage of Scheduled Castes in the constituency equals or exceeds this margin (L_{it} >=0), they can reasonably expect to affect the electoral outcome through coordinated action. Where the percentage of Scheduled Castes in the constituency is below this margin (L_{it} <0), they do not have a reasonable expectation of affecting the outcome even through coordinated action.

I pool the data across elections in order to increase the number of observations. In order to control for other variables which might affect support for the BSP among Scheduled Castes, I then restrict this pooled sample in three ways.

First, I select only those constituencies in which the BSP is fighting at least its second election. In the first election in any constituency, the BSP is likely to be organizationally weak, and may not have had sufficient time to transmit information about itself to Scheduled Caste voters. By the second election, however, the BSP has acquired an electoral history in the constituency as well as a minimum of at least five years to build its local party unit and organize voters. This selection criterion, therefore, controls us to control for variation in the organizational strength of the BSP.

Second, I select only those constituencies in which Chamars, the Scheduled Caste category best represented in the BSP, are in a majority. The category 'Scheduled Caste' is an aggregate category comprised of a collection of caste groups. Of these groups, "Chamars" are better represented in the BSP than any other Scheduled Caste category. In an unrestricted sample, evidence of strategic voting would be less convincing, since it could be attributed to the behaviour of underrepresented Scheduled Castes who in any case have less reason to behave expressively. Restricting the sample to Chamar majority constituencies, however, allows us to conduct a stronger test of strategic voting by determining whether or not substantial numbers of even the best represented caste categories vote strategically rather than expressively.

Third, I restrict the sample to those constituencies in which the BSP fields a Scheduled caste candidate. This restriction allows us to control for possible effects on the Scheduled Caste vote introduced by fielding local candidates from a different caste category. It also permits more reliable estimates of Scheduled Caste voting patterns (see Appendix for details).

The restricted sample is then split into two. Sample One consists of constituencies where Scheduled Caste voters exercise no leverage (i.e. $L_{it} < 0$). Sample Two consists of constituencies where Scheduled Caste voters exercise leverage (i.e. L_{it} >=0). Scheduled Caste voters across the two samples do not differ in any other significant way. Had reliable demographic data been available at the constituency level, we could have controlled directly for the influence of these demographic variables through regression analysis using constituency level data. However, in the absence of such data, we can ascertain whether or not Scheduled Castes in the two samples differ by looking at the demographic profiles of Scheduled Castes in the districts (the census units) from which the constituencies are drawn. The table below summarizes the demographic profile of Scheduled Castes across districts included in the two samples:

Demographic Profile of Scheduled Castes Across Samples (District-Level Data)

	% Literate	% Urban	% Cultivators	% Labourers	% in Trade or Commerce
Sample 1 $L_{it} < 0$	24.24	16.42	10.37	12.45	.82
Sample 2	22.51	13.81	11.35	13.34	.71

L_{it} >=0					

Source: *Census of India 1991*

As the table indicates, there is no substantive difference between the demographic profile of Scheduled Castes in the two samples. Nor is there any geographical variation between the two samples. Constituencies that belong to the same districts and the same geographical regions found in both samples.

If *all* Scheduled Caste voters were voting strategically, and *all* Scheduled Caste voters had perfect information, then no one should vote for the BSP in Sample 1 (L_{it} <0), where the BSP has no leverage, and everyone should vote for the BSP in Sample 2 (L_{it} >= 0) where the BSP has leverage. However, it is unlikely that all voters should behave in this fashion. We might expect some critical mass of voters in each constituency, composed mainly of party activists, to be expressive voters, who should vote for the BSP in any case. Second, those Scheduled Caste voters who are economically better off and not subject to the costs described earlier might also vote for the BSP when it is not likely to exercise leverage. Third, those Scheduled Caste voters who reside in constituencies where the law and order machinery has established a reputation for safeguarding the secret ballot may also vote expressively since they can practice deception without fear of the consequences. And finally, we might expect some strategic voters to simply miscalculate, given the prevailing uncertainty about electoral outcomes.

However, if substantial numbers of Scheduled Castes are voting strategically, then there should be a substantial difference in the *mean percentage of Scheduled Castes* voting for the BSP across samples. The mean vote for the BSP among in Sample 2 (L_{it} >= 0) should be significantly higher than in Sample 1 (L_{it} <0). In addition, there should also be a substantial difference in the *percentage of constituencies* in which the BSP wins the support of a majority of Scheduled Castes across samples. The percentage of constituencies in which the BSP wins majority support among Scheduled Castes in Sample 2 (L_{it} >= 0) should be significantly higher than in Sample 1 (L_{it} <0). On the other hand, if Scheduled Castes are voting expressively, then there should be no significant difference in either quantity across samples.

The table below summarizes the differences in the two quantities of interest across samples, based on EI estimates.

Leverage and Scheduled Caste Voting Behaviour

	N	Mean Percentage of Scheduled Castes voting for the BSP	% of Constituencies in which a Majority of SCs vote for the BSP
Sample 1 (BSP has no leverage)	34	40.4%	35%
Sample 2 (BSP has leverage)	87	51.1%	46%
Difference in Means		10.72%	11%
Level of Significance (One tailed test)		.05	.05

The data indicate that in fact the percentage of Scheduled Castes voting for the BSP in those constituencies in which it has leverage is higher by 10% than in those constituencies where it does not. The percentage of constituencies in which the BSP obtains the support of a majority of Scheduled Castes is also considerably higher in those constituencies in which Scheduled Caste

voters exercise leverage than where they do not. In both cases, the differences are significant, substantively and statistically (at the .05 level). The data therefore lends some support to the hypothesis that substantial numbers of Scheduled Caste voters are voting strategically.

IV Issues to Raise at LICEP

I raise some questions related to this test below, but would welcome all comments and criticisms related to the model or the empirics.

1. Even though there is a substantial difference in Scheduled Caste voting patterns in constituencies where the BSP has leverage and where it does not, we see that even in those constituencies where the BSP clearly has no chance of winning the election or influencing the outcome, substantial numbers of Scheduled Castes vote for the BSP anyway. I would welcome feedback on how to interpret this.

2. Survey data is not available for Scheduled Caste voting behaviour for these elections. What other tests and sources of data would help to investigate constituency-level strategic voting among Scheduled Castes.

3. Are there other cases you know of where the data would permit an investigation of strategic voting among ethnic groups at the constituency level? EI may not in many cases be a reliable method of collecting data on ethnic voting patterns, and the scarcity of data is a real problem when I think of whether and how to investigate this argument cross-nationally.

4. There are particular problems and possiblities raised by using EI to generate estimates for an analysis of strategic voting and for the study of ethnic politics generally. I summarize these in the appendix, and would like to discuss them with others interested in using this method, either during LICEP or later on e-mail.

APPENDIX
Description Of The Ecological Inference (EI) Method

The purpose of this appendix is to provide the reader with sufficient information on EI to evaluate the method with which I arrive at the estimates of Scheduled Caste support for the BSP (Section I); to evaluate the use of these estimates for the second stage analysis of strategic voting (Section II); and to underline the possibilities for research on ethnic politics created by EI (Section III).

I Use of EI to Generate Constituency-Level Estimates of Scheduled Caste Voting Behaviour[44]

The ecological inference problem that I address here is how to estimate the proportion of Scheduled Castes who voted for the BSP in each constituency. King's method solves this problem in two iterations. In the first iteration, it is used to estimate the proportion of Scheduled Castes who turned out in each constituency. The logic of the method is as follows: For any constituency, we can compute deterministic bounds on turnout rates for Scheduled Castes and non-Scheduled Castes in the population. Once we have these deterministic bounds for each constituency, EI computes a probabilistic model for where the turnout rates are likely to lie by "borrowing strength" from all constituencies in order to produce estimates for each. Using King's notation, the ecological inference problem at Iteration 1 is as follows:

Iteration 1:

	Vote	~ Vote	
SC	β_i^b	$1-\beta_i^b$	X_i
~SC	β_i^w	$1-\beta_i^w$	$1-X_i$
	T_i		$1-T_i$

X_i = Proportion of SCs in the electorate in constituency i
$1-X_i$ =Proportion of Non-SCs in the electorate in constituency i
T_i =Proportion of electors who turn out to vote in constituency i
$1-T_i$ = Proportion of electors who do not turn out in constituency i
β_i^b = Proportion of Scheduled Castes who turn out in constituency i
$1-\beta_i^b$ = Proportion of Scheduled Castes who do not turn out in constituency i
β_i^w = Proportion of Non-Scheduled Castes who turn out in constituency i
$1-\beta_i^w$ = Proportion of Non-Scheduled Castes who do not turn out in constituency i

The known quantities at Iteration 1 are X_i (the proportion of SCs in the electorate) and T_i (the proportion of all voters who turnout). In this iteration, we use EI to estimate β_i^b (the proportion of Scheduled Castes who turnout) and β_i^w. All other quantities in this table can be calculated from these four.

The proportion of Scheduled Castes voters (i.e. electors who turned out) who voted for the BSP is then calculated in the second iteration. The estimates of β_i^b and β_i^w enter the second iteration as follows:

[44] This section is based on King (1997), especially Chapters 1, 6 and 9.

Iteration 2

	BSP	Non-BSP	Subtotal
SC	λ_i^b	$1-\lambda_i^b$	β^b
Non-SC	λ_i^w	$1-\lambda_i^w$	β^w
	D_i		T_i

λ_i^b =Proportion of Scheduled Castes who vote for the BSP in constituency i
$1-\lambda_i^b$ =Proportion of Scheduled Castes who vote for non-BSP parties in constituency i
λ_i^w =Proportion of Non-Scheduled Castes who vote for the BSP in constituency i
$1-\lambda_i^w$ = Proportion of Non-Scheduled Castes who vote for non-BSP parties in constituency I
T_i = Proportion of All Voters who turn out in constituency I
D_i= Proportion of All Voters who vote for the BSP.

This second iteration of EI gives us the ultimate quantities of interest: λ_i^b (Proportion of Scheduled Castes who vote for the BSP in constituency i) and λ_i^w (Proportion of Non-Scheduled Castes who vote for the BSP in constituency i).

a Assumptions of the EI Method

The method is based on three assumptions, which I address at some length below, since they are important to understand in assessing the reliability of the estimates and of the use of EI estimates in models of strategic voting:

First, the method assumes that β^b and β^w and λ_i^b and λ_i^w are generated from a truncated bivariate normal distribution. In other words, in the first iteration, it assumes that Scheduled Caste turnout rates do not differ systematically across different clusters of constituencies. In the second iteration, similarly, it assumes that the proportion of Scheduled Castes who vote for the BSP does not differ systematically across different clusters of constituencies.

Second, EI assumes that there is no aggregation bias in the data. In other words, it assumes that the percentage of Scheduled Castes who turn out in each constituency is independent of the percentage of Scheduled Castes in the electorate. Further, it assumes that the percentage of Scheduled Castes who vote for the BSP in each constituency is independent of the percentage of Scheduled Castes who turn out.

Third, EI assumes that there is no spatial dependence between constituencies. In other words, the percentage of Scheduled Castes who turn out and vote for the BSP in any given constituency is independent of the percentage of Scheduled Castes who turn out and vote for the BSP in proximate constituencies.

Violations of the third assumption are inconsequential. However, violations of the first two, if not corrected for, are likely to produce estimates that are both biased and imprecise. King outlines a series of diagnostics to detect violations of the method's assumptions and a series of methods to address such violations.

b Procedure for Obtaining EI Estimates

EI diagnostics for the data I use here do not reveal violations of either of the first two assumptions. However, the capacity of the diagnostics to reveal violations depends upon the quality of the data. This dataset has a narrow range on X: in other words, the percentage of Scheduled Castes in each constituency varies within a limited range, and rarely goes above 40%. With such datasets, King warns that EI may not perform very well, since the data is not good enough to reveal violations of the method's assumptions. In fact, running the basic model produces aggregate estimates of Scheduled Caste turnout rates that are substantially lower than the survey estimates that I use to check EI results. If the aggregate estimates are biased, then the constituency level estimates are clearly biased as well. The bias in the estimates produced by the basic EI model indicate that the data violates one or more of its basic assumptions even though the diagnostics do not reveal such violations.

I correct for these violations by using survey data to suggest the extent of aggregation bias and running an extended model which takes this bias into account. By pooling survey data from the 1996 and 1997 Exit Polls in UP and Punjab, I obtain constituency-level estimates of turnout rates among Scheduled Castes based on between 100 –200 individual observations for reach of 66 constituencies. Running a bivariate regression on the percentage of Scheduled Castes and the turnout rates revealed across these 66 constituencies provides a quantitative measure of the correlation between X_i and βi. I include this correlation in the extended model. The scatterplots of X_i and T_i with maximum likelihood contours superimposed, and tomography plots, indicate that the model fits the data (I'll bring hard copies of these along with me to the meeting).The aggregate estimates produced by the extended model approximate the estimates in the survey data, thus suggesting that the constituency-level estimates are more reliable. Further checks using ethnographic data for 8 constituencies in Uttar Pradesh indicate that the estimates produced by the extended model are reliable. However, while the estimates for non-Scheduled Caste turnout rates are relatively precise, the estimates of Scheduled Caste turnout rates are highly uncertain.

Once constituency-level turnout rates have been generated in the first iteration of EI, I use additional qualitative information to estimate the proportion of voters who voted for the BSP. Evidence from interviews with BSP candidates and activists, indicates that most BSP votes came from Scheduled Caste voters. This information is reliable for two reasons: the BSP is an ethnic party that relied heavily during its 1989 and 1991 election campaigns on a strategy of polarization that identified upper castes as the enemy. We can reasonably assume, therefore, that no upper castes voted for the BSP in those elections (although this would not be true of more recent elections). Secondly, although the BSP attempted to include other minority groups (Muslims and backward castes) in its projected electoral coalition, BSP workers readily admit that they were not successful in the initial stages. According to these candidates and activists, where the BSP put up Scheduled Caste candidates, they obtained the support only of Scheduled Caste voters. And where they put up non-Scheduled Caste candidates, they obtained mostly Scheduled Caste votes, coupled with an additional margin from those who shared the ethnic identity of the candidate. In general, BSP workers have every incentive to over-report their level of support among non-Scheduled Castes to an interviewer in order to present the party as more socially inclusive and successful than it is on the ground. The widespread and repeated admission of failure, therefore, should be treated as especially reliable. Based on this additional qualitative information, we know that λ_i^w is close to zero.

However, EI does not permit the user to set a limit on the value of λ_i^w. Rather than run the second iteration, therefore, I simply set $\lambda_i^w=0$ and calculate λ_i^b (the proportion of Scheduled Castes voting for the BSP) by calculating the total votes obtained by the BSP as a proportion of the total number of Scheduled Castes who turned out. Although this procedure might generate overestimates of Scheduled Caste support for the BSP in those constituencies where the BSP has fielded a non-Scheduled Caste candidate, it is still better than running the second iteration of EI, which would certainly produce higher values values for λ_i^w and lower values on λ_i^b than we know are reasonable. The uncertainty estimates for λ_i^b are identical as for β_i^b. The uncertainty of these estimates should be taken into account in evaluating the test of strategic voting in this paper.

II. Using EI Estimates in A Second Stage Analysis of Strategic Voting

There is a logical contradiction in using EI estimates to test for strategic voting. In this section, I describe this contradiction and the way in which I have addressed it here.

If substantial numbers of Scheduled Castes are voting strategically in the manner I have described, then the data is likely to violate both the distributional assumptions of the EI method, and the assumption of aggregation bias. If Scheduled Castes are voting strategically, then we should expect that support for the BSP is systematically higher in those clusters of constituencies where it has leverage than where it does not. This violates the distributional assumption of the model. Secondly, if Scheduled Castes are voting strategically, then support for the BSP is correlated with the percentage of Scheduled Castes in each constituency. This violates the assumption of no aggregation bias. If not corrected for, EI would produce biased estimates. These estimates, input into a test for strategic voting, would not tell us very much.

The principal way in which to correct for these violations is to incorporate external information on Scheduled Caste voting behaviour. If we suspect strategic voting on the part of Scheduled Castes, then one solution suggested by King is to include a covariate that models the suspected relationship between X_i and β_i^b and then between β_i^b and λ_i^b in the first and second iteration respectively. However, the problem with this method, if we are interested in testing for strategic voting, is that we would then incorporate the same information into the production of our estimates that we want to test. In other words, the test for strategic voting at the second stage would be "rigged" because the estimates were produced by a process which already assumed that Scheduled Castes were voting strategically.

I address this contradiction here in two ways: First, I correct for possible aggregation bias in the first iteration not by incorporating any expectation about strategic voting on the part of Scheduled Castes but by incorporating independently generated information from survey data. This ensures that the estimates of Scheduled Caste turnout rates have been produced by a process independent of the hypothesis of strategic voting. Second, because I do not rerun the EI model to estimate the proportion of Scheduled Castes who voted for the BSP at the second iteration, but estimate this proportion through simple algebra, possible aggregation bias in the second iteration does not affect the estimates. In other studies that probe for strategic voting among ethnic groups, it is similarly important to use methods of correcting for model violations that are independent of the hypothesized voting behaviour.

III. Possibilities for Research on Ethnic Politics

King points to the general advantages of EI in all political science research where individual level survey data are unavailable or unreliable. In this section, I underline the particular advantages that EI has for investigations into ethnic politics.

The field of ethnic politics is particularly marked by a bias towards macro-studies that emphasise the importance of economic and historical forces in affecting ethnic mobilization but neglect the microprocesses which underlie these broad theories. This is in part due to the lack of micro-level data on how ethnic groups behave. The relatively recent development of the survey as a research tool means that survey data which would allow us to identify historical patterns in ethnic group political behaviour simply does not exist. And in many cases where surveys do exist, the size of the samples or the categories used do not permit analyses of the particular ethnic categories of interest. EI opens up significant possibilities for procuring data on ethnic participation and voting behaviour for micro-units across space and across time, which should lead to the development of better theory.

Secondly, EI may be an even better tool than survey data in allowing us to design tests of constructivist hypotheses of ethnic group behaviour. Surveys typically use identity codes for individuals which reflect the politically salient identity categories at the time the survey is conducted. For scholars interested in testing whether the salient identity categories themselves change across time and space, survey data is often of little use. EI, however, permits the researcher to impose the categories, and then probe to see whether certain categories reflect distinct voting patterns while others do not. The principal constraint on using EI to test constructivist hypotheses is whether demographic data is available on the categories of interest. But even with this constraint, it provides greater opportunities to explore such hypotheses than existed previously.

It is precisely because of these advantages that the problems in its application, documented in some detail in this appendix, deserve careful attention.

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