

Political Positions and Imitative Behavior

What determines people's political positions?¹ Two hypotheses have dominated the literature. On the whole, economists have emphasized self-interest (Stigler 1971; Peltzman 1980). But some (for example, Kau and Rubin 1979, 1982; Kalt and Zupan 1984) maintain that political positions are influenced by ideology. These economists base their ideology hypothesis in part on altruism (Kalt and Zupan 1984).

Both of these hypotheses have the same fundamental flaw. They both focus on the consequences of the policies that people advocate. In the Stigler and Peltzman models a person votes and advocates those policies that maximize his real income. We call this narrow self-interest. In the standard altruism models one is interested in voting to maximize some weighted average of the real income of oneself and others.

The problem with these hypotheses is the well-known free-rider problem. An individual's vote or advocacy usually has a miniscule impact on the outcome of any election. Therefore, for most people there are extremely small expected returns to advocating any policy through the impact of that policy on the advocate. While this observation has frequently been made by those exploring the determinants of whether one votes, only a few have seen its possible importance in determining how one votes or what one advocates (Kalt and Zupan 1984; Brennan and Buchanan 1984; Schuessler 2000). If the expected returns of the policy consequences of advocacy are so small, other returns from advocacy—the private returns—will dominate in determining behavior if such returns exist.

So what? Brennan and Buchanan (1984) argue that these private returns make it difficult to formulate predictions about the political process, since there are myriad sources for these returns. Not surprisingly, empirically oriented political economists have not accepted this invitation to close shop, especially since the standard self-interest model sometimes successfully predicts political behavior. But focusing on private returns need not lead to the abyss, nor to a rejection of the empirical successes of the narrow self-interest theory. Concentrating

on the dominant private returns allows one to construct a testable model with some implications similar to, and some quite different from, the narrow self-interest model.

The key point of this chapter is that political behavior can generate private benefits by helping people fit in with desired friends and associates. Political positions are then chosen not because these positions are the desired outcome for voters, but rather because one wants to associate with certain people and they have certain positions. People imitate others in choosing political positions. To put it in terms used by Brennan and Buchanan, people cheer for causes that others important to them are cheering for. The interaction between positions chosen for this reason and positions chosen for income-maximizing reasons, then, leads to many interesting testable implications.

The narrow self-interest model also fails empirically in some major ways. Across the globe some of the biggest political clashes are between ethnic or religious groups rather than economic groups. For example, poor Protestants in Northern Ireland tended to support the Unionist cause in spite of the higher average income of Protestants. The imitation hypothesis easily explains this phenomenon.

The classic work of Berelson, Lazarsfeld, and McPhee (1954) provides a *prima facie* case for imitation in political positions. They find that a person's political position was closely related to the political position of family, coworkers, and friends. Of course, this could be attributable to the fact that a person shares common characteristics with these groups, and Berelson et al. did not use appropriate statistical tools to control for this effect. However, in their results the effect of associates is very much larger than the effect of common characteristics. In consequence, if such tools had been used, one would not expect the common-characteristic effect to eliminate the imitation effect.

Conceivably, their results could be explained by people choosing associates for their political views rather than vice versa. However, it is hard to see how the former could exist without the latter. If people choose associates for their political views, it pays people to develop political views that will get them chosen by those whom they prefer. Berelson et al. provide direct evidence of this revision of political views in response to the views of friends. They find that where a voter's friends had the same party preferences as he did initially, he was much less likely to change his preference than when the party preferences were different (5 percent of 416 voters in contrast to 9 percent of 69 voters). In spite of the few voters changing preferences, the difference is statistically significant ($t = 2.34$). Furthermore, this change in positions

cannot be attributable to changes in characteristics, so imitation seems the sole explanation for that result.

Imitation also seems responsible for “bandwagon” effects: one’s own position is a function of one’s perceptions of the position of others in general. One is more interested in imitating friends, but one is also concerned with general attitudes. For example, Marsh (1984) showed that an average person’s position on abortion was affected by being told differing stories on the trends in public opinion about that issue.

Many have claimed that imitation is a fundamental trait of human behavior, for example, Lumsden and Wilson (1981), Berelson (1964), Moschis and Moore (1979). Not only is it a trait common to all cultures, but one shared with many of our animal forebears. This suggests that at least the predisposition to imitate is an innate human characteristic. Economists, however, have done little with this idea. One exception, Becker (1971), has modeled the effect of imitative behavior on demand elasticities. The most compelling evidence for imitation as a general social phenomenon is the persistence of variation in customs across cultures like greeting rituals where that variation is not explicable by differences in economic conditions. How else could the customs be transmitted from one generation to another except by imitation, or “memes” (Dawkins 1989), the social equivalent of genes?

One of the reasons people imitate each other is to take advantage of their information. Some people know more than others. It makes sense for the latter to imitate the behavior of the former. In particular, it generally pays the young to imitate the old. Even among those with equal information, it often pays to imitate the group, since the group knows more than any one individual in that group.

The obvious other reason for imitation, of political positions in particular, is that people want others to imitate them. Why should a person care that he is imitated? And why should another person care that he cares? There is a payoff to reciprocal relations with others. That reciprocity often requires trust. We saw in the chapter 3 how one could signal trust by charity. But a person is interested not only in how trustworthy another person is in general, but how trustworthy that other would be toward him in particular. One way of providing that information is to imitate the behavior of the people with whom one is most interested in reciprocal relations.

As already discussed, it pays to have a reciprocity partner that most wants to be your reciprocity partner. Under those circumstances the

partner is most likely to reciprocate any favor. That a person signals that he wants to be your partner makes you want to be his partner. The imitation signal is “almost” self-confirming. When a person imitates your behavior, he is not imitating somebody else’s behavior. Assuming that both know of his behavior, it is believable that the person most wants to be a partner with the person that he imitates.

We expect this signaling model to successfully predict behavior even when signalers are unaware that they are conforming to the views of their desired associates. All that is required is that people, in fact, engage in this conforming behavior and that others care whether they conform to their views, even though they, too, might not know why they care.

“What constitutes good public policy?” is not an easily answered question. About the only relevant information that most people have in forming their beliefs is what others say. One gets *de facto* signaling as long as the relevant others are those with whom they wish to associate. Trial and error can lead to this signaling. Following this strategy, both the signaler and the recipient of the signal are rewarded by a better set of friends.

Asch (1963) provided evidence of the role of others in forming one’s beliefs under circumstances where that role was clearly not optimal for truth seeking. A substantially larger number of people denied the evidence before their eyes—large differences in the length of lines on a piece of paper—when all others denied such evidence in their presence than when none so denied it (32 percent compared to 1 percent). The Asch case differs from political positions in one important respect. Virtually everybody had the relevant evidence to determine the relative length of lines. In contrast, very few have the evidence to determine which political position is “correct” or how to even begin to define “correctness.” For most the only available option is to depend on the views of others to determine their political position. When in doubt, believe as others do.

But there is one important similarity between the two cases. In neither case did people receive a significant explicit reward for a “right” answer. In the Asch case there were no monetary rewards for correct answers. In the political position case one’s political position has virtually no impact on policies actually adopted. In both cases, then, there is little incentive to use other than the roughest rule of thumb in determining positions, especially when, as in the political position case, that rule of thumb generates larger returns to the individual in the form of

friendships and approval than would rules more appropriate for truth-seeking purposes.

In contrast to conscious maximizing behavior, such trial and error is guaranteed to produce only a local maximum (Elster 1984), and our signaling theory refers to a global maximum.² It is not surprising, therefore, that reality does not always agree with this simple theory. In particular, a person's beliefs are also a function of the beliefs of those with whom she wished to associate in the past.

That this behavior could arise is understandable. People have a conscience that involves the incorporation of the beliefs of others into their own beliefs. By its very nature a conscience is at least somewhat backward looking, since it has been formed by past associations. There was no selective pressure to make it more forward oriented. In the distant past, when preferences were being formed by selection, there was little social mobility and little migration other than group migration. Under those circumstances, present and past associates were virtually identical, except for births and deaths. Even now, there will be a close association between the beliefs of past associates and present associates, in part because a person tends to choose present associates from those who conform to his past beliefs. But there is currently enough social mobility and individual migration that lagged beliefs will play an important role in what follows.

The alternative imitation hypothesis is that people adopt the political positions of the more knowledgeable rather than those with which they most wish to associate. But surely, imitation for knowledge cannot be important for political positions. The low private payoff to more informed political positions implies little incentive for more knowledgeable voting (Downs 1957). Even for private behavior that does have costs, the young, particularly adolescents, often imitate each other, with whom they wish to associate, rather than more knowledgeable elders.

The most compelling case for imitation as either signaling or de facto signaling, as opposed to imitation for information, is that people really care about whether one imitates their political positions. That is a care that is hard to understand if one were simply providing information to others by one's behavior. This concern with other's political views makes much more sense if conformity is construed as a mark of friendship. Conservatives are not welcomed with open arms by many liberals and vice versa, as the typical university environment attests. But the belief that conformity is a mark of friendship is only self-sustaining if, in fact, it is such a mark.

The Multiplicity of Political Positions

Because political positions are determined in part by reputational motivations, the same person can have different political positions for different occasions: voting, talking to friends, talking to pollsters, and talking to a wider audience (Kuran 1995). These activities can differ either because reputation's importance differs among them or because the people according the reputation can differ. Each of these activities can have an effect on political policies. Political economists studying democracies have tended to stress the impact of voting because it ultimately determines whether politicians are elected or not. But the other activities are important in democracies as well. Polls help shape policy between elections by giving politicians a sense of the issues that ultimately determine votes, and public declarations of policy help influence the votes of others and the behavior of government officials. In the absence of democracy, voting no longer counts, but publicly expressed opinions still might.

Strictly speaking, our reputational theory is inapplicable to voting itself, since one cannot enhance one's reputation with anyone by a secret vote. Indeed, we do not test our theory with actual voting data, but use polling information instead. However, we believe that our general results also apply to voting in a somewhat attenuated form. As discussed in earlier chapters, there is a conscience cost of lying. Under usual conditions this provides an incentive to vote similarly to one's public statements about one's political position. In the no-lying scenario, one's public statements and one's voting are jointly determined. One's public statements will be influenced by the returns to voting particular positions, and one's voting will be influenced by the returns to making particular public statements.

No doubt there can also be a return from voting differently from the way one talks. If one has friends who verbally support different candidates, there is a return to verbally supporting the candidate of the friend with whom one is talking. Obviously, though, one cannot vote both ways. One must lie to at least one set of friends if one talks to both about candidates. Similarly, there is some incentive to lie to pollsters if one expects pollsters to have different views than one's friends.

In this kind of lying there is a fairly high probability of detection if the audiences communicate. The higher this probability, the greater the cost of lying. There is evidence for lying when the probability of detection is small. For example, Reese et al. (1986) found that answers to ethnically sensitive political and social questions depended

significantly on the ethnicity of interviewers as well as the ethnicity of respondents. The difference for interviewers was in the direction of trying to please both sets of interviewers. This is evidence that public statements about political positions are, indeed, influenced by the political positions of others.

Of course, the approved political position of employers or governments would also have a greater impact on self-reported votes, and the impact could be greater than on actual secret votes. For the United States this latter concern is not very important for most people because governments are usually not in a position to retaliate for “bad” voting, and employers are faced with roughly competitive labor markets. Such concerns certainly could be present in other political contexts.

Another source of lying in statements about political positions or voting is conscience. Conscience-determined political positions are largely produced by the approved political positions of past associates because conscience is largely the internalization of those views. The approved political positions of a person’s past can be different from the approved political positions of current associates. One might want to give greater weight to the former in voting than in discussions with current colleagues and friends. Even if a person lies about a vote determined by conscience, his vote will be affected by the views of others—past associates in this case rather than current associates.

There remains one other possible return to lying about how one voted. Desirous of the best of both worlds, people could talk about their votes to maximize their reputation while voting to maximize their narrow self-interest. However, for this process to operate, the returns from maximizing narrow self-interest must be greater than the costs of lying. In a large group setting, however, the obvious gain to voting one’s narrow self-interest is exceedingly small, and there are substantial costs to lying. So people’s votes and public pronouncements would be alike as far as narrow self-interest is concerned.

Kuran (1995) takes a different position. He posits an expressive utility return to voting that has two properties: (1) it is increased by voting to promote one’s self-interest over and above the direct self-interest returns of so doing, and (2) it is not very sensitive to the magnitude of the direct self-interest that one promotes by one’s vote. In consequence, despite the free-rider problem, there can still be a substantial expressive utility return to voting one’s self-interest.

Even if Kuran is correct, voting would still be affected by what others think, as long as some voters find the cost of lying greater than the returns to expressive utility. Two conditions are required for there to

be no connection between voting and what others think. First, there must be a “considerable” amount of lying if, as our evidence later shows, verbal political positions are dominated by what others think. Unfortunately, however, we do not know enough to specify more precisely what “considerable” means.³ Second, lying must be motivated by the expressive utility return from voting, since the other reasons for lying still produce voting determined by what others think.

Given the secret ballot, the only evidence about lying about how one voted comes from the difference between actual election results and polling information about those results. However, that difference is only an imperfect measure of the amount of lying. On the one hand, that difference could be attributable to causes other than lies about political positions. Polls are from a sample of voters, some of whom might lie about their own probability of voting. In consequence, some of the difference could be attributed to sampling variability and sampling bias. In addition, if there is a time gap between polls and voting, some people could change their minds. These problems are minimized with exit polls, in which only actual voters are queried immediately after they vote.

On the other hand, the difference between polling results and actual votes could understate the amount of lying. This difference would not catch lies about voting Democratic, say, if they were counterbalanced by lies about voting Republican. Only the difference between the number of those lies would show up in the difference in polls and actual votes. However, lying should be dominantly one-sided. To make their predictions more accurate, reputable polling organizations encourage their pollsters to question as neutrally as they can. As a result, polling respondents are unaware of the political proclivities of particular interviewers.⁴ In consequence, they can only respond to what they assume is the average position of interviewers. If, for example, they believed that that average position was pro-Democrat, only Republican voters would lie to hide their Republican vote.

Of course, voters could have different beliefs about the average position of interviewers. If that difference creates some incentive for both Republicans and Democrats to lie, the beliefs are not likely to stray very far from the belief in a 50 percent split among interviewers, especially when party affiliations are roughly equal. Given the cost of lying, it is unlikely that a Republican would lie that he voted Democratic when there is a probability close to .5 that his interviewer would also be a Republican.

For presidential elections in the United States the difference

between polls and election results is quite small. In the sixteen presidential elections beginning with 1940 the average difference between the Gallup Poll just before the election and actual election results was only 2 percent (Gallup 1999).

However, Kuran (1995) cites elections where there were disagreements between polling and election results. Racial issues were central to Kuran's two examples from the United States. Many lied because they thought interviewers would not approve of their alleged "racist" attitudes. In the New York City mayoralty race of 1989 between the white, Rudolph Giuliani, and the black, David Dinkins, the differences between pre-election polls and election results were from 12 percent to 16 percent, while the differences between election results and exit polls were 4 percent to 8 percent (Kuran 1995). In the 1990 Louisiana senatorial race featuring David Duke, of Ku Klux Klan fame, the difference between pre-election polls and election returns was 19 percent. Kuran provides no exit poll results, but, as discussed earlier, one expects the amount of lying thus revealed to be less than that implied by pre-election polls.

Lying for reputational reasons is likely to make verbal political positions that contain those lies more responsive to reputational variables than voting behavior. However, we do not know exactly how much lying is required for all of the verbal reputational effect to be attributable to lying. As discussed in note 3, we only have a fuzzy idea of the value of a key term required to make that determination: the percentage of voters who would vote the same way whether they were motivated by self-interest or reputation. We do not know whether 19 percent is sufficiently large or not, but it is unlikely that 2 percent is big enough. In the latter case the value of that key term must be 96 percent or more.

The presidential elections to which the latter number is relevant are important in themselves. Even if the percentage of lies estimated for them are completely unrepresentative of other elections, one would conclude that some important elections are affected by reputational variables, if polling data indicates that they are so affected. But we would expect the lying results for these elections to be closer to the typical election than the Kuran results. Kuran's purpose was to show that there existed elections where substantial lying occurred. In pursuit of that objective there was no need to randomly select elections. Rather, he chose those elections that he believed were dominated by lying. While presidential elections are not randomly selected elections either, the selection of those elections was determined solely by readily avail-

able data. As far as we know, there is no particular reason why presidential elections should exhibit less lying than most other elections.

Furthermore, it is not clear that the lying in Kuran's case was generated by self-interested voting. There is an alternative explanation. There is a well-established media bias in favor of most liberal causes, including more aid for blacks (Lichter, Rothman, and Lichter 1986, for example).⁵ In the absence of other information to the contrary, people's best estimate of average attitudes toward race is likely to be these attitudes displayed by the media. They would, then, expect the average pollster to also have these attitudes. But, because of the bias, these attitudes will be systematically more problack than those possessed by the average friend. But since one values friends more than pollsters, one's vote is more likely to imitate the former. This creates an incentive to lie to pollsters in political campaigns that focus on black issues.

We would expect less of this lying in presidential elections because people have better information about the relevant general attitudes than what the press tells them. Most would know that the electorate is roughly evenly split between Democrats and Republicans. Their best guess is that pollsters would have a somewhat similar split. Though they might like to please pollsters by their responses, they would not know how to do so. This same process is applicable to most of the other elections that pit a Democrat against a Republican. In consequence, our result of little lying in presidential elections seems applicable to most other general elections as well.

The evidence hardly compels in determining whether Kuran's self-expression variable has an impact on voting. There might very well be some difference between voting and public political positions attributable to the greater role of self-interest in the former. However, we expect no massive difference in the usual case. Since in the next two chapters we make a strong case for the important role of reputational variables in determining public political positions, that similarity of voting and public positions in the usual case implies that voting, too, will be affected by reputational variables, albeit indirectly and possibly with somewhat different values relative to the various regression coefficients.

The Model

To deal systematically with political positions it is necessary to quantify them. If there were but a single issue, such as total welfare expenditures, the issue itself would generate a simple metric. But with multi-

ple issues there are multiple dimensions. For our purposes, however, there is no harm in simplifying by working with a single dimension. (In any case, Poole and Romer [1985] provide evidence that the choices we will be analyzing are consistent empirically with a unidimensional approach.) We pretend, along with Peltzman (1980), that there is but a single issue: nondefense government expenditures with fixed proportions among its components and its financing. The political position of any person i , P_i , is measured by the amount of those expenditures that he advocates. S_i is defined as the amount of those expenditures that maximize his own self-interest. When examining alternative hypotheses, however, we look at some of the more obvious consequences of a multidimensional P_i and S_i .

Assume that (1) utility is a declining function of the difference between one's political position and someone else's, and (2) utility is also a declining function of the difference between the political position one adopts and one's income-maximizing political position. We assume that utility for the i th person takes the following explicit form:

$$U_i = c_i \sum w_{ij} (-(P_i - P_j)^2) h_i (P_i - S_i)^2, \tag{1}$$

where w_{ij} is the weight that i gives to imitating j 's political behavior with $\sum w_{ij} = 1$, c_i is the weight i gives to the weighted average of the squared differences between i 's position and that of others, and h_i is the weight i gives the difference between his position and his own self-interested position.

Maximizing U_i with respect to P_i ,

$$(1 + b_i)P_i = \sum w_{ij}P_j + b_iS_i, \tag{2}$$

where $b_i = h_i/c_i$, so his position will depend upon both the positions of others and his own self-interested position.

To get an explicit solution for the P_i , consider a simple case. Assume that b_i is the same for all i . Suppose that there are only two groups with n_1 people having $S_1 = 0$ and n_2 having $S_2 = x$. Assume further that all those in a group have the same w_{ij} .

Then, equation (2) becomes

$$\begin{aligned} (1 + b)P_1 &= (n_1 - 1)w_{11}P_1 + n_2w_{12}P_2, \\ (1 + b)P_2 &= (n_2 - 1)w_{22}P_2 + n_1w_{21}P_1 + bx. \end{aligned} \tag{3}$$

Given that the sum of the weights equals 1, the solution is

$$\begin{aligned} P_1 &= xn_2w_{12} / (b + n_2w_{12} + n_1w_{21}), \\ P_2 &= x(b + n_2w_{12}) / (b + n_2w_{12} + n_1w_{21}). \end{aligned} \tag{4}$$

If $w_{ij} > 0$ and $j \neq i$, $0 < P_1 < P_2 < x$. $P_1 < P_2$ is consistent with a simple narrow self-interest model. Those in each group take positions closer to the self-interested positions of each group. But the other part of the inequalities—a shift of political positions toward the mean—is not. It does not require preposterous assumptions about the parameters of equation (4) to obtain a substantial impact of the political position of others on one’s own political position. One needs simply a low b , the weight of narrow self-interest relative to imitation.

Suppose, for example, that $n_1 = n_2 = 5$, $b = .01$, $x = 1$, and $w_{ii} = 10w_{ij}$, $j \neq i$. (One observes association patterns by income consistent with a low w_{ij} relative to w_{ii} .) Then $P_1 = .478$ and $P_2 = .522$, much closer to the mean political position than to their respective self-interest political positions (0 and 1). Even if $w_{ii} = 100w_{ij}$, $j \neq i$, and all other conditions remain the same, $P_1 = .356$ and $P_2 = .644$.

While it appears likely that voter imitation is a powerful determinant of political positions, imitation is uninteresting as a predictor of behavior by itself. A voter imitates other voters, but at the same time they are imitating him. The political positions of others are endogenous variables. Imitation’s seeming emptiness is probably why an imitation model has not been emphasized in the voting literature. But there are exogenous variables in the system: the narrow self-interest of the participants. The resulting model, however, differs from a simple narrow self-interest model. The political positions of others affect the final results by making one’s political decision a function indirectly of the narrow self-interest of others as well as one’s own narrow self-interest. The existence of narrow self-interests as exogenous variables is crucial not only to political behavior but social behavior in general. In our simple model without narrow self-interest the reduced form would be indeterminate. Even in the more general model developed in the next chapter, variation in narrow self-interest is required to produce variation in political positions.

Imitation Theory

We believe the imitative component of this model is attributable to people signaling the group with which they most want to be friends. However, there is a problem with that attribution that must be addressed. The economist’s usual way of predicting behavior is by

finding an equilibrium solution, that is, a solution in which none of the participants has an incentive to change his own behavior. When a person signals, he is trying to influence the beliefs of others about his future behavior toward them. A signaling equilibrium, then, has two components: (1) the behavior of the signaler, and (2) the beliefs of the receivers of that signal. A signaling equilibrium requires that the signaler has no incentive to change his behavior given the beliefs of others, and that there is no reason for others to change their beliefs given the signaler's behavior. The latter condition will be satisfied when the actual behavior of the signaler is consistent with the beliefs that others have about his behavior.

Now, suppose that a signaler is behaving in terms of equation (2) and that others know the weight that the signaler places on the self-interest term relative to the imitation term ($b_i / (1 + b_i)$). Equation (2) can be a signaling equilibrium if the return to choosing a political position closer to one's narrow self-interest is sufficiently small because of the free-rider problem. Suppose, for example, that in terms of the units of our imitation model, trillions of dollars of nondefense government expenditures say, his narrow self-interest position is 20 and that of the friends he most desires is 10 and $b = .01$. His resulting political position is 10.1. However, his friends realize that that 10.1 means the friends he most wants have a political position of 10, not 10.1. The signaler has made no sacrifice of friendship by adopting a political position that reflects somewhat his narrow self-interest. Indeed, if the signaler chose a political position of 10, he would be signaling that the friends he most wants have an average political position of 9.9. Since the friends he most wants have a political position of 10, he is worse off in terms of his friendship by strictly imitating their behavior than by almost imitating them.

The signaler would be even better off in terms of his narrow self-interest if he had a higher value of b_i as long as others realized that he had a higher value. No matter what political position he adopts, they would know that his most desired friends had a political position of 10 and he would gain a miniscule amount by voting more in line with his narrow self-interest. But suppose that others believed his b_i equals .01. Then he cannot arbitrarily increase his b_i without considerable loss in desired friendships. Indeed, he will have no incentive to choose a b_i greater than .01 by even a small amount if, as we have assumed, the return to doing so is less than the cost of the resulting loss in friendship.⁶

This logic generates multiple equilibria. Whatever b_i others believe the signaler to be using is the b_i the signaler will use as long as the sig-

nalder knows what others believe. (This is a different meaning to b_i than given in the simple utility-maximizing model of equation (2).) History rather than signaling theory determines the actual b_i . We expect, however, the signaler to give a substantial weight to imitation ($((1 - b_i) / (1 + b_i))$). Imitation is the natural way to signal one's friendship, a way that operates in many contexts besides political choice.

Furthermore, a substantial weight to imitation is required for political choice to be a viable signaling device. The greater b_i , the greater the effect of signalers' perceptions of their own narrow self-interest on their behavior. But receivers of those signals will often know neither the self-interest of the signaler nor the signaler's perception of that self-interest. Nor will receivers be sure what b_i signalers are using. Given these information problems, signaling will only work if it can be applied in a simple way where the predominant component of the signal is the imitation component.

The more interesting question is why there should be a narrow self-interest component in the signal at all. We think the answer is "mistakes."⁷ In a small-group setting, it pays individuals to give some weight to their narrow self-interest in their choices. It would not be surprising if individuals would do some of the same, at least initially, when making political choices in a large-group setting. But contrary to most processes, such "mistakes" are not eliminated over time because they are costly. As long as others expect such "mistakes," that expectation is built into how others interpret the signaler's behavior. The average level of the "mistakes" signalers have made determines the b_i receivers expect. It, therefore, pays signalers to make this average level of "mistakes" in the future.

The emphasis in this chapter is on the imitation effect both because of its importance and because of its neglect in the literature. However, we also save narrow self-interest from the theoretical inadequacies of the standard economic model. The free-rider problem destroys narrow self-interest as a motivation for how one votes. But with signaling, people might very well give some weight to narrow self-interest in voting because others believe that they are doing so.⁸

Implications: Self-Interested Behavior

The imitation model shares a common implication with narrow self-interest. Those who have a self-interest in supporting greater government expenditures will do so more than those who do not. From equation (4),

$$P_2 - P_1 = bx / (b + n_2w_{12} + n_1w_{21}) > 0. \quad (5)$$

From the definitions of x , $S_2 - S_1 = x > 0$. Hence, the differences in political positions conform to the differences in self-interested positions. Since both this prediction and the kind of results discussed in this section have appeared in the literature, neither is great news nor a distinctive feature of our model. There are two reasons for discussing these findings at this point. First, doing so provides a simple way to introduce variables that play an important role in subsequent tests. Second, it is not unimportant that these roughly familiar results can be predicted from a model that does not rest on the shaky foundations of narrow self-interest in a large group setting.

To test for self-interested behavior it is necessary to have an empirical measure of political positions and to specify independently of voting behavior what constitutes the self-interest of particular voters. Since Peltzman (1984, 1985), Kau and Rubin (1982), and Enelow and Hinich (1984) found Republicans supporting less government redistribution, one can use the Republicanism of voters as a measure of their opposition to such programs. Along with observations from 15,125 individuals on other variables over the period 1972–86, NORC (1986) provides data with seven levels of that variable: strong, moderate, and weak levels of support for Republicans and Democrats, respectively, and independents. The most obvious way to scale this variable is strong Democrat = 0; not very strong Democrat = 1; independent close to Democrats = 2; independent close to neither party = 3; independent close to Republicans = 4; not very strong Republican = 5 strong Republican = 6. We call this measure *RN*.

While obvious, this scaling is also somewhat arbitrary. Party identification is of interest because it can help predict the behavior of voters. If the difference between strong Democrat and not very strong Democrat has half the impact on electoral decisions of the difference between not very strong Democrat and independent close to Democrats, that difference should be scaled by half as much. We devised another scaling, called *R*, based on that principle.⁹

Following the lead of many economists, we measure self-interest monetarily. Using such a measure, Peltzman (1985) provides evidence that the losses from redistribution rise with income. Even though there are other components of self-interest, there is no reason to believe that their existence would invalidate the relationship between income and losses from redistribution.

The job of determining other gainers and losers from redistribution is more difficult. Fortunately, a careful specification is not required for the implications we examine here. Nearly all our tests use just the income variable. We roughly guess at other gainers from redistribution: those receiving government aid; those in industries that expand as a result of government redistribution (education, public administration, health and hospitals); those not employed full-time, the unemployed (on the assumption that they are more likely to be unemployed now or in the future and receive government aid); and those who are not self-employed (on the assumption that the business taxes that the self-employed pay are not all immediately collected from others through higher prices). In addition, we include union membership, since union interests have been served by those advocating bigger government expenditures, though we provide no explanation for that alliance.

The first column of table 5.1 tests self-interested behavior using regression results with the Republicanism of individual voters, measured by R , as the dependent variable. The coefficients of income and the other self-interest variables conform significantly to the predictions of both the narrow self-interest and the imitation models. The self-employed identify with the Republican Party. Those that are not fully employed, employed in "government industries," and those who are unionized identify with the Democrats.

Implications: Group Effects

Call groups for which w_{ii} in equation (3) is greater than w_{ij} , $i \neq j$ *association groups*. The imitation model predicts that individuals in association groups will vote in terms of the income of their group as well as their own individual incomes. With more high-income members in one's group, one has more of an incentive to imitate high-income behavior.¹⁰

To put this implication to work, one has to identify association groups. We claim that ethnic and religious groups are association groups in the United States. Both ethnicity and religiosity are salient characteristics in the United States determining associations whether or not there is some intrinsic requirement that they do so. As one can confirm by data on marriage patterns, actual probabilities of association are greater within ethnic and religious groups than between them. There should be a close relationship between these actual patterns of

TABLE 5.1. Regression Results and Related Data (t values in parentheses)^a

Independent Variables ^b	Dependent Variables ^c				
	Republican		Income	1909 Wages	
<i>Self-Interest</i>					
Income	.0240	(8.30)			
Self-employed	.0273	(5.03)			
Full-time employee	.0024	(.58)			
Government aid	-.0225	(-4.63)			
<i>Industries</i>					
College	-.0442	(-3.49)			
Other education	-.0196	(-2.89)			
Public administration	-.0129	(-2.18)			
Hospitals	-.0146	(-2.16)			
Union	-.0338	(-9.02)			
<i>Regions^d</i>					
NE	.0364	(3.54)	.1669	(5.34)	
MA	.0511	(7.09)	.1036	(4.73)	
ENC	.0213	(3.16)	.0474	(2.32)	
WNC	.0071	(.82)	.0270	(1.02)	
SA	-.0148	(-2.06)	-.0399	(-1.85)	
ESC	-.0320	(-3.41)	-.0522	(-1.85)	
WSC	-.0358	(-4.30)	.0233	(.93)	
MT	.0206	(2.01)	-.0075	(-.23)	
<i>City</i>					
Large standard metropolitan area (SMA): central city					
(SMA): central city	-.0548	(-6.78)	.0751	(3.07)	
Large SMA: suburb	-.0003	(-.05)	.3698	(15.71)	
Other SMA: central city	-.0371	(-5.42)	.0586	(2.84)	
Other SMA: suburb	-.0069	(-.97)	.2569	(11.94)	
Other urban	-.0127	(-2.30)	.0844	(5.04)	
<i>Ethnic</i>					
Africans	-.1231	(-14.60)	-.1572	(-6.16)	
Chinese	.1104	(2.30)	.2725	(1.87)	
Japanese	.0092	(.20)	.1002	(.70)	
Philippine	.0085	(.20)	.1690	(1.28)	
Indian	-.0054	(-.09)	.0472	(.27)	
Arab	-.0272	(-.38)	-.0727	(-.34)	8.12
Greek	.0942	(1.87)	.3166	(2.07)	8.41
Yugoslav	-.0309	(-.97)	.0609	(.63)	11.69
Spanish	-.0082	(-.35)	-.0514	(-.73)	10.51
Portugese	-.1102	(-2.72)	.1702	(1.38)	8.10
Hungarian	-.0568	(-2.52)	.1283	(1.87)	11.65
Russian	-.0262	(-1.40)	.2081	(3.66)	11.01
Lithuanian	.0280	(.88)	-.0729	(-.75)	11.03

TABLE 5.1.—Continued

Independent Variables ^b	Dependent Variables ^c				
	Republican		Income		1909 Wages
Rumanian	-.0173	(-.35)	-.2462	(-1.64)	10.90
Mexican	-.0268	(-1.90)	-.2660	(-6.21)	
Irish	-.0019	(-.27)	.1453	(6.73)	13.01
German	.0046	(7.45)	.1232	(6.50)	13.63
English	.0528	(7.74)	.2352	(11.53)	14.13
Scottish	.0560	(4.54)	.2367	(6.34)	15.24
Danish	.0407	(1.86)	.2680	(4.03)	14.32
Finnish	-.0502	(-2.30)	.0162	(.24)	13.27
Italian	-.0087	(-.89)	.0501	(1.67)	10.29
French	.0545	(3.97)	.1578	(3.78)	12.92
Belgian	-.0606	(-1.42)	.1776	(1.37)	11.01
Austrian	.0083	(.36)	.0959	(1.38)	11.93
Czechoslovakian	-.0155	(-.92)	.0167	(.32)	12.01
Dutch	.0630	(3.97)	.1416	(2.93)	12.04
Norwegian	.0517	(3.55)	.1969	(4.44)	15.28
Swede	.0327	(2.13)	.1090	(2.33)	15.36
Pole	-.0201	(-1.67)	.0727	(1.99)	11.06
West Indian	-.1069	(-3.71)	-.0971	(-1.11)	
Puerto Rican	-.0223	(-1.01)	-.3836	(-5.48)	
South, Central American	-.0057	(-.18)	-.0324	(-.34)	
Native Americans	-.0142	(-1.25)	-.1022	(-2.94)	
French Canadian	-.0039	(-.21)	.1142	(2.01)	10.62
Other Canadian	.0283	(1.21)	.1758	(2.47)	14.15
Swiss	.0561	(1.94)	.1238	(1.41)	12.61
“American”	-.0790	(-6.56)	-.1532	(-4.18)	
<i>Religions</i>					
None	-.0215	(-2.62)	.0363	(1.61)	
None—average ^d	-.0364	(-4.89)			
Catholic	-.0267	(-2.94)	.0263	(1.70)	
Catholic—average ^d	-.0656	(-12.96)			
Jewish	-.0799	(-3.47)	.4466	(10.08)	
Attendance: Protestant	.0036	(4.00)			
Attendance: Catholic	-.0052	(-3.61)			
Attendance: Jewish	-.0095	(-1.47)			
<i>Age</i>					
Age	-.0062	(-9.44)	.0584	(30.90)	
Age ²	.00006	(8.23)	-.0007	(-34.45)	
Age slope ^e	-.0012	(-9.41)			
Education	.0033	(4.07)			
Father’s education	.0031	(4.57)			
Mother’s education	.0015	(2.05)			
Sex	.0038	(.95)			
Year	.0015	(3.46)			
Intercept	.2444	(6.42)	-.3580	(-17)	
R ²	.1254		.1668		

TABLE 5.1.—Continued

Source: National Opinion Research Center (1986); Higgs (1971).

^aSample size: 15,125.

^bIndependent variables are defined as follows: Income = family income in a year divided by mean family income in that year. Quadratic, cubic and log income function were also tried. The squared and cubic terms were not significant and the log income terms worked no better than income. Self-employed dummy = 1 if person or spouse self employed. Full-time employee dummy = 1 if person was a full time employee. Government aid dummy = 1 if person or spouse received government aid in the last five years. Regions: Pacific is the region of comparison (NE = Northeast; MA = Mid-Atlantic; ENC = East North Central; WNC = West North Central; SA = South Atlantic; ESC = East South Central; WSC = West South Central; MT = Mountain). City: Rural is the city category of comparison. Ethnic: Ethnicity unspecified is the ethnic group of comparison. Religions: Other religions, mainly Protestant, is the religion of comparison. Attendance = Number of days attended church per year. The attendance variables are attendance times the appropriate religious dummy. Education = Year of school. A squared education term was also tried, but not found to be significant. Sex = 1 if male. Year = year of interview.

^cDependent variables are defined as follows. Republican = Republican Party identification, scaled by the 1976 presidential election. (For details see Nelson 1994.) The results are robust with respect to the scaling procedure. Income = family income defined in footnote b of this table. 1909 wages = Observed past income. See note 17 for chapter 5.

^dThe averages are not additional variables. They are the coefficient of the given religious variables taken at the mean level of church attendance for that group compared to the omitted group (Protestants) taken at the mean level of church attendance for that group.

^eSlopes are also not additional variables. Instead, they are combinations of the appropriate independent variables that yield slopes at the mean value of that independent variable.

association and the w for two reasons. First, actual associations are determined in part by the preferences measured by the w . Second, the very fact of association tends to produce a higher w . It pays to give greater weight to the political position of those with whom one might associate than to the position of others.¹¹

One can test the hypothesis that is the focus of this section: that people in high-income groups will have high R , holding constant their own income. The ethnic dummies in the Republicanism equation of the first column in table 5.1 provide a measure of the ethnic group's role in determining the political positions of individuals holding their own income and other individual characteristics constant. They are a measure up to an additive constant of the political position of the group that is not explained by individuals responding to their own individual characteristics other than ethnicity. This allows one to determine the indirect effects of those characteristics on the behavior of those with which they associate. For purposes of calculating these dummies, one wants to control for all the important individual characteristics that could influence an individual's vote. Hence, there is a rather large list of variables in the first column of table 5.1. One can relate these dummies to the average relative family income in the sample by ethnic

group—the second column in table 5.1.¹² The imitation model predicts that the regression coefficients of the ethnic dummies in the Republicanism equation (*B*) should be positively related to the value of these dummies in the income equation (*I*). Indeed, they are for a sample of thirty-seven ethnic groups.

$$B = .0041 + .1260 I \quad (6)$$

(−.537) (2.79) (*t* statistics in parentheses)

There are at least two alternative explanations for the relationship of these ethnic variables that flow from the narrow self-interest theory. First, the primary system insures that the party that specializes in the interests of low-income voters qua low-income voters will tend to be the advocate of their other interests. To succeed in a primary a candidate must appeal to the majority of his own party. For example, Democrats push black interests as well as the interests of those with low income because blacks constitute a larger proportion of Democratic voters than voters in general.

Probably the most important manifestation of that process is the lead of the Democratic Party in affirmative action and some kinds of civil rights legislation. A relatively few ethnic groups are purportedly beneficiaries of that legislation: blacks, Native Americans, American Hispanics, and Orientals.¹³ There is some question about whether those benefits are restricted to elites and whether on net Orientals benefited at all. However, it is likely that many within these groups believe they are beneficiaries, but it is unlikely that all believed themselves to be equal beneficiaries. Under these circumstances the best way to control for the possible affirmative action beneficiaries is to eliminate them from the sample.¹⁴ Then,

$$B = .0075 + .159 I \quad (7)$$

(−.69) (2.37)

A version of the altruism hypothesis also generates a relationship between group income and voting behavior. If, as Adam Smith (1976) believed, people give greater weight to the well-being of other people the more contact they have with them, they will vote in terms of group income as well as individual income. But this specification of the altruism model comes from a rather special theory of altruism, and it is based on observed behavior that is easily explained by the imitation model, used also by Smith.

Implications: Lags

The last section's result is not an overwhelmingly convincing verification of the imitation hypothesis, if one believes either the narrow self-interest or the altruistic model to be a viable alternative. There are specifications of those hypotheses that could lead to the same results. But the story is changed considerably when one talks about voting behavior as a function of group income sixty years in the past. All of the alternative hypotheses—self-interest and altruism alike—require group income to measure either the self-interested position of the group or the permanent income of the individuals in the group. Group income of sixty years ago will not serve as such a measure, especially when present group income is also included in the regression.

In contrast, long lags make sense in the imitation model, though are not required by it. Reasonable specifications of the imitation model generate long lags. Convert equation (4) to a set of simultaneous difference equations. Assume that people know the political position that maximizes their immediate narrow self-interest, but that they discover with a lag the political position of others.

$$\begin{aligned} (1 + b)P_{1t} &= (n_1 - 1)w_{11}P_{1(t-1)} + n_2w_{12}P_{2(t-1)}, \\ (1 + b)P_{2t} &= (n_2 - 1)w_{22}P_{2(t-1)} + n_1w_{21}P_{1(t-1)} + bx. \end{aligned} \quad (8)$$

Look at the case where a person associates exclusively with a dominantly high-income group. Assume, for example, that within the group $n_1 = 2$, $n_2 = 8$, $w_{ij} = 10w_{ij}$ $j \neq i$, $b = .01$, $x = 1$. But suppose that group was formerly a low-income group ($n_1 = 8$ and $n_2 = 2$). It takes seventy-three periods for both low-income and high-income members of that group to move their political positions halfway between their equilibrium low group income position and their equilibrium high group position.¹⁵ Equation (8) helps explain custom. A lag in people's perceptions of the views of others produces a slow response of their own views to changes in the self-interest of the group.

While this is just an example, equation (8) implies in general that lags will be shorter the larger b with no lags if $b = 1$. When there is a significant private gain to a behavior, b will be much greater. In consequence, we expect b to be smaller for voting and for mores formation than for activities related to the production process.¹⁶

Therefore, we expect greater lags in this voting case than in the usual economic problem. Since we do not know precisely how long a lag to expect, the imitation model itself does not provide any precise guide to

its length. Our choice of the lag period is, therefore, dictated by other considerations. We want to choose a time period sufficiently long that lags generated within the alternative hypotheses are unlikely to be observed, and that present and past group income are clearly distinguishable, and we must work within data constraints. The voting behavior observed is for 1972–86. The past year income chosen is for 1909. Our test will be of the imitation model with lags of sixty-three to seventy-seven years against the hypotheses of narrow self-interest, altruism, or the imitation model with much shorter lags.

We test the lag hypothesis using ethnic groups. We use as an imperfect measure of their past income the weekly wages of the foreign-born in 1909 by ethnic groups, as shown in the third column of table 5.1.¹⁷ Call these wages *PI*. Since there were no data for any of the affirmative action beneficiaries, we, of necessity, control for affirmative action by eliminating those groups. We get marginally significant results of *PI* on ethnic Republicanism.¹⁸

However, there is even more convincing evidence that some combination of past and present income helps determine Republicanism among groups. One obvious reason why the results were only moderately informative above is that the data forced use of 1909 income. Supposedly, the whole stream of past income is relevant with unknown weights. Present and 1909 income will not serve as adequate proxies for other years if the time path of income varies by ethnic groups. Furthermore, the appropriate weights for each year can vary by ethnic groups depending upon their own stream of immigration to the United States. This problem can pose insuperable difficulties in determining the precise role of past and present income separately.

But the problem can be overcome if one is simply interested in determining whether or not there is a combined effect of the two. Take, for example, the case of ethnic groups each of whose income relative to average income has remained constant over time. Then, one need not know the lag structure in order to estimate the combined effect of past and present income on political positions. While one cannot find any such groups, one can find groups whose relative income positions exhibit some stability over time. We ran a very simple test using this principle. We sorted ethnic groups by whether they had higher or lower than the median values of *I* and *PI* respectively. We then compared the mean of *B*, the ethnic dummy coefficients in the Republicanism equation, for those groups with high values of both *I* and *PI* with the mean of *B* for those groups with low values of both.

As shown in table 5.2, the difference between the two means was

.054, $t = 5.54$. With 14 degrees of freedom this is extremely significant. Furthermore, the data provide additional justification for this testing procedure. The categories of ethnic groups with unstable income—either low values of I and high values of PI or vice versa—should have more in-group variation in B attributable to variation in the lag structure of income paths than the categories of ethnic groups with stable income—either high or low values of I and PI . Indeed, this is the case. The ratio of the average value of the variance of the former to the average value of the variance of the latter is 9.92, significant at the .001 level. So a way of organizing data to determine if there is a combined effect of long past and present income can be used to show that both present and long past income are relevant in determining current political positions.

TABLE 5.2. Republicanism of Ethnic Groups Classified by Present and Past Income

High I , High PI		Low I , Low PI	
Irish	-.002	Yugoslav	-.031
English	.053	Spanish	-.008
Scottish	.056	Lithuanian	.028
Danish	.041	Arab	-.027
French	.055	Italian	-.009
Dutch	.063	Rumanian	-.017
Norwegian	.052	Pole	-.020
Other Canadian	.028	French Canadian	-.004
Mean	.043	Mean	-.011
σ	.0192	σ	.0172
High I , Low PI		Low I , High PI	
Greek	.094	German	.047
Portuguese	-.110	Finnish	-.052
Hungarian	-.057	Swedish	.033
Russian	-.026	Czech	-.016
Belgian	-.061		
Mean	-.032	Mean	.003
σ	.0685	σ	.0394

Note: Republicanism regression coefficients are from table 5.1.
 I = family income per family; PI = past family income per family; both as defined in Table 5.1. High and low determined by direction of deviation from their respective medians.

There is also evidence of lags of a different sort. Not only does the self-interest position of a group change over time, but an individual can change groups over time, though this is less true for ethnicity than other group identifiers. Past, as well as present, associations should have an impact on an individual's political position. This would be especially true of political positions that are generated by conscience: internalized social norms. An important part of that "social capital" is past associates. We find that both father's and mother's education have a significant positive effect on a person's Republicanism with coefficients of .0031 and .0015 respectively. The respective *t* values are 4.57 and 2.05. Of course, fathers and mothers are often still alive, so that some of this result can be explained by current association with parents. However, the order of magnitude of these results suggest that more is going on. The slope for father's education is virtually identical to the slope for the individual himself (.0033).

Similar results are obtained in chapter 8. Long past associations affect current political positions. City size and regions when the respondent was sixteen often play as big a role in explaining political positions as does current city size and region.

Expressive Voting

Others have rejected the narrow self-interest theory of voting for the same reason we did: the free-rider problem. They also have sought some private return to voting. Schuessler (2000) believes voting to be a search for "identity." Brennan and Hamlin (1998) maintain that that private return lies in the joy of actively cheering on one candidate or another. Voting is like rooting for one football team or another.

We believe that there is merit to this position, though it is ad hoc. There is often a fervor associated with voting, just as soccer fans often riot at the drop of a ball. But these "cheering" and "identity" theories don't get very far unless one has some idea about what the cheering and identification are all about.

Brennan and Hamlin posit that one cheers more for candidates whose political position is closer to one's own. Voting for a candidate is just a form of cheering, where the compensation for the costs of voting is the fun of cheering. This resolves the free-rider problem associated with voting, but does not explain how individual political positions are determined. Hence, their theory as developed is consistent with any theory about the determinants of political positions, but seems to have a natural fit with our theory of imitation.

Often we adopt behavioral rules that are sustainable because they achieve goals of which we are unaware. Cheering seems to be one such case. Cheering works because one's desired friends are cheering for the same candidate or team. Cheering is an emotional form of imitation. We believe that the implications of cheering are the same as the implications of imitation.

Brennan and Hamlin, however, believe cheering has implications that it does not have. They assume that one cheers because one identifies with a candidate, rather than cheering because one identifies with one's fellow cheerers. But look at team sports. In cheering Michael Jordan, Chicago Bull fans never questioned his Chicago roots. All that was important was that the Chicago Bulls were the *Chicago* Bulls. Few Chicago fans still cheer for him when his current team, the Washington Wizards, play the Bulls.

While Brennan and Hamlin are more interested in voting than sports fan behavior, their mistaken view about cheerer identification also leads to mistakes in predicting voting patterns. They believe that people are more likely to vote if they identify with the candidate. Since electoral success generally requires moderate candidates, they believe that extremists are less likely to vote than are moderates. As we saw in chapter 4, this can be rejected empirically.

Conclusion

The imitation model is better both theoretically and empirically than either the standard narrow self-interest or altruism models of voter behavior. In contrast to the other theories, the imitation model appropriately focuses on private returns to private actions rather than public returns. Empirically, the observed impacts of present and past group income on voting behavior are inconsistent with any version of narrow self-interest except imitation for information. That version of narrow self-interest has two problems: (1) the large group problem endemic to any narrow self-interest model of voting behavior; (2) a failure to explain why people vary their political position as the position of those to whom they talk varies.

The main empirical conclusion is that associations matter profoundly in determining voting patterns. Ethnic and religious groups, not including the beneficiaries of affirmative action, explain 32 percent of the explained variance of Republicanism, while the self-interest variables of table 5.1 and education (partially a measure of permanent

income) explain only 20 percent. (This latter number exaggerates the role of narrow self-interest, since many of the self-interest variables and education have another important role examined in the next chapter.) Imitation theory helps explain what the narrow self-interest model (except imitation for information) cannot explain—the large proportion of conflicts generated by ethnic and religious differences.