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The Nazi Vote: A National Ecological Study

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Two models of voting are often used to explain the Nazi vote in the Weimar Republic. The first model states that the Nazis' electoral successes resulted from Protestant petty bourgeois and peasant support for fascism. The second model argues that the Nazis gained the bulk of their support from newly mobilized voters. Previous analyses of these models are plagued with serious problems due to their limited data base. This study reassesses these models with the use of an unusually complete data set for all of Germany and concludes that much of the previous work examining the Nazi vote wrongly identifies the Protestant petty bourgeoisie as the major contributor to the Nazi vote. The Nazis received important levels of support from Protestant peasants, new voters, and Catholic petty bourgeoisie.

Since the end of World War II, a body of literature has developed which seeks to explain the rise of the Nazi movement in the Weimar Republic as a consequence of petty bourgeois and peasant support for the fascist cause. Virtually all of this literature argues that this support was located in Protestant areas of Germany. Another body of literature argues that the Nazis made their most impressive electoral victories by mobilizing previous nonvoters. Thus we have a middle-class model of the Nazi vote and a new-voter model of the Nazi vote. The arguments for both models, briefly reviewed below, have been based primarily on regional studies for small areas of Germany or on highly aggregated ecological studies.

This study examines the nature of these models and tests them with the use of an unusually complete data set for all of Germany during the Weimar Republic.[1] First, some of the major assertions frequently encountered in the literature on German fascism regarding the petty bourgeoisie and the peasants are recapitulated. Second, problems of methodology are set out. Third, an analysis is presented which examines closely the religious basis of Nazi voting for these same groups. Finally, the question of new-voter support for the Nazis is addressed directly according to the methodology of the previous section so that the competing models may be contrasted. Since the arguments for petty bourgeois and peasant support for the Nazis are both more complex and more heavily represented in the literature on Nazi voting, this study is predominantly a discussion of these two groups.

[1]The voting statistics were obtained from the Inter-University Consortium for Political and Social Research. Data set: *Germany in the Weimar Republic* (ICPSR 42), The Center for Political Studies, University of Michigan, Ann Arbor, Michigan. The occupational data were collected by the author from the *Statistisches Reichsamt,* June 1925 Census. The two data sets were then merged by the author. The merging and the analyses presented here were conducted on an IBM 350 computer using the Statistical Analysis System (SAS) statistical package.

Background

"Of all of Germany's socioeconomic groups, the business community, especially if we take it to include the electorally crucial economic 'middle class' of independents (*Middelstand*), such as shopkeepers or master craftsmen, assisted the Nazis most in seizing power" (Grunberger 1971, p. 167). This statement is characteristic of much of what is said about the role of the petty bourgeoisie in helping the Nazis to gain power. Perhaps the best known advocate of this middle-class model of fascism is Seymour Martin Lipset.

Lipset arrives at his conclusion through two methods. First, he examines the overall vote totals for major parties during the Weimar period and notes that the parties that supported middle-class interests lost votes when the Nazis gained votes (1963, pp. 57, 139). Second, Lipset refers to a number of studies, notably Heberle (1945) and Pratt (1948), which, although limited to specific areas of Germany, offer evidence of petty bourgeois support for the Nazis.

In Heberle's ecological study of political parties in Schleswig-Holstein's rural communities, rank-order correlations are used to indicate that the petty bourgeoisie voted against the leftist parties and for the Nazis (1945, p. 118). Loomis and Beegle use the same technique to find petty bourgeois support for the Nazis in both Schleswig-Holstein and Hannover (1946, p. 729). Again, the

study is confined to rural areas. The historian Godfrey Scheele notes that the Staatspartei, which evolved from the German Democratic Party and served primarily business interests, ended by providing the Nazis with electoral support (1946, p. 131). Of course, this began to occur when the Staatspartei progressively disintegrated. Finally, Juan Linz notes that owners of small- and middle-sized businesses supplied the Nazis with more than ten percent of their Reichstag members in the early 1930s (1978, p. 65). Generally speaking, throughout the literature the emphasis is on the Protestant petty bourgeoisie since it is held that the Catholic petty bourgeoisie were oriented more toward the Center Party.

Similarly, the relevant literature recognizes the direct and successful appeal made by the Nazis to the German peasantry. Hitler wrote, "For one thing, the possibility of preserving a healthy peasant class as a foundation for a whole nation can never be valued highly enough. Many of our present-day sufferings are only the consequence of the unhealthy relationship between rural and city population. A solid stock of small and middle peasants has at all times been the best defense against social ills such as we possess today" (1943, p. 138). Although Hitler succeeded overwhelmingly in appealing to Germany's peasant population, this did not occur until after 1928; except for the Center Party, the Nazis had it all to themselves in the rural areas. The competition with the Center Party and to some extent the Bavarian People's Party was one of the major reasons why the Nazis did less spectacularly in the Catholic south than in the north and northeast (Farquaharson 1976, p. 40).

In terms of actual peasant electoral support for the Nazis, Heberle finds that the small and medium farmers tended to support the Nazis in Schleswig-Holstein (1945, p. 114). McKibbin, drawing on Heberle's data, comes to the same conclusion (1969, p. 32). Loomis and Beegle find that in two predominantly Protestant areas, the medium farmers correlate positively with the Nazi vote (1946). Friedrich argues that part of this Protestant support resulted from an emotional mass nationalism in agricultural areas in the north and northeast (1937). Kosok has observed that before World War I, the peasants in these areas were generally pro-state and pro-war (1933, p. 67).

For purposes of comparison, it is useful to note the electoral role of the German working class. To begin, there was the "natural" appeal of the socialist parties to the workers. The Social Democrats were a major factor in Weimar politics as were the Communists, although to a lesser extent. Not surprisingly, Heberle finds that the workers in rural areas of Schleswig-Holstein opposed the Nazis and supported the socialist parties (1945, p. 118). Lepsius implies that some workers voted for the Nazis in protest against rising unemployment (1978), and unemployment and lower earnings certainly do not make a case for worker support for the Republic. Nonetheless, the emphasis in the literature suggests that the parties of the left retained their hard-core worker support (Grunberger 1971, p. 185; McKibbin 1969). Whatever loss of faith in the Republic the depression may have caused evidently resulted in a shift of votes from the Social Democrats to the Communists, not to the Nazis.

The new-voter model of the Nazi vote posits that the Nazis gained most of their support in the early 1930s from newly mobilized voters, who are seen to be formerly apathetic and nonpoliticized with little attachment to the democratic political processes of the Weimar period. These new voters were presumably driven to the ballot box by the economic dislocations characteristic of the times and the emotional appeal of the simplistic Nazi ideology. (See, for example, O'Lessker 1968.)

Methodological Problems

Some of the analyses of voting in the Weimar Republic presented below differ markedly from the results of previous work. These differences arise from methodological considerations and require brief elaboration.

The first problem is minor but can in some cases be significant. Nearly all of the relevant literature uses simple rank-order correlations to determine the nature of relationships which can often be quite complex. Thus, the methodology often does not match the complexity of the problems encountered with the result that a certain relationship may seem to exist when in fact a more sophisticated analysis would indicate a quite different relationship.

A related problem is that no more than two variables can be examined with one correlation statistic, but in addition to vote and occupation (or class), religion is a crucial variable, so a minimum of three variables are involved, yet only two can be treated. Thus, to control for religion, earlier studies have been based on data for particular regions within Germany which are known to be predominantly Protestant or Catholic, but not only do these regions often have uncharacteristic religious enclaves; the regions themselves are often not representative of Germany as a whole. This problem was noted by Shively in his study of party identification and voting stability during the Weimar Republic (1972, p. 1208). Possibly due to the cost of compiling the needed data set, no analysis has been attempted in which finely divided data for all of Germany were analyzed simultaneously.

What is perhaps more serious is that the most important studies of German electoral behavior have focused on rural areas within limited regions. For example, nearly all of Heberle's results for Schleswig-Holstein are drawn from eighteen minor civil divisions which are rural. His findings regarding the petty bourgeoisie are problematic since most of the petty bourgeoisie did not live in rural areas.

Heberle's analysis for the rural areas of Schleswig-Holstein is particularly important for a number of reasons. It was the first substantial ecological analysis of the Weimar period, and his results are regularly reprinted or referred to in the electoral literature that followed. Even Lipset's analysis of the middle-class nature of the Nazi party rests to some extent on Heberle's results (Lipset 1963, pp. 138-52). In short, Heberle helped to establish the relevant questions and hence much of the electoral literature on Weimar Germany has followed his direction. I hope to show that with regard to Protestant and Catholic petty bourgeois support for the Nazis, these directions were probably not well founded.

Another methodological problem is that of the data base used for analysis. Nearly all of the studies mentioned above are based on the geographical units called *Kreise*. These *Kreise* are minor civil divisions that the Germans used to collect and organize census material as well as voting results. There were over 1000 *Kreise* during the Weimar period, but they do not have even remotely similar populations. Some have populations of a few thousand, whereas others have many tens of thousands. The problem with virtually all of the electoral studies for the Weimar period which I have cited is that the data were not weighted by population when computing correlations. Thus, we have *Kreise* with only a few thousand inhabitants being counted equally with *Kreise* with much larger populations; this skews all of the results in favor of the less populated rural areas. The validity of generalizations made from such correlations must be considered dubious at best.

The final methodological problem worth mentioning is the very misleading character of regional studies of the Weimar Republic. Although there are strong general trends that do emerge from a truly national study, there is enough region-by-region variation so that a statistically significant case for virtually anything can be made with data for limited regions. For example, Loomis and Beegle report a positive correlation of .66 between the share of the Nazi vote and the proportion of the population which owns and operates an industrial or handicraft business for the region of Hannover (1946, p. 729). Here, Hannover is taken to mean the *Wahlkreis* called Weser-Elms, Osthannover, and Sudhannover-Braunschweig (a *Wahlkreis* is a collection of *Kreise* in an area of Germany). Yet if we look at the comparable unweighted correlation statistics for the individual *Wahlkreise,* we find that for Weser-Elms, the correlation is .39; for Osthannover, the correlation is -.14; and for Sudhannover-Braunschweig, the correlation is -.15, the last two of which are not significantly different from zero. Again, these figures refer only to the rural areas of these three *Wahlkreise.* If the data are weighted for population, and urban areas are included, the Pearson correlations for each *Wahlkreis* respectively become .09, .46, and -.15. It is important to note that Loomis and Beegle limited their analysis to the spread of Nazi support in rural areas, but the example does show that you get what you look at. If a specific area in the Republic is studied, it is difficult to generalize from the results beyond that area.

Similarly, Heberle finds a positive correlation of .63 between the share of the Nazi vote and the proportion of the population which comprises proprietors in industry, commerce, and transportation. For wage earners in agriculture, the correlation is -.78. For wage earners in industry, commerce, and transportation the correlation is -.53. Yet if the data for the urban areas are included and each *Kreis* is weighted by its population, the above three correlations become -.55, .62, and -.77. In one instance, Heberle's result is in basic agreement with my own, but in the other two instances, opposite results were obtained. In short, when a particular area in Germany is studied, sometimes the results reflect the general trend, but often they do not. Again, this is not to say that there are no strong general trends in the German data, but rather that these general trends can be derived with any certainty only from the data for all of Germany. It is that task that we can now address.

Data. The data used in this analysis are for the *Kreise* for all of Germany in the Weimar Republic. Each of the three occupational variables (owners and independent business people, salaried employees, and wage earners) are measured as proportions of the population within each *Kreise.* For brevity, I refer to these classifications simply as owners, white-collar workers, and blue-collar workers. The three sectors of the economy are agriculture, forestry, and fishery; industry and manufacturing; and trade and transportation. In studying the peasants and the agricultural proletariat we focus on the first sector. In studying the workers, we examine sectors 2 and 3, with the emphasis on 2. When studying the petty bourgeoisie, we examine sectors 2 and 3, with an emphasis on sector 3.

The voting variables are measured as proportions of the total population rather than proportions of the total vote because there are problems involving the theory of newly mobilized voters. As mentioned earlier, one of the theories explaining the Nazi electoral success states that previously apathetic and alienated voters were mobilized to vote for the Nazis (O'Lessker 1968). Evidence for this has focused on the rise in voting participation that occurred in July of 1932. Thus, it is possible that when the total vote increases, the share of the vote that goes to a particular party may decrease over time yet the number of votes remain relatively stable. Using the total population for each *Kreis* as the base of the proportions untangles this problem.

The religious variables, Protestant and Catholic, are measured as proportions of the total population.

Methodology. The methodology used in the analysis is a logistic technique. Since the dependent variable is a proportion, it can be given a probabilistic interpretation. For example, voting for the Nazis results in a binary outcome, i.e., an individual voter either votes for the Nazis or does not. Furthermore, each voter is placed within a given occupational and religious environment. Aggregating the total number of Nazi votes withn each *Kreis* and computing each associated proportion can be interpreted as proxying the probability of voting for the Nazis for a given voter within each case as conditioned by each particular environment (see Hanushek and Jackson 1977, p. 191; see also Theil 1970). The use of the population proportion as an estimate of a probability is further justified by the very large sample within each *Kreis*. Thus, we can form the log of the odds ratio in the standard manner as given in equation (1),

$$L = \ln(P/(1-P)) \tag{1}$$

where P is the proportion of the total population within each *Kreis* which votes for the Nazis and L is the dependent variable used in the analysis that follows.

One property of the logistic distribution is that the estimated probability of voting for the Nazis within any given *Kreis* is limited to the (0,1) interval. This estimated probability, P^*, is easily obtained after solving for P and is presented in equation (2),

$$P^* = 1/(1 + \exp(-BX)). \tag{2}$$

Here, B is a vector of estimates (including an intercept term) and X is the data matrix for the independent variables.

Two models are examined in this study using the logit as constructed in equation (1) as the dependent variable. The first is presented in equation (3):

$$L = b_0 + b_1\text{Occ} + b_2\text{Rel} + b_3(\text{Occ*Rel}). \tag{3}$$

In Equation (3), Occ is the proportion of the total population within each *Kreis* which has a particular occupation. Rel is the proportion of the total population within each *Kreis* which is Protestant. The second model in this analysis is given in equation (4).

$$L = b_0 + b_1\text{Occ} + b_2\text{Rel} + b_3\text{Urb} + b_4(\text{Occ*Rel}) + b_5(\text{Occ*Rel*Urb}). \tag{4}$$

In Equation (4), Urb is that proportion of the total population within each *Kreis* which lives in a town with a population greater than 5,000. Thus, a density measure is used here as an estimate of the degree of urbanization within each *Kreis*.

Before proceeding further, a few points should be raised concerning the religion variable. Note that the Catholic proportion of the population is defined as one minus the Protestant proportion of the population. Since nearly all Germans were affiliated in some way, if only nominally, with some church, this method is quite accurate. The following analysis was also run with the Catholic proportion of the population as the base. None of the results of this study was seriously affected in any way by this change. The proportion of the population which is Jewish is invariably small and is ignored.

Figure 1 shows the religious distribution of the German population during the Weimar period. Note the bi-modal nature of Figure 1. It is clear that Catholics tended to live with Catholics and Protestants with Protestants. Figure 1 portrays the actual geographic and religious spread of the German population during the Weimar period since each *Kreis* is weighted by its population before the frequencies for each percentage category are computed.

One final methodological point should be raised here concerning the weights to be used in the following analysis. Minimally, all estimates must be weighted by population within each *Kreis*. However, the weighting issue is somewhat more complex. The models in Equation (3) and Equation (4) are heteroskedastic. This problem can be addressed by estimating both models using generalized least squares. In the following analysis, this is accomplished by weighting each observation (i.e., each *Kreis*) by $NP(1-P)$ (see Hanushek and Jackson 1977, p. 193).

Use of Aggregate Data. Whenever an analysis using aggregate data is undertaken, the warning flag

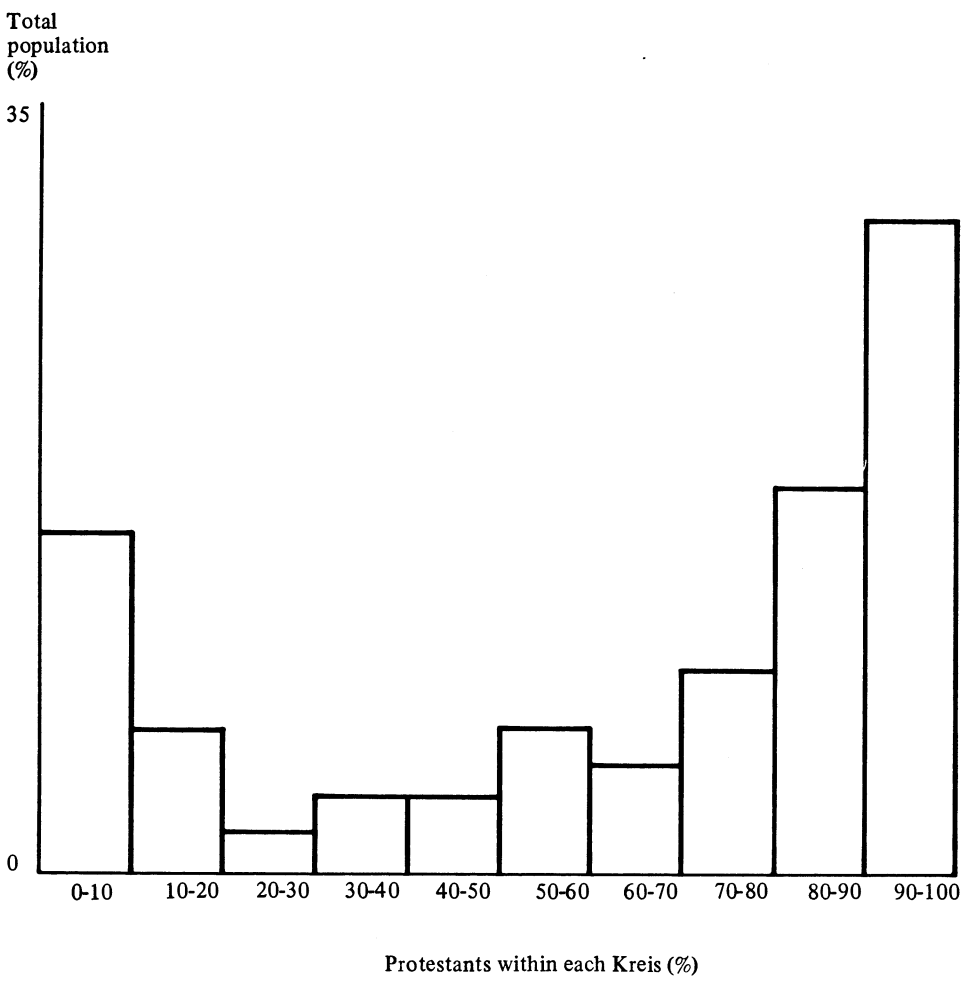


Figure 1. Distribution of German Population According to Percentage of Protestants in each *Kreis* (1925)

of "ecological fallacy" is certain to be raised. The problem, which has been thoroughly explored elsewhere in statistical, substantive, and philosophical detail (Robinson 1950; Goodman 1959; Alker 1974; Blalock 1964; Allardt 1969), concerns cross-level inference; that is, to what extent can we rely on aggregate-level relationships to reveal underlying individual-level relationships? For example, if we find that areas in Germany tend increasingly to support the Nazis as they become more Protestant, are we to conclude that Protestants tend to support the Nazis?

Much of the problem of cross-level inference returns to the issue of model specification; that is, if we are to make explicit inferences about individual behavior from aggregate relationships, the model specifications exploring these aggregate relationships must closely approximate the underlying individual relationships (Valkonen 1974, pp. 66-7; Blalock 1964, pp. 95-126; Boyd and Iversen 1979, pp. 23-5). This condition may or may not occur with any single model specification, even one that predicts aggregate relationships well; however, when the model specification portrays individual-level structure reasonably well (thus ruling out gross misspecification), cross-level inferences can be suggested.

Individual-level conclusions need not be drawn from the aggregate data used in this analysis, but if such conclusions are drawn from my results, a few points seem worth mentioning.

It is always possible that the particular model specification used incorrectly identifies an individual-level relationship; to address this possibility, a variety of quite different specifications has been used to test and re-test the general conclusions, as suggested by Valkonen (1974, p. 68). The idea is to exlore whether the substantive find-

ings resulting from one model specification are a result of the specification itself or of recurrent patterns in the data. Although a large variety of specifications was examined during the course of this analysis, two important cases deserve explicit mention. First, a straightforward general linear models technique of the type described by Wright (1976) was used. Logs or odds ratios were not used. This technique distinguishes areas that are approximately homogeneous with regard to religion and urbanization. Then the influence of occupation on the Nazi vote is examined within those areas. Second, a variety of interactive approaches was examined to see if any "hidden" bends in the data could be discovered. Neither of these two strategies produced results that would call into question either the substantive conclusions presented below or the results upon which they are based. Again, although the conclusions are not dependent on inferences drawn at the individual level, the results described here suggest that such inferences might have value.

Since survey data for Germany during the Weimar period are not available, all major empirical studies of the Nazi vote have relied on aggregate-level data. This analysis is a different treatment of the same kind of data used elsewhere. In the absence of survey data, using aggregate-level data to examine the voting behavior of the German electorate is both the best that can be done given the data limitations, and useful in its own right. Thus, although we may or may not wish to make individual-level inferences from results based on aggregate-level data, it is nonetheless of interest to examine how various sectors of the population, for example, the blue-collar workers, support the Nazis. Occasionally, the language used could be construed as drawing individual-level interpretations from these data. As in other studies of the Nazi vote, this is merely a matter of the style used to ease the presentation of material.

Results

The results of the analyses for all of Germany using the model that does not control for the level of urbanization are summarized in Table 1.[2] To explain how to read Table 1, let us take the example of owners in agriculture, predominantly landowning peasants. The insignificance of the estimate for the parameter b_1 suggests that there is no independent effect for that occupation after controlling for religion. The positive sign for the estimate for religion reaffirms the general conclusion in the literature that much support for the Nazis came from Protestant areas. Note that the estimate for religion is positive and significant for all occupations represented in Table 1. The sign and significance of the estimate for the parameter b_3, for the interactive term is crucial to interpreting the results of this table. For the case of the landowning peasants, the parameter is both positive and significant. This means that Nazi support increased in areas whose populations were more heavily composed of landowning peasants if those areas were also predominantly Protestant. The condition of a predominantly Catholic environment reverses the relationship between the proportion landowning peasants and the proportion Nazi vote.

Generally, a positive sign for the estimate of the effect of the interaction variable suggests that Protestantism and the occupation variable interact to enhance Nazi support, whereas a negative sign for the same suggests that Catholicism and the occupation interact to enhance Nazi support. In the case of the landowning peasants, a positive sign for the interaction effect is the expected result since it has often been stated that Protestant peasants supported the Nazis. If the estimate were unexpectedly negative, it would suggest that Catholic peasants supported the Nazis.

In Table 1, two measures of fit are reported. The first is the fit of the logistic dependent variable to the data; however, this does not measure the fit of the actual proportion of Nazi vote to the data. Thus, the second reported measure of fit is computed from the error between the predicted Nazi vote as computed from equation (2) and the actual Nazi vote. In all cases in Table 1, both measures of fit are very close in magnitude.

To restate the above result, the landowning peasants seem to be living up to theoretical expectations; the positive signs for the interaction term (under the owners) suggest that the Protestant peasants supported the Nazis whereas the Catholics did not. The results for the white-collar and the blue-collar agricultural employees are more ambiguous.

The blue-collar workers in industry and manufacturing seem to behave according to accepted theory. The negative sign for the occupation effect in Table 1 clearly suggests that the Nazis did not gather much support from these workers. Moreover, religion seems to have played less of a role with blue-collar support in this instance, as

[2]This regression strategy appears superior to a strategy in which all of the occupational variables are entered into the equation simultaneously. If the latter method is used, a degree of covariation among some of the explanatory variables can lead to significance problems with some of the estimates. Moreover, the fit does not improve. Although the point is debatable, this lack of improvement in the fit suggests that nothing is gained by this strategy while at the same time we lose crispness in the significance tests.

seen in the lack of significance for the interaction term. This probably reflects a strength of class sentiment among blue-collar workers in industry and manufacturing which is capable of cutting across religious boundaries. Blue-collar workers in trade and transportation also behave as expected in Protestant areas, as shown by the negative sign of the interaction effect. However, the negative sign for the interaction effect plus the positive sign for the noninteractive occupation effect suggest strong Catholic support coming from this group, which is not expected from prior theory. Moreover, the positive estimate for the occupation term is significant at the 0.0001 level. Although reasons for such surprises are given later, it is clear at this point that some modifications regarding the traditional way of thinking about the strictly Protestant nature of the Nazi vote are in order.

White collar workers in both nonagricultural sectors behave in a fashion that is totally unexpected from prior investigations. The evidence presented here strongly suggests that the Nazis gained votes in Catholic areas with large numbers of white-collar workers, whereas the Nazis lost votes in comparable Protestant areas. Any statistical significance problems with these results appear minor.

Despite the surprising nature of these results, the biggest surprise comes when we examine the Nazi support coming from the petty bourgeoisie. Here it is best to begin with owners within the trade and transportation sector of the economy. The results are unmistakable. The evidence strongly suggests that the Nazis gained votes in Catholic areas having high levels of petty bourgeoisie, whereas the Nazis lost votes in Protestant areas with high levels of petty bourgeoisie. Moreover, support from these high Catholic petty bourgeois areas appears to have been very strong. These results are reconfirmed when we examine owners within the industry and manufacturing sector of the economy. The surprising Catholic support still appears strong, and the task now is to supply some answers to the questions raised.

Before expanding the analysis to control for the level of urbanization, it is useful to illustrate some of the previous results graphically. Figure 2 plots the data for the proportion petty bourgeoisie (owners in trade and transportation). Predicted regression lines for the conditions of three religious environments are superimposed on the data. That is, values for the religious variable in equation (3) which reflect these environments (0, 0.5, and 1) are held constant while each predicted regression line is plotted. The predicted lines are obtained using the parameter estimates presented in Table 1 to compute the probable Nazi vote as given in equation (2).

The lines in Figure 2 appear almost straight,

Table 1. Model Parameters Using Data for All of Germany (July 1932)

Dependent variable: Log of the odds ratio (L) constructed from the proportion of the total population within each *Kreis* voting for the Nazis.

Model: $L = b_0 + b_1\text{Occ} + b_2\text{Rel} + b_3(\text{Occ} * \text{Rel})$

	b_0	b_1	b_2	b_3	Logit R^2	Actual R^2
Agriculture, forestry, and fishery						
Owners	−1.99	−0.63*	0.98	4.33	0.60	0.60
White collar	−2.07	18.72*	1.17	−8.41*	0.56	0.55
Blue collar	−2.06	0.69*	1.15	0.03*	0.56	0.55
Industry and manufacturing						
Owners	−2.28	9.29	1.43	−9.91	0.56	0.55
White collar	−2.08	3.69†	1.36	−11.38	0.59	0.58
Blue collar	−1.89	−1.06	1.18	−0.05	0.58	0.57
Trade and transportation						
Owners	−2.21	11.08	1.46	−17.81	0.57	0.56
White collar	−2.16	5.26	1.43	−9.68	0.59	0.58
Blue collar	−2.18	7.70	1.45	−14.14	0.58	0.57

N = 946

*Not significantly different from zero at the 0.1 level.
†Significantly different from zero only at the 0.1 level.

Note: All other estimates are significant at least at the 0.05 level.

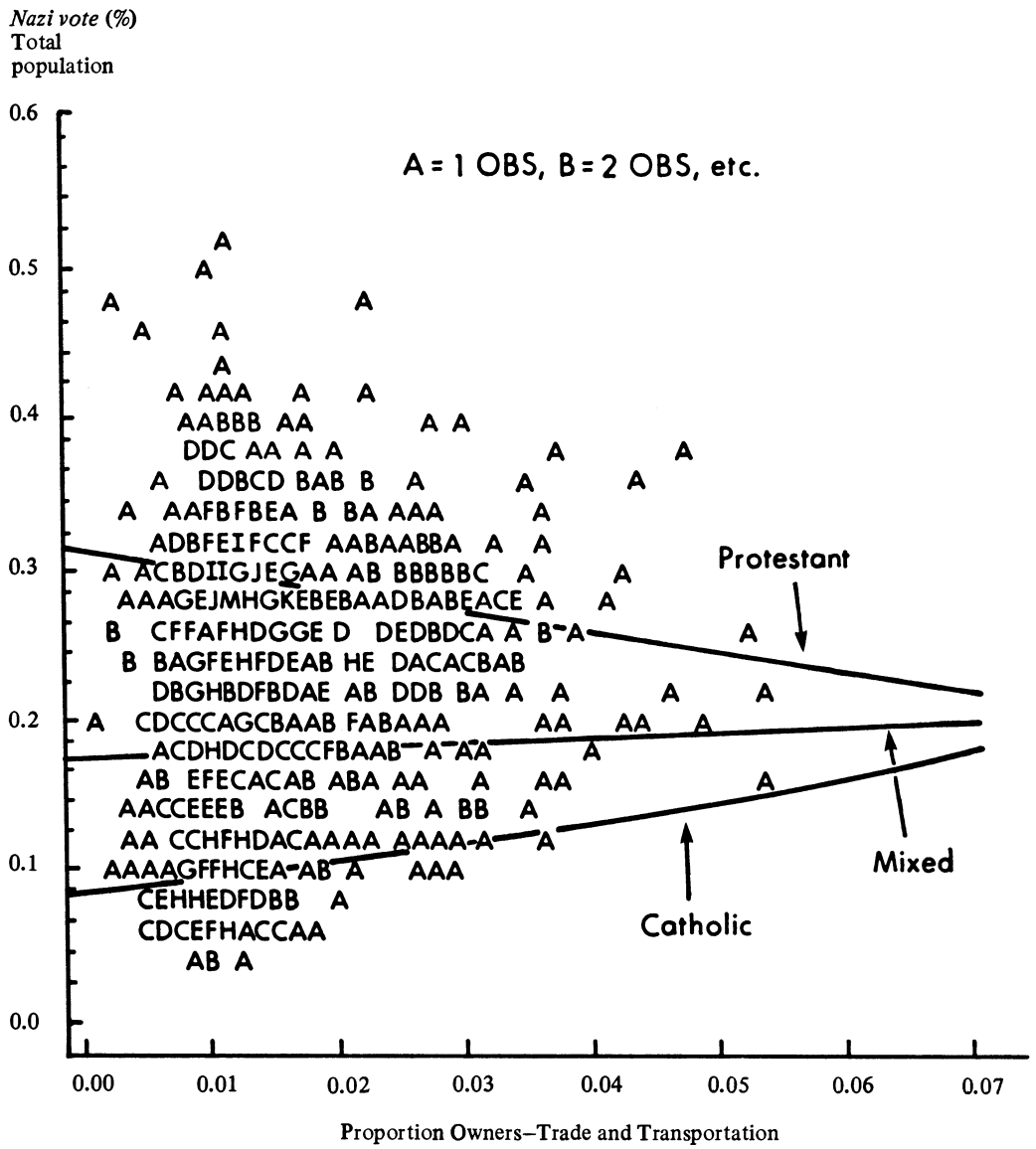


Figure 2. Nazis Gain in Catholic Areas with High Levels of Owners in Trade and Transportation (July 1932)
Legend: A = 1 OBS, B = 2 OBS

owing to the behavior of the logistic distribution over the limited range of the occupational data in this instance. Such predicted regression lines appear increasingly nonlinear as they are projected further from the actual range of the data. Nonetheless, within the range of the data it is clear that the predicted regression line for predominantly Catholic areas has a positive slope in relation to the Nazi vote, whereas the slope for the comparable line for the Protestant areas is negative.

Although the presentation of the data in Figure 2 is a constructive initial step in interpreting some of the previous results presented here, a more useful approach is to present a complete three-dimensional representation of the predicted hypersurface for the model used. This is done for the case of the landowning peasants in Figure 3.[3]

[3]It should be noted that all of the projected hypersurfaces displayed in this analysis extend well beyond the actual range of the data. The projections are made for illustrative and interpretive purposes only.

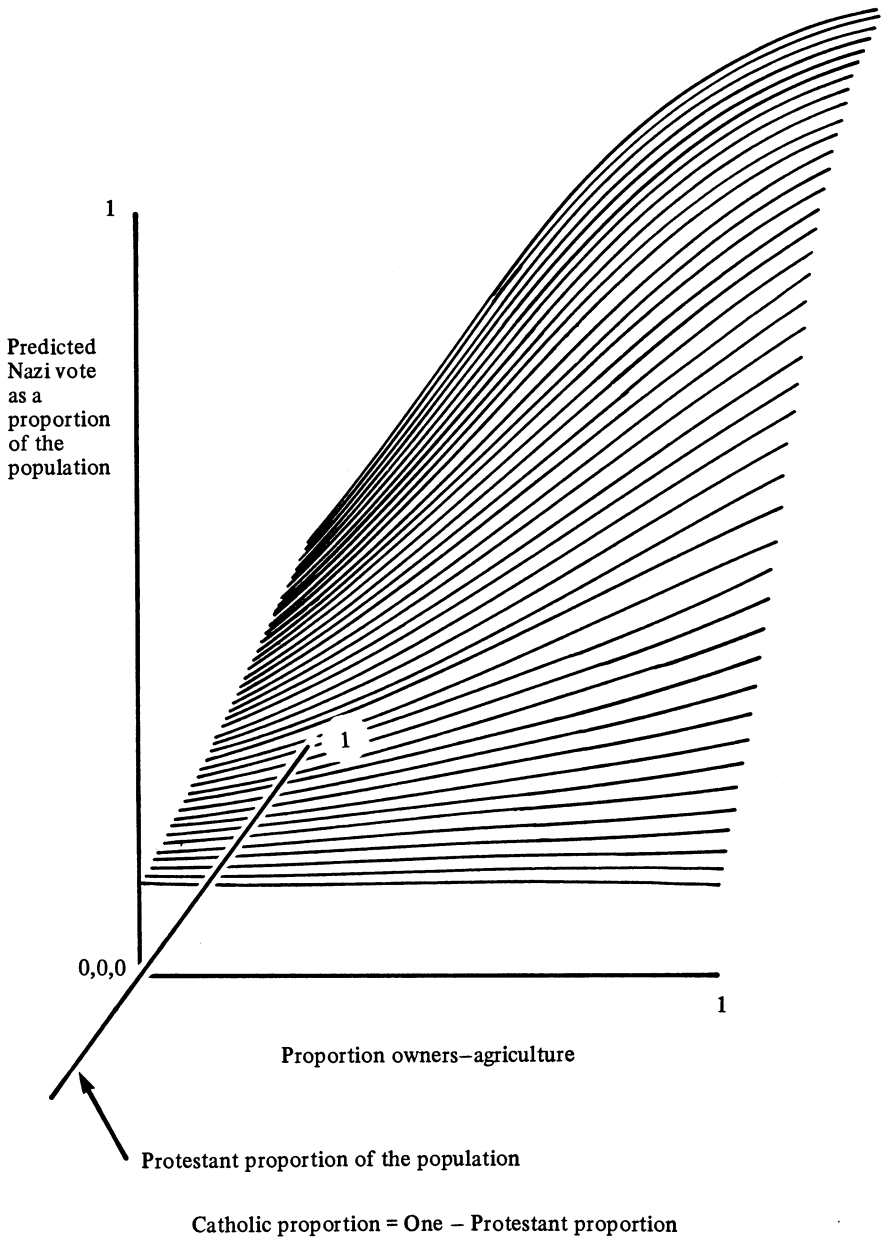


Figure 3. Nazis' Gain in Protestant Areas with High Levels of Landowning Peasants (July 1932)

The vertical axis represents the Nazi vote; the horizontal axis represents the occupation. The diagonal axis represents the religion variable. The position of the viewer is up, to the right, and back away from the origin. The diagonal axis goes into the picture, away from the viewer. The "S" shape of the upper portion of the figure is a familiar feature of a logistic surface. Note that as one moves from a Catholic area (near the origin of the religion axis) to a Protestant area, the relationship between the Nazi vote and the landowning peasant population increases dramatically in the positive direction. Thus, the predicted Nazi vote increases in Protestant areas as the proportion of the population of landowning peasants increases. There is little or no increase in the predicted Nazi vote in Catholic areas as the proportion of the population of landowning peasants increases.

Presented in this way, the previous results of Table 1 are vividly portrayed and more easily interpreted.

Figures 4 and 5 display the comparable three-dimensional representation of the model's predicted hypersurfaces for the owners in both nonagricultural sectors. Here, the viewer is up, to the left, and back away from the origin. The diagonal axis comes out from the picture to the right of the viewer. In both figures, strong Nazi support appears to originate from Catholic areas with high levels of petty bourgeoisie. Moreover, in the case of owners in trade and transportation, the relationship between the Nazi vote and the occupation appears negative in the Protestant areas. Note that a negative relationship here does not imply a negative probability for the predicted Nazi vote (a mathematical impossibility), but rather a reduced positive probability; that is, the predicted probability of voting for the Nazis decreases in Protestant areas as the proportion of the population of owners in trade and transportation increases.

Much of the discrepancy between these results and prior arguments and results reported in the literature can be traced to the differences between urban and rural Germany. With the exception of Pratt's (1948) analysis of urban areas in Germany, most studies have focused on the rural vote. However, especially in the case of the petty bourgeoisie, to draw conclusions regarding all of Germany, the analysis must not be limited to the rural vote, for most of the petty bourgeois live in urban areas. Indeed, for most purposes the urban petty bourgeoisie *is* the German petty bourgeoisie; in rural areas the average petty bourgeois proportion of the total population (owners in trade and transportation) is 0.013; in urban areas, it is 0.029, more than double. Thus we must distinguish between urban and rural petty bourgeoisie. Furthermore, we must discount the effect of the rural petty bourgeoisie in supplying the Nazis with their electoral support when compared with the effect of the urban petty bourgeoisie.

Table 2 displays the results of this analysis using the model of equation (4), which includes controls for the level of urbanization for each *Kreis*. Although all occupations appearing in Table 1 also appear in Table 2 to allow readers the opportunity for a full comparison, the remainder of this study focuses on the petty bourgeoisie (owners in the nonagricultural sectors).

A verbal interpretation of even some of the results presented in Table 2 would prove long and tedious owing to the highly nonlinear form of the model used. This problem may be ameliorated by displaying three-dimensional representations of the new model's predicted hypersurfaces. Since we are now dealing with four conceptual variables (Nazi vote, occupation, religion, and urbaniza-

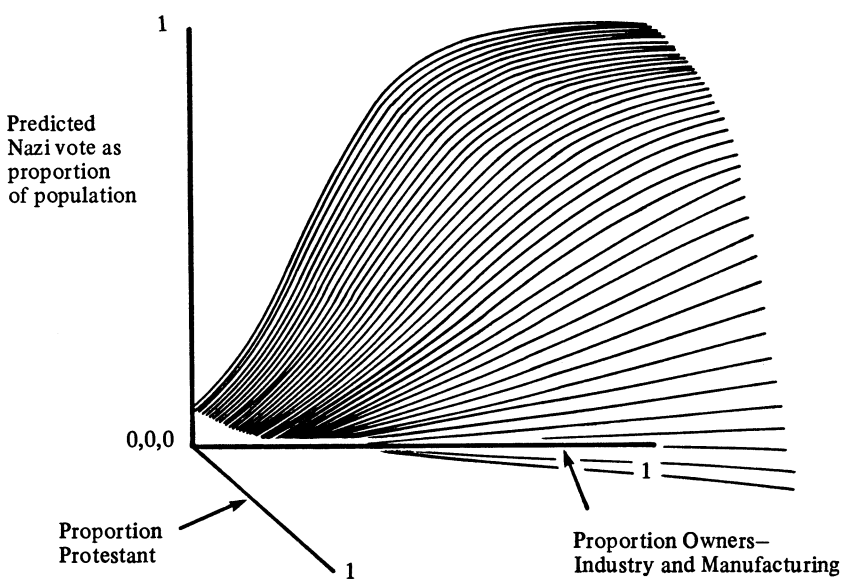
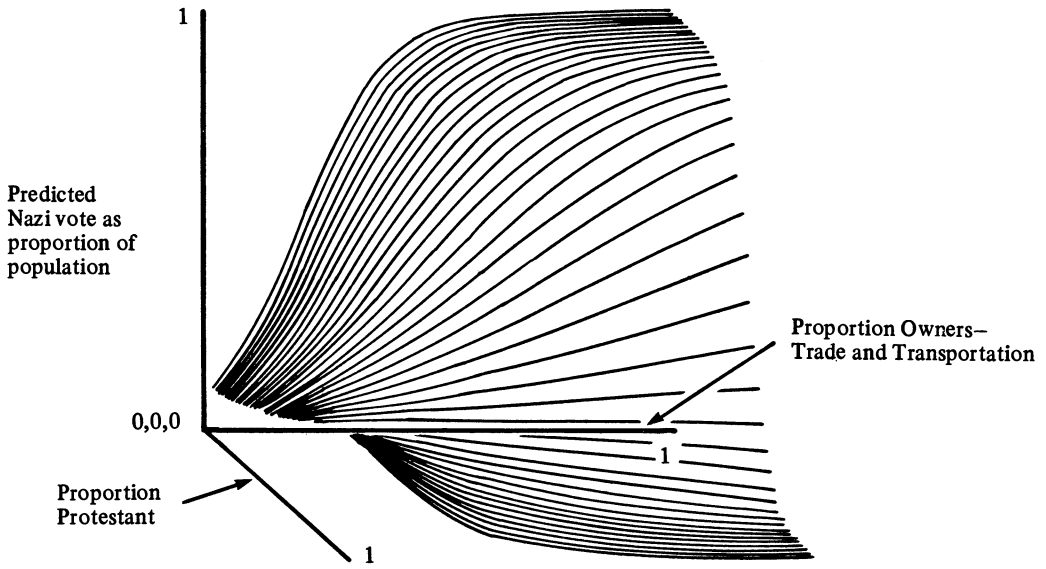


Figure 4. Nazi Gain in Catholic Areas with High Levels of Owners in Industry and Manufacturing (July 1932)



Note: Catholic proportion = one – Protestant proportion.

Figure 5. Nazi Gain in Catholic Areas with High Levels of Owners in Trade and Transportation (July 1932)

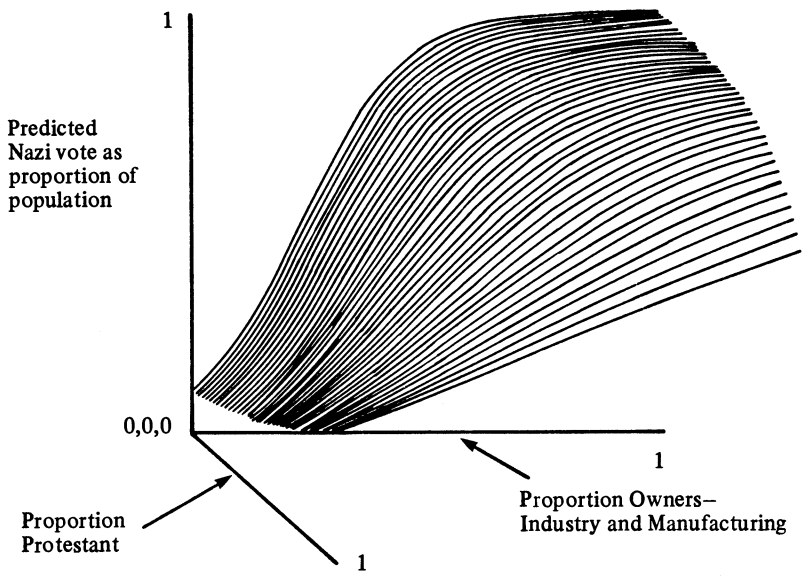


Figure 6. Nazi Support from Areas with High Levels of Owners in Industry and Manufacturing is Heavy for Rural Catholic Areas and Moderate for Rural Protestant Areas (July 1932) (Rural Condition)

tion), the new three-dimensional representations must be obtained by fixing one of the variables at predetermined values. Here, the values of urbanization are fixed (0 and 1) to reflect a totally rural environment and then a totally urban environment.

Figures 6 and 7 show the predicted hypersurfaces for rural and urban areas for owners in industry and manufacturing. Note that in rural areas, Nazi support appears to come from both Catholic and Protestant areas having high levels of owners. However, such support from Catholic areas seems much stronger than that from Protestant areas. In Catholic urban areas with high levels of owners in industry and manufacturing, the Nazis still seem to gather strong support. However, these results suggest that Protestant support from that occupation completely vanishes in urban areas.

Figures 8 and 9 present the comparable rural and urban predicted hypersurfaces for owners in trade and transportation. Strong support for the Nazis appears to originate from both Catholic and Protestant rural areas with high levels of petty bourgeoisie. Moreover, petty bourgeois support for the Nazis also appears strong in Catholic urban areas. However, petty bourgeois support for the Nazis appears to vanish in the urban Protestant areas.

These results do not answer all of the questions raised by Table 1, but they go a long way toward explaining why most studies that limited their analysis to rural voting found that the Protestant petty bourgeoisie *did* support the Nazis. Moreover, limited regional studies failed to discover the apparently strong relationship between the Nazi vote and the Catholic petty bourgeoisie.

What can be said about the Nazi electoral support? It is clear from other studies that the Nazis gained most of their support from areas in the north and northeast of Germany. That knowledge, combined with the results supplied here, suggests that the bulk of the Nazi support, at least in July, 1932, came from areas with high levels of landowning peasants who were Protestant. It is significant that the Nazis did not become a major party until after 1928, when they moved their campaign into the rural areas. In the rural Protestant areas the Nazis gained from areas with high levels of peasants and petty bourgeoisie. But the rural petty bourgeoisie were few in number compared to the peasantry and the petty bourgeoisie's own urban counterpart. In the rural Catholic areas, the peasants maintained their allegiance to the Center Party and the Bavarian People's Party, which is why the Nazis did not achieve such large electoral gains in the Catholic regions such as Bavaria. Within the rural Catholic

Table 2. Model Parameters with Controls for Urbanization Using Data for All of Germany (July 1932)

Dependent variable: Log of the odds ratio (L) constructed from the proportion of the total population within each *Kreis* voting for the Nazis.

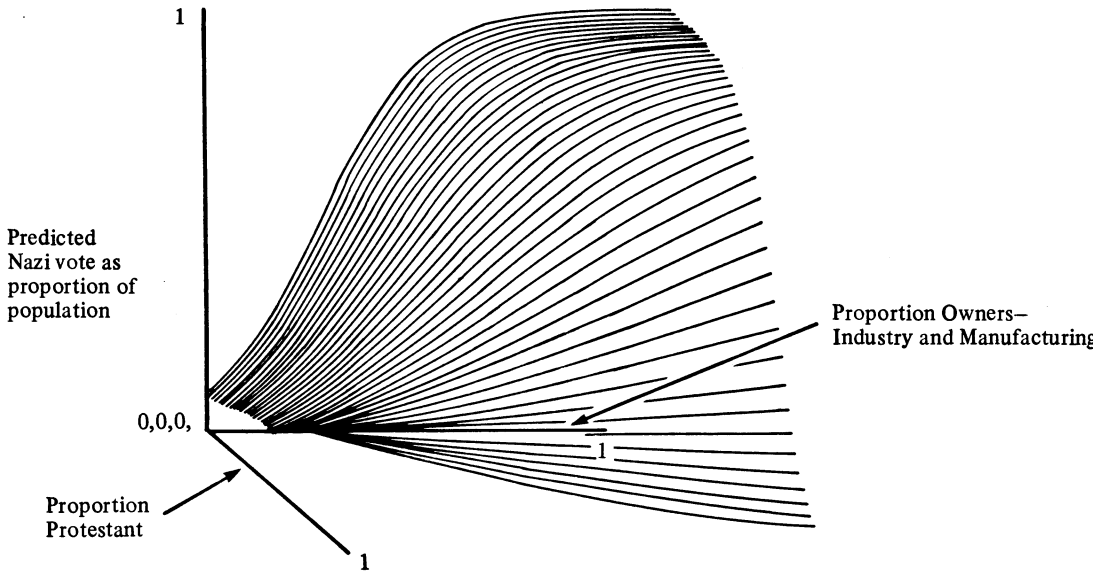
Model: $L = b_0 + b_1\text{Occ} + b_2\text{Rel} + b_3\text{Urb} + b_4(\text{Occ*Rel}) + b_5(\text{Occ*Rel*Urb})$

	b_0	b_1	b_2	b_3	b_4	b_5	Logit R^2	Actual R^2
Agriculture, forestry, and fishery								
Owners	−2.02	−0.36*	0.99	0.03*	4.41	−0.94*	0.60	0.60
White collar	−1.92	−10.18*	1.15	−0.19	4.22*	24.58*	0.58	0.58
Blue collar	−1.89	−1.07*	1.13	−0.20	0.66*	1.76†	0.58	0.58
Industry and manufacturing								
Owners	−2.21	9.25	1.38	−0.10	−7.42	−3.37†	0.59	0.58
White collar	−2.07	6.08	1.40	−0.11	−15.79	3.84*	0.59	0.58
Blue collar	1.91	−0.83†	−0.83	0.02*	0.62*	−1.16	0.59	0.59
Trade and transportation								
Owners	−2.26	17.97	1.32	−0.07*	−1.55*	−18.51	0.60	0.60
White collar	−2.15	7.47	1.38	−0.14	−5.91†	−3.83†	0.60	0.59
Blue collar	−2.18	10.07	1.39	−0.06*	−7.30	−7.86	0.60	0.59

N = 946

*Not significantly different from zero at the 0.1 level.
†Significantly different from zero only at the 0.1 level.

Note: All other estimates are significantly different from zero at the 0.05 level.



Note: Catholic proportion = One – Protestant proportion.

Figure 7. Nazi Support from Areas with High Levels of Owners in Industry and Manufacturing is Heavy in Urban Catholic Areas but Nonexistent in Urban Protestant Areas (July 1932) (Urban Condition)

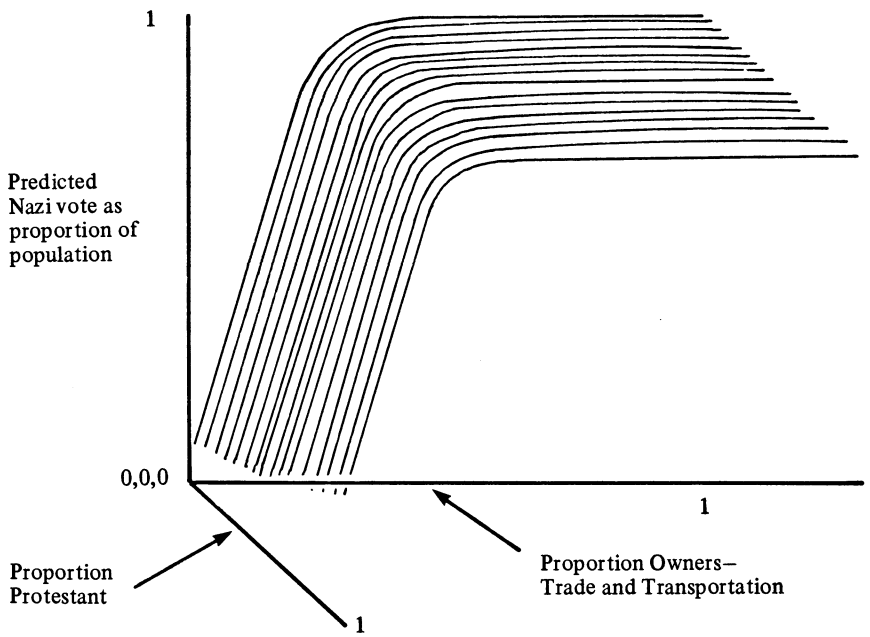


Figure 8. Nazi Support from Areas with High Levels of Owners in Trade and Transportation is Heavy for Both Rural Catholic Areas and Rural Protestant Areas (July 1932)

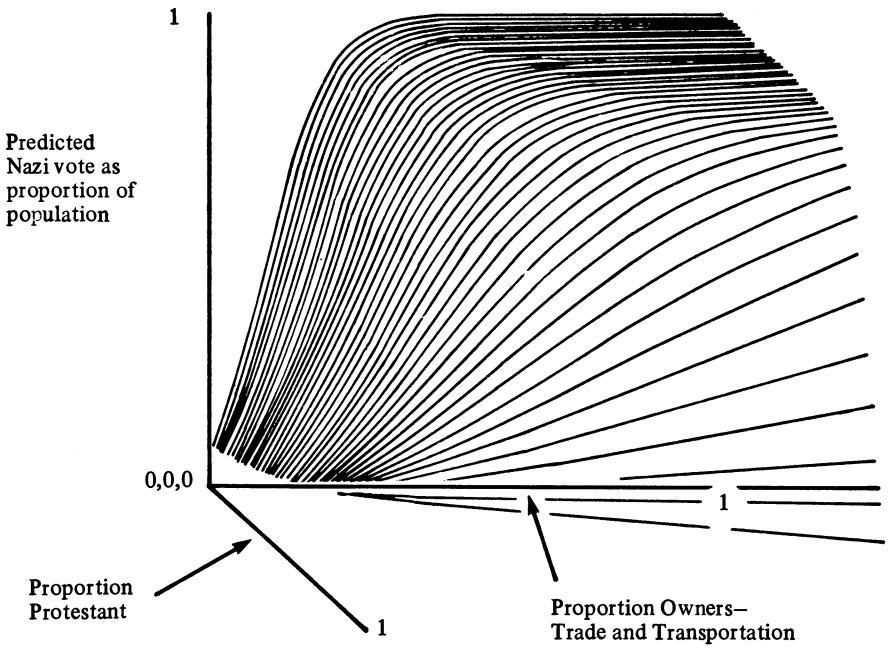
areas, however, the petty bourgeoisie did support the Nazis. In short, peasant support for the Nazis came from the Protestants; petty bourgeois support for the Nazis came from the Catholics and, to a more limited extent, rural Protestants as well.

The Question of New Voters

The question of whether or not much of the support given to the Nazis came from newly mobilized voters has still to be answered. This question temporarily puts aside the question of who the new voters were and merely asks, "Where did they go?" The literature is ambiguous on the subject. Two opposing viewpoints are best stated by Lipset and O'Lessker. Lipset argues that the new-voters hypothesis directly challenges the middle-class petty bourgeoisie theory of the Nazi vote (1959, pp. 148-151). He argues that new voters did not go to the Nazis and cites the election of 1930 as proof of his case. Lipset argues that new voters are generally the formerly alienated and apathetic citizens. Since they are alienated and apathetic, they will only support parties that already have strong electoral support. Yet Nazi support went from 2.6 percent in 1928 to 18.3 percent in 1930; thus, new voters did not provide that support. On the other side of the argument, O'Lessker (1968) uses a stepwise regression technique to offer evidence that the newly mobilized voters did in fact support the Nazis.

The question of whether newly mobilized voters supported the Nazis can be addressed directly by constructing a variable that is the difference between the number of nonvoters during the election at time $t-1$ and the number of nonvoters during the election at time t. Thus we have a measure for newly mobilized voters which is related to the change in the turnout. As with the other variables used in this analysis, the measure for new voters is formed as a proportion of the total population in each *Kreis*. Table 3 presents the estimates obtained by replacing the occupation variable in equation (4) with the new variable measuring the new voters. The results are presented for the years 1930 and (July) 1932.[4]

[4]Some readers may wonder what would result if the earlier regressions using the occupational variables simultaneously included the new-voters variables. These



Note: Catholic proportion = One – Protestant proportion.

Figure 9. Nazi Support from Areas with High Levels of Owners in Trade and Transportation is Heavy in Urban Catholic Areas but Nonexistent in Urban Protestant Areas (July 1932)

Table 3. New-Voter Model Parameters Using Data for All of Germany (July 1932)

Dependent variable: Log of the odds ratio (L) constructed from the proportion of the total population within each *Kreis* voting for the Nazis.

Model: $L = b_0 + b_1$New voters $+ b_2$Rel $+ b_3$Urb $+ b_4$(New voters * Rel) $+ b_5$(New voters * Rel * Urb).

	b_0	b_1	b_2	b_3	b_4	b_5	Logit R^2	Actual R^2
1930								
DNVP	−3.61	−1.91*	1.17	−0.18	−4.27*	4.50*	0.16	0.08
DDP	−4.42	8.91	0.63	0.73	−13.28	−5.42†	0.20	0.10
DVP	−4.93	11.49	1.10	1.11	−10.60	−6.08	0.44	0.39
Center	−0.75	1.41*	−2.95	−0.14	5.51	−7.63	0.72	0.57
SPD	−2.96	3.68	1.34	0.47	−6.36	1.76*	0.46	0.38
Communist	−3.38	3.84†	0.55	1.01	−11.21	6.94	0.34	0.21
NSDAP	−2.84	1.90*	0.81	0.23	1.65*	1.02*	0.34	0.29
1932 (July)								
DNVP	−3.94	−3.35*	1.14	0.05*	1.38*	−1.21*	0.27	0.19
DDP	−5.97	3.23*	1.07	0.85	−12.59	7.36†	0.24	0.10
DVP	−5.68	4.14†	0.65	0.75	−3.25*	−2.36*	0.27	0.22
Center	−0.65	3.48	−3.06	0.07*	3.86*	−6.41†	0.75	0.61
SPD	−3.04	5.54	1.27	0.51	−7.31	0.80*	0.45	0.41
Communist	−3.05	5.63	0.39	0.82	−11.53	6.31	0.32	0.24
NSDAP	−2.04	3.33	1.11	0.05†	2.89	−3.09	0.65	0.65
1932 (November)								
NSDAP	−2.22	3.80	1.03	0.03*	3.30	−2.89	0.60	0.59

N = 959

*Not significantly different from zero at the 0.1 level.
†Significantly different from zero only at the 0.1 level.

Note: All other estimates are significantly different from zero at the 0.05 level.

As before, individual interpretation of the estimates for the nonlinear model used would be excessively tedious and of questionable value since the overall impact of new voters on the entire model would be difficult to evaluate. A more straightforward assessment of the electoral effects of the new voters is to compute the net gain or loss to each party under various conditions as predicted by the model over the actual range of the new-voter data. That is, the model is taken through two iterations. First, the predicted vote is computed at the lowest level of new-voter involvement within a *Kreis*. Then the predicted vote is computed at the highest level of new-voter involvement within a *Kreis*. The difference between the two estimates is then taken. This procedure is repeated for the conditions rural Catholic, urban Catholic, rural Protestant, and urban Protestant. Comparing these differences across parties and within these conditions allows for a direct comparison to determine which parties gained the most from new-voter support. These results are presented in Table 4.

An analysis of Table 4 best begins with the 1930 election. Regarding this election, two primary conclusions can be drawn from the table. First, the largest new-voter gains in 1930 came from the Catholic areas, both rural and urban. Second, newly mobilized voters do not seem to have offered the Nazis much support in 1930. Apparently Lipset is correct with regard to the 1930 election: the initial swelling of the Nazi ranks did not come from new voters. However, this pattern is dramatically changed in the July 1932 election. From Table 4 it is clear that new-voter support affected the Catholic areas with regard to the Center Party, the Communist Party, the Social Democratic Party (SPD), and the NSDAP. However, the largest gain for July 1932 benefits the Nazis and comes from rural Protestant areas.

regressions have been run during the course of these analyses. Although not displayed here, the results of these regressions act only to reconfirm all of the results already presented. None of the estimates changed in sign and there were no appreciable effects on significance. Furthermore, the effects on the magnitudes of the estimates were uniformly slight. The increase in the fit was also slight.

Moreover, the Nazis also gained substantial new-voter support in Protestant urban areas. It also appears that the Nazis were the only big gainers in most Protestant areas, rural and urban. In the November 1932 election, the Nazis continued to gain support from newly mobilized voters in all areas, but again with a dramatic emphasis in rural Protestant areas. Thus, in terms of both elections in 1932, new voters did make important contributions to Nazi electoral strength.

A graphic display of the July 1932 results with regard to the Nazis is presented in Figure 10 and Figure 11. Although it is clear from both figures that new-voter support benefited the Nazis in rural and urban areas, the impact of the new-voter support in the rural Protestant areas is especially pronounced and can be seen by the upward bulge in Figure 10. In comparison, the lack of such a bulge in Figure 11 suggests that new-voter support varies somewhat less between urban Catholic and urban Protestant areas than new-voter support between comparable rural areas.

Conclusion

What can now be said regarding the middle-class versus the new-voter theories of the Nazi vote? The analysis presented here suggests that both theories are partly correct. The mistake made by Lipset and O'Lessker is the assumption that the theories must be mutually exclusive. It is clear that newly mobilized voters did not swell the ranks of the Nazis in 1930 to the same extent that they did in July and November of 1932. Nonetheless, the new voters did affect the latter elections.

Regarding the middle class support for the Nazis, the highly flaunted Protestant petty bourgeois support for the Nazis seems to have occurred mainly in the rural areas. Moreover, the Protestant urban areas seem to be just the opposite of bastions of petty bourgeois Nazi support.[5] The analysis in this essay indicates that the Nazis gained strong support from the petty bourgeoisie in Catholic areas.

Protestant peasant support for the Nazis was overpowering. It appears as though the Protestant peasants were the single largest contributors to the Nazi vote. The Catholic peasants were not strong supporters of the Nazis. By and large, the Catholic landowning peasants supported the Center Party and the Bavarian People's Party in July 1932. At first it might seem that this resulted from the peasants' strong ties to the Catholic Church in many areas. However, there is evidence that the Catholic landowning peasants did not support the Catholic-oriented parties until the realigning 1928

[5]Preliminary analyses indicate that the Protestant petty bourgeoisie continued to support the SPD in increasing numbers while at the same time abandoning their support for the German Democratic Party and the German People's Party.

Table 4. Predicted Net New-Voter Effects on All Major Parties

	Catholic		Protestant	
	Rural	Urban	Rural	Urban
1930				
DNVP	–	–	–	–
DDP	0.04	0.08	−0.02	−0.09
DVP	0.04	0.11	–	−0.07
Center	–	–	0.04	−0.01
SPD	0.05	0.07	−0.09	−0.12
Communist	0.04	0.09	−0.08	−0.01
NSDAP	–	–	–	–
1932 (July)				
DNVP	—	—	—	—
DDP	—	—	−0.02	−0.02
DVP	—	0.01	0.01	0.02
Center	0.20	0.20	0.02	−0.02
SPD	0.08	0.12	−0.05	−0.07
Communist	0.08	0.15	−0.08	0.01
NSDAP	0.09	0.09	0.33	0.16
1932 (November)				
NSDAP	0.09	0.09	0.35	0.20

Note: The range of the new voter data is the interval (−0.09, 0.016).

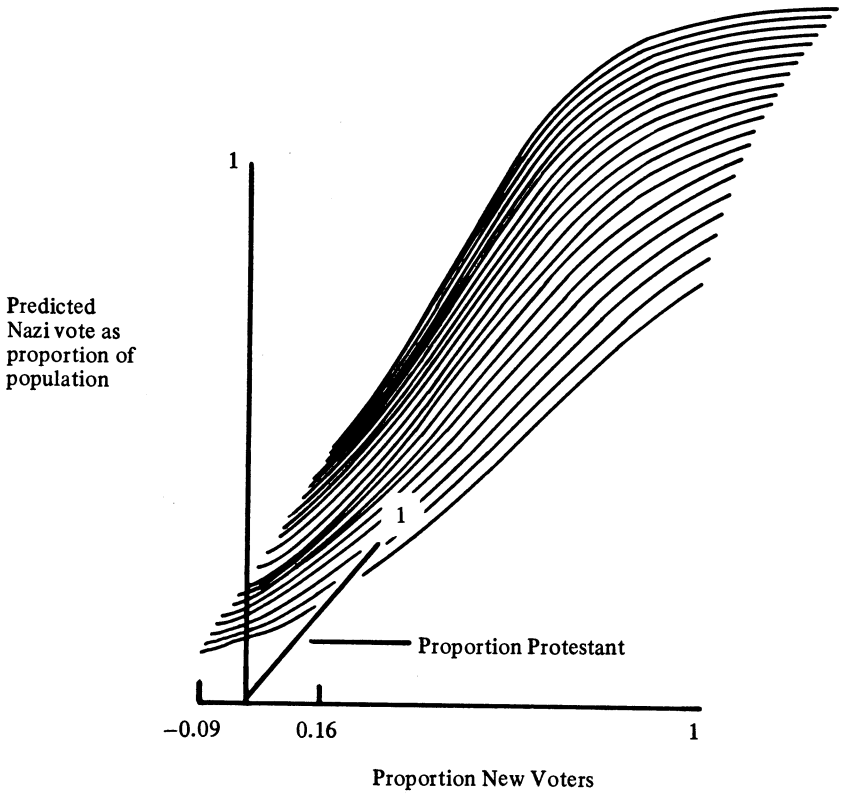


Figure 10. Rural New-Voter Support (July 1932)

election.[6] Thus, the present analysis raises as many questions as it answers regarding the electoral role of the peasants. Nonetheless, it is clear that the Protestant peasants did support the Nazis whereas the Catholic peasants did not.

This gives us an indication of who the new voters were in the July 1932 election. Since the new voters made a strong showing for the Nazis principally in rural Protestant areas, we can conclude that they probably came from the ranks of the Protestant landowning peasants.

Finally, in contrast to support for the Nazis, the main body of resistance to the Nazis was found in the working class. The workers in industry and manufacturing generally did not support the Nazis, and in the areas of trade and transportation, the Protestant workers opposed the Nazis while the Catholic workers offered some support. However, the important category is industry and manufacturing, and here it is clear that the workers were a primary electoral obstacle for Nazis.

[6]The basic result is that the slopes for the landowning peasants in Catholic areas (regressing on the Catholic-oriented parties) are clearly negative before 1928 and positive from 1928 on.

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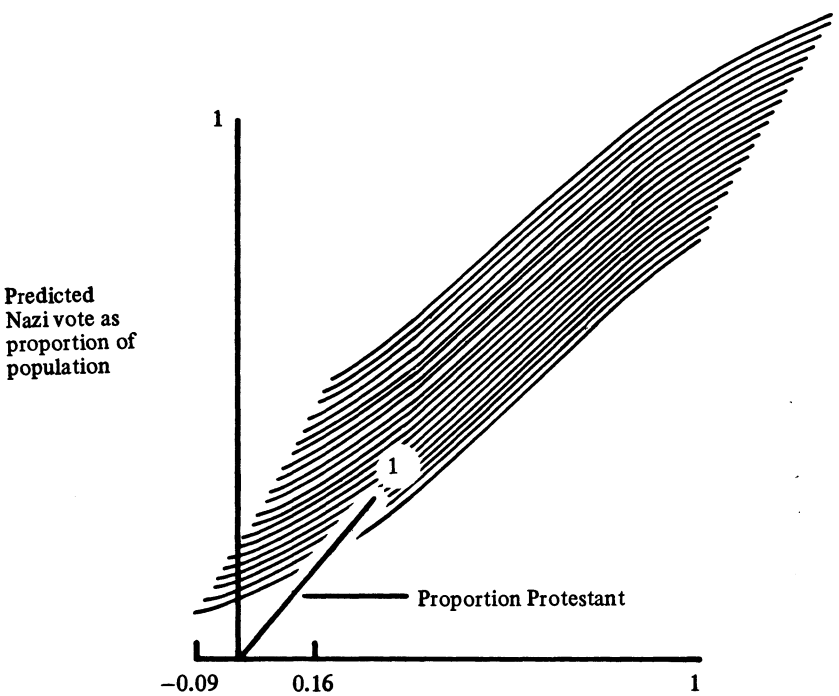

Note: Catholic proportion = One – Protestant population

Figure 11. Urban New Voter Support (July 1932)