The several attempts to relate such economic factors as inflation, unemployment and income to political attitudes and behavior have produced contradictory findings (Kramer, 1971; Stigler, 1973; Okun, 1973; Arceus and Meltzer, 1975; Tufte, 1975; Goodman and Kramer, 1975; Bloom and Price, 1975). Such uncertainty illustrates the difficulty of employing aggregate variables to explain the political orientations of individuals. A smaller group of studies has attempted to surmount this difficulty by attempting to relate individuals' economic perceptions to their political orientations; these studies have used or could use such variables as self-perceived economic change, evaluations of governmental policy, and evaluations of the candidates and/or parties as economic managers.

On the one hand we have the "objective" and macro studies; on the other hand we have the "subjective" and micro studies. Unfortunately, we have little way of directly relating the two types of approaches. For example, we have virtually no way of testing the degree of similarity between "subjective" and "objective" evaluations of personal and/or national economic conditions. We lack the data to relate the psychological economic world of the individual to the actual economic world. And without these data we cannot combine the most fruitful aspects of aggregate and survey approaches. If the CPS could code what actually happened to unemployment, prices, and interest rates both preceding and succeeding the interview, we could begin to test perceptual accuracy, and we could begin to compare expected with actual. Hopefully, we could work toward the goal of measuring the relative impact of external and internal economic worlds as well as
interactions thereof. In order to better study the impact of economic issues, we need to add contextual information to our data base.

Moving to another topic, I would like to address the question of issue voting through reporting on some research I have recently completed and discussing how its findings and questions lead to further types of discussion. I have been exploring whether we can use what is known about individuals who express a choice during a pre-election survey to predict the votes of individuals who have not made up their minds.

In working with the 1972 CPS Election Study I have discovered that simply allocating the undecideds in the same proportion as those who have already made up their minds will not work. We are faced with the interesting anomaly that while 68% of the decideds expressed an intent to vote for Richard Nixon, 64% of the undecideds voted for George McGovern. Obviously, a straightforward transfer of percentages cannot be made.

The undecideds, though different in preferences, might be weighing issue, party, and candidate factors similarly to the decideds. Are the decision-making processes similar? A number of discriminant analyses have been performed on the decideds, and the resulting discriminant function coefficients have been used to predict the votes of the undecideds. The process has allowed comparison of the classificatory power of issue positions, candidate affect, party affiliation, and a variety of combinations thereof. The efficacy of discriminant analysis has been tested through applying sets of coefficients derived from the known sample to the unknown sample, and 69% of the originally undecided voters have been correctly allocated.

In taking a careful look at the 31% of the original undecideds for whom the classification was incorrect, I have discovered that their candidate affect changed a great deal between pre-election and post-election interview.
The predicted McGovern voters who voted for Nixon averaged 14 degrees more warmth toward Nixon and seven degrees more coolness toward McGovern, and the pre-post thermometer change for erroneously predicted Nixon voters was +11 toward McGovern and -17 away from Nixon. Combining the thermometer movements into an affective change index results in a correlation of .76 with vote.

All this has been very interesting (I hope), but what does it have to do with the subject matter of the memorandum—issue voting? It need not be clarified that issue positions were initially found to add virtually no classificatory power to that contributed by party and candidate affect. Issue variables were thus dropped from the final predictive equation. In view of this, it seemed reasonable that issue positions would explain predictive errors. Indeed, the multiple correlation between 12 issue positions and vote for the erroneously predicted undecideds is a high .63. Since the correlation between affective change and issue positions is .60, we can ask if the correlation of affective change with vote can be explained by individuals simply bringing their candidate evaluations in line with their issue positions.

If so, the correlation of affective change with vote should be substantially reduced when controlling by issues. Such controls, however, reduce the .76 correlation only to .75, which means that the affective change index can still explain 56% of the remaining variance in vote. These figures in turn lead us to the question of whether issue positions have simply been projected or rationalized so as to be consistent with candidate preference. But the correlation of issues with vote does not reduce to meaninglessness when controlled by affective change. The multiple partial correlation for issues is .60, which of course statistically explains
36% of the remaining variance. Thus affective change has substantial explanatory power independent of issues, and issues have substantial explanatory power independent of affective change.

The two sets of predictive variables can together explain 73% of the variance of vote. The variance explained uniquely by affective change is 34%, that explained uniquely by issues is 13%, and the variance shared by both is 25% (figures do not add to 73 because of rounding). Because such a large proportion of explained variance is shared, it is impossible to conclusively establish the predominance of either affective change or issues, and it is impossible to allocate the exact proportion of variance explained by either. If issues account for the proportion of variance which is shared, they (probably issue voting) are more responsible for the erroneous predictions than affective change, and if affective change accounts for the shared variance, its explanatory power is about four times greater than issues.

The above figures come from the context of some unusual research with a small portion of the electorate, but they have been used for the sake of illustrating with actual rather than hypothetical data, and the principles they illustrate apply to other attempts to specify the relative impact of candidate, party, and issues. When independent variables are highly correlated, and when they share a large proportion of the explained variance of a dependent variable, it is mathematically impossible to separate their individual effects. We thus need to face the fact that in dealing with issue voting we may never have the capability of precisely measuring it. It could be the case, moreover, that our disputes about issue voting stem from theoretical disagreements which will never be empirically resolved.
I have reported my ongoing research firstly to illustrate the
difficulty of disentangling the effects of highly correlated independent
variables. Secondly, the report illustrates the potential utility of
pre and post candidate thermometer scales. Although the electorate as
a whole did not meaningfully change its thermometer ratings of Nixon and
McGovern during the pre and post election surveys, a particularly
important segment of the electorate did. This segment involved at least
some of the individuals who appeared ready to vote for one candidate and
eventually voted for the other. In order to better understand the
decision-making process of the individual voter, particularly those who
have not quite made up their minds and probably those who change their
minds in the midst of the campaign, we need to ask the candidate thermometer
questions at least twice. Unfortunately, such questions were asked only
prior to the 1976 election.

At the same time, we need to reexamine and attempt to determine what
the thermometer questions are measuring. As implied by the discussion
of shared variance above, the feeling thermometer may partly be capturing
issue proximity. Of course it may also be capturing party affiliation.
The thermometer's ratio level of measurement has done much to advance our
methodological sophistication (the 98-100 categories should not be collapsed
to 97). However, an instrument which would capture everything would
distinguish nothing. We need to develop ways of determining what the
feeling thermometer does capture and to better distinguish its unique
components from such variables as salience issues, valence issues, party,
and economic conditions. Possibilities include factor analysis of likes/dislikes questions, partial correlations, and canonical correlations.