On Ad-Hominem Assertion and Scientific Discourse in the Study of Sociotropic and Egocentric Motivations of Political Attitudes and Behaviour

Douglas A. Hibbs, Trade Union Institute for Economic Research (FIEF), Stockholm, and Department of Economics, Göteborg University

Introduction

In Scandinavian Political Studies (1994, 83–88), Professors Peter Nannestad and Martin Paldam (hereafter “NP”) reviewed my little monograph – just an extended essay really – titled Solidarity or Egoism? The Economics of Sociotropic and Egocentric Influences on Political Behaviour: Denmark in International and Theoretical Perspective (Aarhus University Press for the Rockwool Foundation Research Unit, 1993). Because I think NP’s review dwells too heavily on allegations about my (i) pro welfare state “value biases” (pp. 83, 84, 87, 88), (ii) “grudging acceptance” of proper scientific terminology (pp. 83, 84), and (iii) application of “double standards” in support of politically preferred conclusions (pp. 83, 86, 87), and too little on the substance of my essay and the larger scientific issues it addresses, the editors of SPS have kindly given me this opportunity to redress the imbalance between ad hominem assertion and scientific discourse populating NP’s remarks.

NP’s review begins by describing my monograph as “a strange little booklet” because of the biases just mentioned, and also because it focused so much on their research on Denmark “which is not yet available in a final version” (NP 1994, 83). It is appropriate, therefore, that I provide a few words about the origins of my efforts. My work was commissioned by the Director of Research at the Rockwool Foundation, who in turn was responding to an energetic request from Professor Paldam that I be recruited to write an extended essay placing NP’s empirical research on sociotropic versus egotropic political behaviour in Denmark in international and theoretical perspective. The initial NP-Rockwool Foundation plan was to issue a small volume on the topic centred on NP’s work, with my essay
included as an interpretative companion. Evidently, I was recruited somewhat late in the day as a replacement for a prospective Danish contributor (Jørgen Goul Andersen) whose initial companion essay was viewed by NP and Rockwool as somewhat too critical of NP’s methodology and conclusions for inclusion in a harmonious joint volume. After obtaining written assurances from both NP and Rockwool that the NP work I was engaged to review was their “final word” on the topic (and not a “moving target”, as I suspected at the time, and NP say in their review is now the case), I signed on to the project. Before I had completed my companion essay, however, I was informed that Rockwool and NP had fallen out, because Rockwool officials arrived at the judgment (after consultation, it seems, with one or more Danish social scientists) that NP’s work was of insufficient quality and originality to merit publication under Rockwool Foundation sponsorship. Consequently, my own essay ultimately was issued as a stand alone piece, the “strange little booklet” that Martin Paldam announced to me that he and Peter Nannestad would “review” in SPS, once it was published.

The main objective of my monograph was to supply a rather matter of fact tutorial on how to do decent research on egocentric/egotropic/self-interested motivations of political behaviour (under which, in Down’s [1957] words, “each citizen casts his vote for the party he believes will provide him with more benefits than any other”), as opposed to sociotropic/solidaristic/public-spirited motivations (under which, in Kinder & Kiewet’s (1981) words, “citizens vote according to the country’s pocketbook, not their own”), with special reference to NP’s empirical work on Denmark. After reviewing the intellectual origins of the egocentric–sociotropic distinction to establish background to the debate, and after presenting a brief exegesis of the pure theory of probabilistic electoral choice and the econometrics of measurement specification error to establish useful theoretical and methodological frameworks for analysis, my monograph developed, inter alia, the following conclusions regarding NP’s contention that Danish political behaviour is driven predominantly by egocentric motivation, in contrast to research findings for the US and many other countries.

Micro Voting
NP presented some micro regressions in support of their arguments, but properly interpreted these analyses furnish little or no evidence favouring an egocentric model of Danish voting choices. In fact, although they clearly did not realize it when writing the papers I reviewed, NP’s statistical results mimicked, as closely as their measurements permitted, the results first obtained for the US by Kinder & Kiewet (1981) that were taken by many in
the social science community as establishing a “sociotropic” model of voting.

In the founding work on sociotropic voting, Kinder and Kiewet reported regressions like the following for individual presidential voting choices:

\[
\text{Prob (Party Vote)} = F \left\{ \begin{array}{l}
\text{Party ID, Party Competence Handling (economic) Problems,} \\
\text{Other Insignificant Sociotropic,} \\
\text{Egocentric Economic Variables}
\end{array} \right\}
\]

where F denotes a linear operator, Party ID is regarded as a proxy for the history of voters’ normal party vote and statistically significant variables are shown in boldface type. Conditional on historical party attachments, Kinder and Kiewet’s results were taken to imply that voters’ assessments of party competence in handling specified economic problems are the main determinant of US presidential voting.

Analogously, for bloc voting choices of Danish respondents, NP’s micro regressions (1992) yielded

\[
\text{Prob (Bloc Vote)} = F \left\{ \begin{array}{l}
\text{Vote-I, Government Competence Solving Problems,} \\
\text{Other Insignificant Sociotropic,} \\
\text{Egocentric Economic Variables}
\end{array} \right\}
\]

where \( F^* \) denotes a standard normal cdf probability model (probit) and significant variables are again indicated by boldface type. In their review of my monograph (but not in their papers [1991, 1992]), NP seem to acknowledge the striking similarity of their results to Kinder and Kiewet’s US “sociotropic” evidence, but they conjecture that although American measurements of party competence in handling (specified) economic problems “will probably be understood as referring to social rather than personal concerns”, their Danish measurements of government competence in solving (unspecified) problems “may be sociotropic or egotropic” (NP 1994, 86). The conclusion I drew in my monograph was that “since Party Competence assessments comprised the most important indicator of sociotropic motivation in the founding work on the topic, by established standards of the field [and subject to the possibilities afforded by their measurements] NP’s research actually demonstrated that [conditional on voting histories] sociotropic orientations have dominated Bloc Voting outcomes in Denmark. Here I share the working assumption of [NP’s Aarhus colleague] Goul Andersen, who like Kinder and Kiewet and most other contributors to the field, also regarded the Government’s problem solving ability as a measure of sociotropic orientation” (Hibbs 1993, 63).
Voting Dynamics

The influence exerted by past votes (Vote\_t\_1) on current voting intentions in NP's probit regressions was very large, and has strong implications for the dynamics of Danish voting behaviour which go unnoticed in their papers. I show in my monograph that over the variation in evaluations of government problem-solving competence registered in NP's data, their estimates implied that the conditional probability of unchanged bloc voting from election to election was in almost all circumstances between 0.9 and 0.99. Rather than providing evidence of egocentric voting, I concluded that the model of electoral behaviour most consistent with such regression results is one in which “Danish bloc voting behavior evolves very nearly as a random walk perturbed by Competency 'shocks', that is, by shifts in public perceptions of the government's management ability. . . . [as already noted] such competency shocks are probably best regarded as movements in general sociotropic orientation” (Hibbs 1993, 38, 62). The dynamic element of my interpretation of course conforms to the well-known sluggishness of Scandinavian bloc voting, extensively documented in the political behaviour literature.

Given these conclusions, I pointed out that sources of shifts in the electorate's assessment of governments' "ability to manage and solve problems" was a good place to look for particular sociotropic and egocentric effects on Danish political behaviour. In this respect NP's (1991) investigations of the determinants of fluctuations in government competency ratings took on added significance. In the research I reviewed, NP supplied two distinct streams of relevant analysis.

Sociotropic Versus Egocentric Orientation

One approach pursued by NP consisted of estimating microlevel regressions of individual (binary-coded) competency ratings on three Factor Scores, one denoted sociotropic and two denoted egotropic, which were constructed from individual responses to a battery of questions pertaining to various economic events. Regressed on binary Competency ratings, NP found that their egotropic factor scores, which were generated from respondents' reports of personal and household economic experiences, dominated their sociotropic factor score, which was generated from respondents' "worries" about economic problems. They interpreted these regression results as strongly supporting an egocentric/egotropic model of Danish political behaviour. NP's conclusion, however, is fatally flawed because their measurements do not adequately address the issues under debate.
The constituents of their sociotropic factor scores were responses to the question:

*I shall now mention some social problems and ask you to tell me whether it is a problem which worries you 'a lot', 'only a little' or 'not at all': Unemployment – Price Increases – Foreign Debt*

With the possible exception of the Foreign Debt item, answers to this question convey no useful information about the sociotropic versus egocentric orientation of the respondents. Expressions of “worries” about these matters to pollsters may wholly reflect self-interest or wholly reflect a concern for the public interest, or perhaps reflect some mixture of the two. Among other things, I therefore concluded in my monograph that “it obviously was not possible [from regressions based on such factor scores] for NP or anyone else to make credible inferences about the relative importance of self-interest and national interest in accounting for voters’ assessments of Government management or problem solving Competency” (Hibbs 1993, 63–64).

**Aggregate Regressions**

A second approach taken by NP involved estimation of statistical relations between aggregated competency ratings (percentage competency ratings obtained by taking averages over microindividual responses each period, “Pct Competency”) and various macroeconomic variables. These regression exercises produced results in the form:

\[ \text{Pct Competency} = F(\text{Competency}_{-1}, \Delta \hat{P}_{-1}, \Delta \tilde{W}, \Delta U_{-1}, \Delta \text{BoP}_{-1}) \]

where \( F \) denotes a linear operator, \( \hat{P} \) is the inflation rate, \( \tilde{W} \) is the real wage growth rate, \( U \) is the unemployment rate, \( \text{BoP} \) is the balance of payments, \( \Delta \) is the difference operator and, as before, significant variables are shown in **boldface** type.\(^3\) From such aggregate political-economic regressions NP claimed to find macrolevel confirmation of their microlevel inferences. They wrote:

> the analysis has shown that, to a high degree, the private economic conditions have importance for the distrust [of the management competence] of the government. This appeared both on the macro level where inflation (the real wages development) proved to affect the distrust [of the management competence] of the government, and on the micro level where the “egotropic” factors proved to penetrate more strongly . . . than the “sociotropic” one. . . . (NP 1991, 30).

I found this interpretation of the aggregate evidence to be truly astonishing, especially coming from experienced professors of political science and economics, respectively. Clearly, no such conclusion about
individual motivation can be drawn from these or any other such aggregate regressions. In my monograph I concluded:

NP’s macroeconomic regressions (1991, Table 1) are of no help in estimating the relative importance of egocentric and sociotropic political motivation. . . . the coefficients register an attenuated sum of both Personal (Egocentric) and National (Sociotropic) effects (Hibbs 1993, 47).

Double Standards, Hard Work, Serious Science

As noted in the introduction, the conclusions I set out briefly above, as well as others that space limitations prevent me from going into here, were developed in my monograph in a rather formal fashion, generally by reference to the pure theory of probabilistic electoral choice and the econometric theory of measurement error. The later body of theory in particular was exploited to great benefit in Kramer’s (1983) work, and I made considerable use of Kramer’s fundamental insights after generalizing a bit his overly strict framework of application.

The theoretical objections to NP’s arguments that I made from this angle were intentionally and transparently conjectural in my monograph, and are the object of a sizeable fraction of NP’s review. Here NP accuse me of accepting, with minor qualifications, “all evidence from cross-sectional studies showing that economic voting is sociotropic” while “At the same time he [Hibbs] rejects our finding, that Danes are egotropic, because they are reached using a cross-sectional design!” NP label this alleged inconsistency “the Hibbsian double standard” and they conclude that “It cannot but reinforce the suspicion of a value bias that was suggested by his [Hibbs'] choice of terminology already” (NP 1994, 84). These assertions seem to be based on misunderstanding of my review of the facts as well as my exposition of the information problems faced by voters when judging government performance.

Concerning the former, I devoted an entire section of my monograph to showing how the intersection of hard theoretical thinking and development of improved statistical design has yielded current best estimates of sociotropic effects on American voting that are only one-eighth to one-sixteenth the magnitude of earlier calibrations (Hibbs 1993, IX passim). Far from “accepting all evidence from cross-sectional studies”, I pointed out in my concluding remarks that

The US record [of research] illustrates vividly how on occasion refinement of research design . . . can actually change the qualitative implications of the evidence. . . . In the first wave of cross-sectional research on the US, sociotropic effects were estimated to be from eight to twelve times larger than egocentric effects. . . . egocentric motivation is now
believed to exert roughly the same, or perhaps somewhat greater, influence as sociotropic motivation (Hibbs 1993, 65).

The second source of NP’s misunderstanding stems from an incomplete grasp of the implications of measurement error theory generally, and the signal from noise extraction problem in particular, for specification of empirical models that stand some chance of recovering in data what voters regard as politically relevant performance when they make electoral valuations. NP write about “estimates of egotropic and sociotropic effects [having] several likely biases”, which they believe have something intrinsically to do with time and can somehow be neutralized or sorted out by including “time”: “The egotropic and sociotropic effects are something happening over time. Cross-sections therefore cannot yield valid estimates. . . . One has to use models with . . . mixed time-series cross-sections data (pooled cross-sectional design)” (NP 1994, 84). Notwithstanding the citations in NP’s review to Kramer (1983), as well as to pertinent sections of my monograph which they see as developing the topic “very elegantly”, these remarks simply exhibit no professional-level understanding of the scientific issues involved. The problem of identifying and disentangling sociotropic and egocentric political motivations has nothing whatever to do with intrinsic time, and cannot be solved by brute force application of computer regressions to pooled time-series data sets, as one finds, for example, in NP (1993). Without repeating here the quite detailed exposition in my monograph (in sections IV, V, XIII and IX), one of the important messages I tried to convey, both by reference to pure theory and good empirics, was that “pooling alone is no panacea”, that is, “pooling by itself is no solution to the measurement bias problem” (Hibbs 1993, 59, 60).

Serious scientific work on the subtleties of political motivation or, for that matter on any complex topic of significance, requires delaying the urge to accumulate, at great public expense, mass survey data on hastily devised questions, holding in check the inclination to attempt solution of difficult research problems via endless computer runs, resisting the temptation to achieve quick notoriety by making unusual, unsustainable and sometimes transparently silly claims and, instead, engaging first in the often very hard work of mastering the theories and methods appropriate to analysis of the social and institutional contexts nature supplies.

NOTES
1. The NP papers I reviewed are Nannestad & Paldam (1991) and (1992). An “in progress” draft of a follow-on paper in Danish, Nannestad & Paldam (1993) arrived in my post after I had completed writing my monograph, and so I did little more than add
mention of its existence in my introduction. Evidently, yet more papers were produced subsequently.

2. These scores comprise the “Other Sociotropic and Egocentric Variables” that in regressions of the form discussed above exerted little or no effect on Danish Bloc Voting intentions in the presence of respondents’ reports of prior Bloc Votes and evaluations of Government Competency in managing and solving problems.

3. Inflation and real wage growth appeared separately in NP’s linear regressions.

4. NP’s theory of terminological bias is founded on my use of the term egocentric as opposed to their use of egotropic and on my “grudging” use of the term sociotropic “in most of the book”, even though I would really prefer to use (how they know is not stated) alternatives like “good and bad” (NP 1994, 83). Terminological bias may be spreading. Clarke & Stewart (1994) also repeatedly use the term “egocentric” rather than NP’s unbiased alternative, “egotropic”.

REFERENCES