A New Model for Election Forecasts

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This is the first of two articles analysing the forecasts of voting and the actual trends in the general elections.

"THIS is not yet a revolt", said the Indian Institute of Public Opinion somewhat pontifically on January 30, 1967, "but it may in time be a Revolution". The Institute was not engaging itself in astrology but was experimenting, for the third time in a decade, with a forecast, State by State, of the Congress popular vote, and, for the first time in India, with a scientific prediction of Congress seats in the Lok Sabha and State Assemblies.

The measurement of the "popular" vote is an old-timer in public opinion research, at least since Dr. George Gallup first embarked on this hazardous occupation on October 21, 1935. In India, the Institute of Public Opinion forecast the Congress vote in the Lok Sabha fairly accurately in 1957 and *mirabile dictu* exactly in 1962. But 1967 was clearly a very different matter. For one thing, interest shifted to the States, for the Congress was certain to obtain an absolute majority at the Centre. The demand was for measurement of seats more than the popular vote: for it is seats, not votes, that are the real vehicles of Power. And, as in Say's notorious economic law, supply had to rise to meet demand.

This is the backdrop of the Institute's new model for measurement of both votes and seats: it is an original model in the sense that it has been tried for the first time. By and large, it has satisfied the pragmatic test: it has worked except in three States, Madras, Kerala and Madhya Pradesh. Obviously it needs improvement, but one can, on the record, hazard the opinion that a breakthrough on the measurement of seats at the national level has been made.

How was this done? By the combination of political surveys and three parameters, two for adjustment of the popular vote as it emerged from "crude" field data and one, a more difficult concept, a "Congress Multiplier", applied to the Congress percentage of the popular vote in each State to give the corresponding Congress percentage of seats in each Assembly. The survey was based on 8,400 "clustered" random interviews, set out as in the map, conducted in the months of October, November, December, 1966 and January 1967.
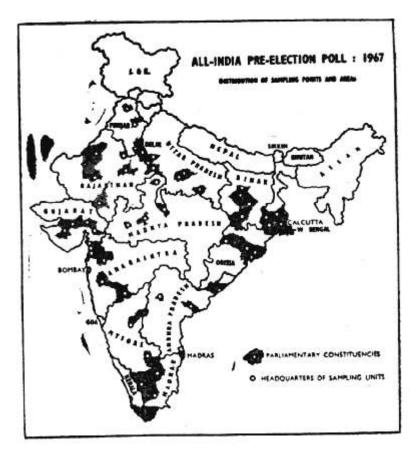
There are good reasons why, in India the answer to the classic Gallup question: "If there was an election today for which party would you vote?" provides the wrong answer, meaning a figure for the Congress vote different from actuals by a margin greatly exceeding the error due to the small size of the sample. Much experience with this double unreality has convinced the Institute's survey analysts that what emerges from Indian survey data is a polarised presentation of two possibilities, "Congress" and one other party or "undecided". The undecided element is amenable to public opinion research techniques: but how does one adjust the survey data on the Congress or Opposition vote to the multicandidate situation? The answer is by applying a "splinter" reduction factor depending on the number of contestants per seat.

There has been a widespread view —which is totally mistaken—that every non-Congress candidate in an election splits only the Opposition vote. The Indian Institute's research on each of the State results in 1957 and 1962 showed a fairly consistent linear relation between the number of contestants and the decline of the Congress vote This relation is called the "Splinter Factor." It has been the main instrument in the Institute's success in forecasting the Congress popular vote within the sampling error in every State in which surveys were undertaken. The Table alongside gives details of prediction and of performance as they finally emerged.

Turnout and Seats

A word should be added, however, about the two other factors, one affecting the popular vote only marginally; the other—The Congress Multiplier—the main determinant of seats. The former is called the Congress Marginal Turnout Factor measuring what might be described as "involvement" in the elections by actual voter. Surveys of the Indian Institute of Public Opinion show quite definitely that political apathy is very high amongst illiterates, and that the most politically active groups are biased towards the age-group under 35 and literates. It has been possible to compute a factor which suggested that turnout in 1967 might be 60 per cent. This has come true. If this increased turnout were equally distributed between the Congress and the Opposition, no corrective would be necessary. But Election Commission statistics for 1962 show that the Congress held only one in three of additional votes polled; in 1967 it was below one in four: there are the widest differences in the effect of increased turnout between States. The inter-State correction was applied in a "marginal turnout factor."

The Congress Multiplier

It is now necessary to pass on to the fourth factor, a more dubious creation. This is the Congress Multiplier, an abstract factor invented by the Institute by dividing the "probable" percentage of Congress seats accruing from a given percentage of the Congress "popular" vote. In a multiparty system, with an indefinite number of contestants, this factor can only be deduced from historical data for 1957 and 1962: in 1952 the States were different. Adjustments are then made on the basis of number of contestants.

The theory of probability is not here applicable as it applies only to large samples: therefore, the error here was expected to be large. So it was in Kerala, Madras, Madhya Pradesh, but overall, the result was remarkably near the calculated figures. As a result, the overall prediction on seats for all the States together and for the Lok Sabha, was unexpectedly good. The predicted percentage of Congress seats at the "middle" for the Centre was 57 per cent and for all the States together 50 per cent. Actuals are now 54.6 and 50.61 per cent. No prediction of seats has ever been closer.

(To be concluded)

ALL-INDIA PRE-ELECTION POLL : 1967

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TABLE I: CONGRESS PERCENTAGE OF TOTAL POPULAR VOTE POLLED AND SEATS: 1967 ELECTION

State	Congress Percentage of total polled votes		Congress Percentage of Seats	
	I.I.P.O. Estimate as published on 11-2-1967	Actuals	Actuals	
1	2	3	4	5
Andhra Pradesh	41	42.9	57.5	
Assam	44	40.1	58.1	
Bihar	36	31.3	40.3	
Gujarat	44	43.1	55.1	Congress
Haryana	44	39.3	59.3	"Multiplier"
Kerala	30	34.1	6.8	4 ÷ 3
Madhya Pradesh	3	37.7	56.4	i.e.
Madras	38	37.3	21.0	Congress percentage of Seats
Maharashtra	43	41.2	75.1	
Mysore	43	45.7	58.3	
Orissa	37	30.4	21.6	Congress percentage of popular vote
Punjab	37	37.4	46.2	
Rajasthan	32	39.4	48.4	
Uttar Pradesh	33	30.4	46.8	
West Bengal	39	38.9	45.4	
State Assemblies (excluding Union Territories)	37.2	37.86	50.61*	1.34*
Lok Sabha	38.2	37.87	54.58*	1.44*

* The Institute's "middle" estimate on State Assemblies together was 49.95 per cent for the Congress and 57 per cent for the Lok Sabha. Its corresponding Multipliers were 1.35 and 1.5 respectively.