

22.

Here is another (more recent) example of trendy social science intruding: is it animating? or intimidating? or dismissible? The author-advocate sees it as "both justified and inevitable." Time may tell.

FACTIONS and Policon: New Ways to Analyze Politics

STANLEY A. FEDER

Two challenges facing every political analyst are the complexity of political phenomena and the sea of information flooding our inboxes. During the late 1970s and early 1980s a small group of academics began to make some headway against these problems. Two tools—social choice theories of politics and computers—have made this progress possible.

The theory of social choice focuses on the outcomes of processes by which groups make decisions. Applications of the theory rely on information about the relative strength of political actors, outcomes they want, or candidates they are backing. This is information [of] which most country specialists have a strong intuitive grasp. The theory uses concepts such as cost/benefit analysis and actors' orders of preference for the possible outcomes. The former is used to make inferences about how individuals will behave in making political choices, such as when voting; the latter, to make inferences about the positions a candidate should advocate in order to win the most votes. **FACTIONS** and **Policon**¹ are both based on parts of social choice theory that deal with individual behavior and the aggregation of individual preferences.

In contrast to the information requirements of traditional analysis, those of social choice theory are quite parsimonious. In addition, the relationships among political variables in social choice theory are described with much more precision than in classical political theory. In social choice theory political relationships are described mathematically; this makes the computer an appro-

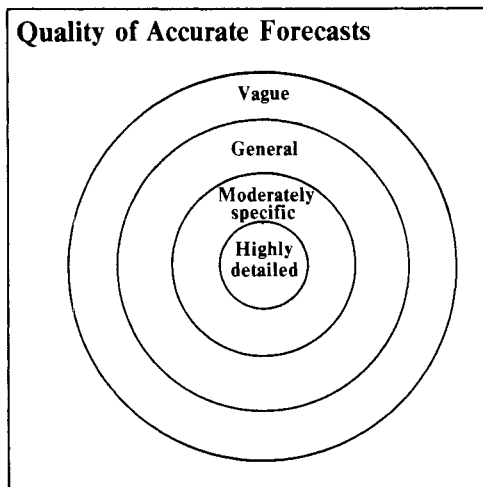
Stanley A. Feder, "FACTIONS and Policon: New Ways to Analyze Politics," *Studies in Intelligence*, vol. 31, no. 1 (Spring 1987), pp. 41–57. Originally classified "Secret" and "Noform." For definitions, see appendix B.

1. Policon is a method for political forecasting and analysis developed by Policon Corp. and used by the CIA under contract from 1982 until 1986. **FACTIONS** was developed internally by the Directorate of Science and Technology, Office of Research and Development, and is very similar to Policon.

priate tool for political analysis. Computerized social choice analysis of the interactions of dozens of political actors can be done with consistency and theoretical rigor in a fraction of a second. Analysts who learn FACTIONS or Policon will not only improve the quality of their analyses but should increase their output as well.

More specific and detailed forecasts. Since October 1982 teams of analysts and methodologists in the Intelligence Directorate and the National Intelligence Council's Analytic Group have used Policon to analyze scores of policy and instability issues in over 30 countries. This testing program has shown that the use of Policon helped avoid analytic traps and improved the quality of analyses by making it possible to forecast specific policy outcomes and the political dynamics leading to them.

For example, 60 percent of the Policon analyses done between October 1982 and October 1985 forecast specific outcomes. (The other 40 percent forecast general trends.) In contrast, only 33 percent of DI analyses published during the same period forecast specific outcomes. More than 60 percent of the Policon analyses also predicted the political dynamics leading to the outcomes. Political dynamics were included in less than 35 percent of the traditional finished intelligence pieces. Interestingly, forecasts done with traditional methods and with Policon were found to be accurate about 90 percent of the time. Thus, while traditional and Policon-based analyses both scored well in terms of forecast accuracy, Policon offered greater detail and less vagueness. Both traditional approaches and Policon often hit the target, but Policon analyses got the bull's-eye twice as often.



Beyond that, analysts have found that the use of Policon and FACTIONS makes it easy to analyze alternative scenarios systematically and in detail. Questions like “What if the leader of country X dies?” or “What if the Soviet Union intervenes?” can be answered quickly with FACTIONS or Policon, and in terms of policy outcomes and political processes. Also, both methods make it possible for analysts to test which of the assumptions they have to make will have a major impact on analytic conclusions.

An efficient way to structure political analysis. Like many approaches to political analysis, Policon and FACTIONS assume that once a political environment has been described, inferences can be made about how political actors will behave, how issues will be resolved, and what outcomes will occur. Unlike some approaches, however, Policon and FACTIONS assume that political behavior is purposeful, that individuals and groups compete with each other to obtain outcomes they desire, and that policy outcomes are the result of such competition. Thus, an analyst using Policon or FACTIONS describes a political environment in terms of issues, actors trying to influence the politics of those issues, and each actor’s relative political clout and its policy priorities.

As a conceptual framework, these methods indicate what information is important and provide rules for organizing and analyzing political information and for forecasting. Policon and FACTIONS also provide guidance on how to

How the Policon model helps analysts avoid traps

Traps

Continuity expectations—the future will look like the past.

Too few alternative outcomes considered.

Anchoring—new evidence yields unjustifiably small changes in an earlier estimate.

Causality—policies and orders are assumed to be carried out immediately and smoothly in other countries.

Rationality—others are often expected to behave in ways consistent with our expectations.

Model’s Benefit

The model assumes policies or leadership are a product of estimable political forces, not a continuation of a trend.

Examines the possibility of each outcome favored by each actor of occurring.

New evidence is processed systematically to produce a completely new analysis and forecast.

Highlights conflicts with ruling groups and between ruling groups and the bureaucracy and military.

Assumes behavior is a result of patterns of goals and capabilities, and as each actor sees them from his/her/its perspective.

break an intelligence problem down into a number of smaller questions. For example, analysts concerned about the potential for instability would examine issues over which a governing group would face strong opposition, such as leadership succession, the degree of fairness of elections, or the level of government subsidies on consumer items. A country's East-West orientation could be explored by examining pressures for a shift in trade patterns, a reduction of foreign basing rights, or support for wars of national liberation.

How and why FACTIONS and Policon work. At the heart of FACTIONS and Policon are two models. The first is a model that is used to forecast policy outcomes. This model is derived from what social choice theorists call the "spatial" theory of voting. Spatial models use locations in a coordinate system as an analogy to how close or far apart on an issue groups are politically (as in Table 1).

With FACTIONS and Policon, the coordinate system is unidimensional. This means that issues to be analyzed must be conceived of as having possible outcomes that can be ordered along a line. Some issues have multidimensional aspects; these cannot be analyzed with Policon. Our experience, however, has been that the outcomes of most issues can be portrayed in a single dimension.

[Table I includes] a spatial model of an issue the Office of European Analysis explored in 1983. The Italian Parliament had to decide how large a budget deficit to permit. The Policon analysis not only forecast the outcome with an error of less than one percent, it also correctly indicated that the Italian government would fall over the issue.

In the diagram [section of the table], possible outcomes are described in terms of the size of the debt each group wanted Italy to incur. An abbreviation of the name of each group is placed above the line corresponding to its position on the debt issue. The full names are spelled out in the list above the diagram.

In spatial models of voting, it has been shown theoretically and empirically that the outcome that wins is the one that can derive the most support from nearby groups—the median position in terms of votes or power resources. Policon and FACTIONS use voting as an analogy to other forms of political processes. With these methods, analysts' estimates of an actor's relative political, economic, or coercive resources are used to approximate the number of "votes" an actor controls.

FACTIONS and Policon also assume that an actor may not use all of its clout on issues that are not very important to it. The resources an actor will bring to bear on an issue are, therefore, assumed to be proportional to the importance of that issue to the actor.

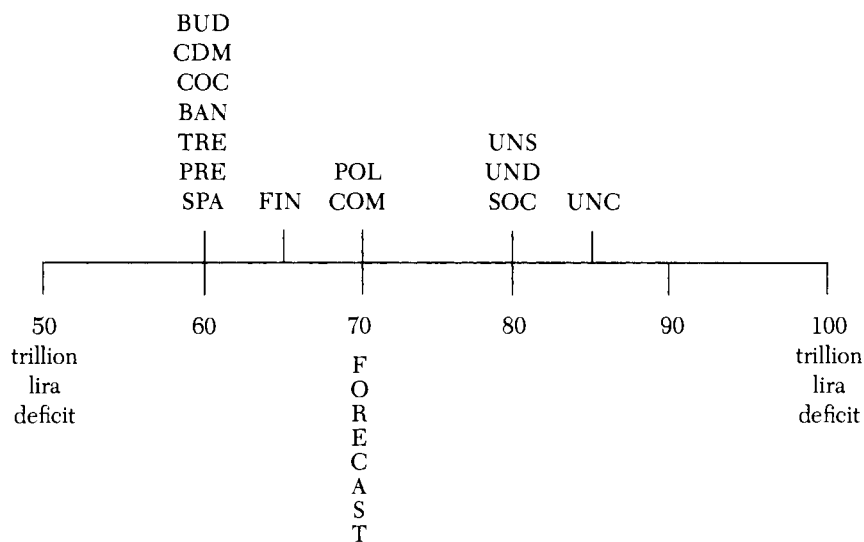
The model also assumes that each actor can support or oppose any policy proposed, depending on how near to or far from the actor's desired outcome the proposed policy is. The amount of support an actor will give to a proposed

Table 1 The Italian Budget Deficit Issue

Actors			
Ministry of Budget	BUD	Christian Democrats	CDM
Socialists	SOC	Communists	COM
Employers' Association	COC	Unions—Socialist	UNS
Unions—Communist	UNC	Unions—Christian Democrats	UND
Financial Press	FIN	Political Press	POL
Bank of Italy	BAN	Treasury Ministry	TRE
Pertini	PRE	Spadolini	SPA

Issue Diagram

What size deficit will the Italian Parliament permit?



policy depends on the “utility” of that policy for the actor. With *FACTIONS* and *Policon*, utility is inferred from a policy’s position on an actor’s list of possible outcomes ordered from most to least preferred. These preference orderings are derived from nearness to the actor’s position in the spatial diagram of an issue.

To use *FACTIONS* or *Policon*, an analyst would take these steps:

- First, define the intelligence problem in terms of a set of policy or leadership choice issues. For each policy issue, identify the actors that will try to influence the outcome.
- Then diagram the issue by placing the groups that advocate opposing and most extreme positions at the opposite ends of a straight line.

- Next, indicate where on the line the policies advocated by the other groups lie. Take care to make the distances between the groups' positions represent the analyst's feel for how near to each other or how far apart groups' advocated policies were. For leadership choice questions, list each actor's order of preference among the possible candidates.
- Next, identify the strongest actor and arbitrarily assign that actor a value of 100. Assign proportional values to other actors based on judgment or gut feeling about their relative strength. Lastly, again use a 100-point scale to estimate how important the issue is to each actor.

Thus, analysts who use **FACTIONS** and **Policon** draw heavily on their judgments and impressions about political forces in the countries they follow. **FACTIONS** and **Policon** make it possible for the country specialists to make accurate forecasts based on their intuition and judgments. If an analyst is not sure about the strength or position of a group, or the salience of the issue, a range of values can be used to see at what point the values of these variables make a difference in the forecast outcome or patterns of cooperation and conflict.

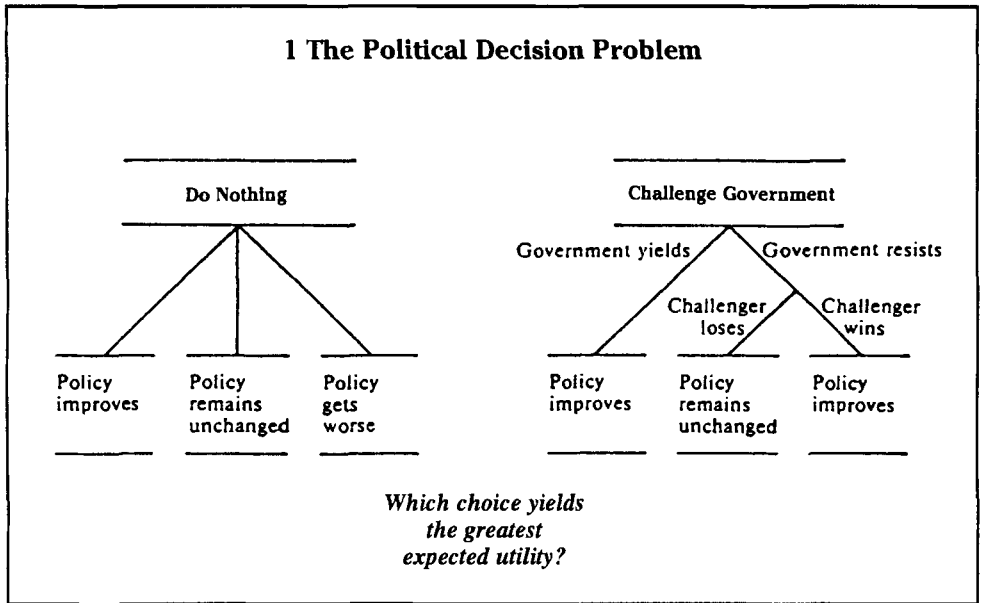
In mathematical terms in the policy forecasting model, the amount of support an actor (let's call him/her A) gives to another (let's call her/him B) equals A's resources times the salience of the issue to A times A's utility for B's position.

$$\text{A's support for B} = (\text{A's resources}) \times (\text{salience of issue to A}) \times (\text{A's utility for B's position})$$

To use the model, the amount of support each actor will derive from every other actor is computed and summed. Then the model asks which group's position would win if the policy contest came down to a choice between only two alternatives. In other words, is there an actor or set of actors who support the same position, that can defeat every other actor or coalition in a pairwise contest? In social choice theory the actor or policy that can defeat every other one in pairwise contests is called a Condorcet winner, after a French mathematician, the Marquis de Condorcet. Usually there is a Condorcet winner. If there is none, however, there can be frequent shifts in policy on the issue.

Once the number of actors concerned about an issue exceeds three, forecasting a "winner" becomes too time consuming to do by hand. Computer software has been written to perform the forecast calculation rapidly.

The second model on which **FACTIONS** and **Policon** are based is a decision model, also known as an expected utility model. For each actor, this model estimates a hypothetical cost or benefit associated with that actor's attempts to get other actors to accept the policy outcome advocated by the first. The patterns of costs and benefits are the basis of inferences about how groups will



react. For example, groups that have a lot to gain by challenging others probably will initiate action. Groups that support different positions and believe they each have something to gain on an issue are likely to find themselves in conflict with each other.

With **FACTIONS** or **Policon**, the decision problem every actor is assumed to face is whether to try to influence the other actors to accept the policy preferred by the first. The logic of the cost/benefit analysis is illustrated in Diagram 1. Let's assume that a group (let's call it actor A) wants the government to change a policy. There are two courses of action open to A: Do nothing or take actions to pressure or persuade decision makers to change the policy. If A challenges the government, the latter can react in one of two ways. The government might yield and change its policy to the one that A prefers, or the government might resist the challenge. If the government resists, A might muster enough support to get what it wants, or A may lose.

In probability theory the concept of an expected "outcome" is used to aggregate the values of the outcomes of events or actions. Measures of expected outcome can be used to determine if the action is worth taking. For example, assume that you are asked to buy a \$5 raffle ticket for a new Mercedes automobile worth \$30,000. You know that 10,000 tickets will be sold. If you buy the ticket, is it likely to be to your benefit? One way to decide is to look at the expected outcome.

To calculate the expected outcome you have to list the possible outcomes, the value of each to you, and the probability that each will occur.

There are two possible outcomes: you could win or you could lose. The probability of your winning having bought one ticket is one in 10,000. The probability of your losing is 9,999 out of 10,000. If you lose, you are out \$5, but if you win you are ahead by \$29,995 (\$30,000 – \$5).

The expected outcome from buying the raffle ticket is the sum of each outcome times the probability of its occurring. Thus your expected outcome would be a loss of \$2: $(\$29,995 \times 0.0001) + (-\$5 \times .9999) = -\$2$.

With the political decision model a similar calculation can be made, but outcomes are valued in terms of political utility rather than in dollars. Thus we call them political expected utility models.

For analytic purposes, we can think of A as placing some value (utility)—be it positive or negative—on each possible policy outcome. We can also attach a probability to the government's resisting A's attempt to have the policy changed, and to the government's not resisting. Similarly there is a probability that A will win, and a probability that A will lose a potential fight with the government.

In the FACTIONS/Policon approach, A's utility for each possible political outcome can be inferred from the location of alternative outcomes relative to A's position on the issue continuum. The probability that A will win in a political contest with another actor is approximated by A's resources relative to those of the other actor. An estimate of the probability that an actor will resist a challenge is derived from the measure of the importance of the issue to the actor being challenged.

Using these values we can calculate what A is likely to get out of challenging the government. In the jargon of microeconomics, this calculation produces an approximation of A's costs or benefits—its expected utility—in challenging the government on the policy issue.

The value of an approach like FACTIONS or Policon is that it uses country specialists' impressions of groups' relative strengths, positions on an issue, and degree of interest in an issue to generate proxies for the values of probabilities and utilities.

This expected utility calculation describes only A's relationship with the government. In reality, many other actors can be involved. Each of them will make its own political calculations and may either sit back and watch or throw support behind one side or the other if A or anyone else takes action to get the policy changed.

Policon's and FACTIONS' expected utility models take the possible actions of third parties into account and include them in A's simulated cost/benefit per-

spective. The models also incorporate actors' attitudes toward risk in the calculations.

If the expected utility of challenging a policy is compared to the costs and benefits of not challenging, we can make inferences about what A is likely to do. For example, if A's expected utility of not challenging is greater than that for challenging, A is likely to do nothing. But if A's expected utility of challenging is greater than that for accepting the status quo, A can be expected to take action.

If two actors each perceive that they have something to gain in challenging each other, they can be expected to end up in conflict with each other. When a nation's leader has conflictual relations with many important groups, that country would be considered unstable.

If a national leader has a positive expected utility vis-à-vis another group when the latter has a negative expected utility in relation to the leader, the other group would be expected to accept the leader's position or to try to negotiate a compromise. A group will yield when it believes that less is being asked of it than it believes it could lose. It will resist a political demand when it believes that more is being asked of it than it believes it has to lose. The patterns of behavior deriving from expected utility relationships are summarized in Diagram 2.

The expected utility model also allows analysts to estimate each actor's attitude toward risk. The model assumes that risk-acceptant actors behave as if they overvalue what they have to gain and undervalue what they may lose; risk-

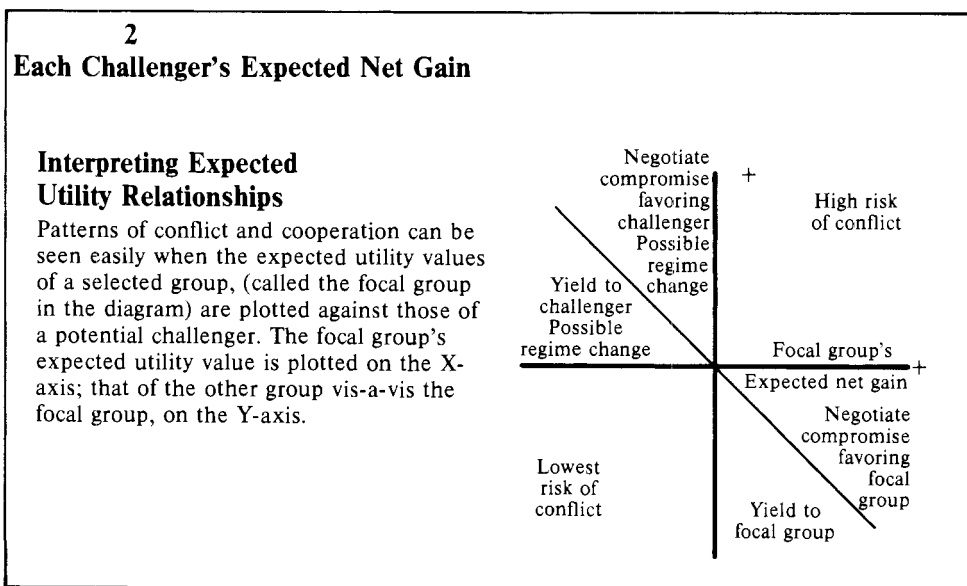


Table 2 Issues Policon has Addressed in Recent Years

Predicting What Policies Will be Adopted:

- What policy is Egypt likely to adopt toward Israel?
- How fully will France participate in SDI?
- What is the Philippines likely to do about US bases?
- What stand will Pakistan take on the Soviet occupation of Afghanistan?
- How much is Mozambique likely to accommodate with the West?
- What policy will Beijing adopt toward Taiwan's role in the Asian Development Bank?
- How much support is South Yemen likely to give to the insurgency in North Yemen?
- What is the South Korean government likely to do about large-scale demonstrations?
- What will Japan's foreign trade policy look like?
- How much Islamization will the Sudanese government promote?
- What stand will the Mexican government take on official corruption?

Assessing the Potential for Political Change:

- How much austerity can the Egyptian people tolerate?
 - When will presidential elections be held in Brazil?
 - How much autonomy will be granted to Sudan's southern province?
 - What form will cooperation between France's Socialist president and the non-Socialist parliamentary majority take?
 - How will a new head of government be chosen in Paraguay?
 - How fair are elections likely to be in Panama?
 - Can the Italian government be brought down over the wage indexing issue?
 - How open will the political system be in Turkey?
-

averse actors, as if they undervalue what they have to gain and overvalue what they have to lose. Using the raffle example, a risk-acceptant person would think that \$2 hardly matters in comparison to the car to be won. A risk-averse person would not buy a ticket and feel content to be \$2 ahead.

Similarly, by knowing approximate attitudes toward risk, it is possible to make inferences about how actors view the political situations in which they find themselves and to forecast how they will behave. This aspect of the expected utility approach makes it a useful, innovative, and powerful analytic tool.

Drawing inferences from the input data. Once the country analyst has assembled the judgments on which the analysis will be based, the information is typed into the computer. The computer software incorporates a series of mathematical equations based on the spatial voting model and on the expected utility model.

The computer analysis usually can be run in less than a minute, but it

generally takes a few hours to interpret the computer results. Findings include a forecast of the policy to be adopted, patterns of conflict and cooperation among the various groups, and insights into the strengths and vulnerabilities of each of the groups.

In many cases, Policon and FACTIONS results will confirm the views of the country analysts. A March 1986 study of the post-Marcos government in the Philippines, for example, bore out the opinion of the intelligence community that President Aquino was unlikely to call for a reduction of US military base rights early in her term. But the analysis also revealed that leftist groups had little real influence on this issue, despite their anti-American activism.

Some Policon and FACTIONS forecasts may run counter to the conventional wisdom. As of October 1986 all unexpected Policon predictions have proven correct. Some examples:

- Policon accurately forecast in May 1983 that after the Peoples' Republic of China claimed the China seat at the Asian Development Bank, Beijing would modify its position to permit some Taiwanese participation in the bank. At the time, even PRC statements that hinted at a "two Chinas" attitude were considered impossible.
- In May 1984 Policon correctly showed that the Italian government under Bettino Craxi was in a strong position on the question of wage indexing, while intelligence community analysts believed this issue would cause the government to fall.
- Almost a year before the January 1985 Brazilian presidential election, Policon correctly predicted the victory of a non-government, consensus candidate and the pressures that then president Figueredo would face during the election process. At the time, community analysts believed a government party candidate would win.
- In October 1985, a Policon study predicted that moderate opposition groups in the Philippines would form an ad hoc coalition that could extract major concessions from the Marcos government. The conventional wisdom held that the moderate opposition groups were too diverse and competitive to cooperate politically. Subsequently, a snap election was called and the unexpected voting strength of the newly unified moderate opposition triggered such extensive government fraud that Marcos fell.

Spotting ad hoc conditions. Politics sometimes makes for strange bed-fellows. The Policon/FACTIONS process can help analysts identify emerging coalitions and measure their cohesiveness.

"Ad hoc" coalitions form when groups' similar policy positions result in indirect support for each other during the resolution of an issue. Members of these coalitions may not coordinate their activities, but by working for similar

goals they support each other in effect. If the same groups take mutually supportive positions on a number of different issues, a formal or quasi-formal alliance might emerge.

A Policon analysis of the Philippines in October 1985 showed that moderate opposition groups had moved closer together on key issues compared to their positions a year earlier. The tightening of this ad hoc coalition contributed to its increased political influence. These Policon findings helped some analysts anticipate the subsequent decision by opposition groups to field a unified slate of candidates to contest Marcos' reelection.

Estimating risks and opportunities. FACTIONS and Policon provide the analyst with a perspective on how groups see themselves in relation to others. This information about groups' perceptions can tell analysts whether a group is likely to risk intense conflict or yield to others in pursuing policy goals. It also can indicate whether a group is reckless or judicious in choosing its political battles.

Sometimes groups needlessly give up on a policy struggle, underestimating their own strength or the support they can get from others. In a study of Mexico in 1984, for example, modeling showed that the major opposition party was unlikely to win concessions on certain issues because it mistakenly believed that the de la Madrid government held the upper hand.

Other times, groups become risk-takers, thinking they have more of a chance to win on an issue than they actually do. For instance, an October 1985 Policon analysis showed that President Marcos was overconfident, misperceiving the strength of the political opposition. He failed to see that calling an election would be risky, a mistake that subsequently cost him the Philippine presidency.

Testing alternative hypotheses. Once the basic analysis is done, country analysts can next use FACTIONS and Policon to assess the impact of hypothetical political developments. For example, in addition to doing a basic analysis, a country specialist may want to ask:

- Would a leader strengthen his position if he modified his stand on a contentious issue?
- Would the military gain the upper hand if the current civilian leader were to die?
- What would happen if a foreign country or organization were to throw its weight behind a domestic political group?
- What policies could a country adopt to weaken an insurgency?
- How would the use of repression affect prospects for political reform?
- What would be the political consequences if traditionally apolitical institutions—such as the church and the military—become politicized?

- How would inter-group dynamics and policy forecasts change in a crisis situation?
- How much influence would the political opposition have if all the groups worked together?
- What impact would a change in world oil prices—or other economic conditions, such as foreign aid—have on regime stability?
- What would be the best policy for the United States to adopt toward a country to strengthen that country's government?

To address such questions, data inputs are varied appropriate to the hypothetical political developments and the models are rerun.

Varying resources. Political fortunes change over time and under different circumstances. A group might begin to receive financial support from an external donor, decide to cooperate with a faction of the military, or break up over internal policy disputes. Such changes would alter the influence the group would have on policy matters.

FACTIONS and **Policon** can simulate changes in clout by adjusting the level of political, economic, or coercive resources a group can bring to bear. An April 1986 study of Panama, for example, analyzed the prospects for a reduction in the influence of the armed forces. The resources of the most powerful military leader—General Noriega—were removed from the model to simulate his death or exile. The analysis showed that Noriega's fall would cause no change in policy forecasts, suggesting that the influence of the military in Panama was independent of Noriega's strong personality.

Varying groups' priorities. To anticipate the impact of a group changing its political program—deciding either to fight harder to get its way on certain issues or to shift its attention to other areas—analysts can adjust the salience values for the group to reflect the hypothetical situation and then rerun the model.

A study of the Philippines done right after Marcos fell in February 1986 assessed the potential impact of both the church and the military reducing their political role in the new government and devoting more time, respectively, to pastoral care and to fighting the insurgents. Under this scenario, **Policon** analysis indicated that the Aquino team probably would be more vulnerable to extremist pressures and could end up devoting more time to deflecting attacks from the right and the left than to getting on with their reform program. Therefore, according to the **Policon** study, the continued involvement of the church and the military probably would strengthen the new government, at least over the short term.

Varying policy positions. **FACTIONS** and **Policon** allow analysts to evaluate the effects of groups altering their positions on an issue either to respond to

changes in the political environment or to ally with other groups to improve their chances of prevailing on an issue.

To anticipate a potentially divisive debate over how long President Sarney should stay in office in Brazil, a January 1986 Policon study exaggerated the groups' positions on the tenure issue to simulate a polarized political environment. Groups in favor of retirement before 1989 were moved toward one end of the issue continuum, while groups in favor of extension in office beyond 1989 were moved toward the other end. Modeling showed that if the debate heated up and groups become strongly divided over this issue, the political balance probably would favor the conservatives who advocated Sarney's extension in office, and the leftists would have to compromise.

A Policon Case Study: Forecasting Aquino's Battles with Enrile

In late February 1986, soon after Corazon Aquino became President of the Philippines, the Political Instability Branch of the Office of Global Issues used Policon to assess the stability of her government. The assessment was based on the analysis of six issues:

- reform of the military command
- policy toward the insurgency
- elimination of crony capitalism
- US military base rights
- legal action against Marcos and his cronies
- legal status/political role of radical leftists.

An Agency analyst with many years of Philippines experience provided the information on which the assessment was based. This information included a list of political groups that the analyst believed would try to influence policy on the six issues, an estimate of the relative strength of those groups, judgments about the policies favored by each group, and an estimate of how important each issue was to each group.

The analysis of the six issues indicated that internal disagreements were not likely to threaten the new, coalition government over the short term. Most disagreements, our analysis showed, probably could be worked out behind the scenes. Among the issues examined, however, the role that radical leftists would be allowed to play in the new government would probably be the most contentious. Attempts to resolve this issue, we wrote, could pit the military against the Aquino/Laurel coalition, contributing to an early end to the honeymoon period.

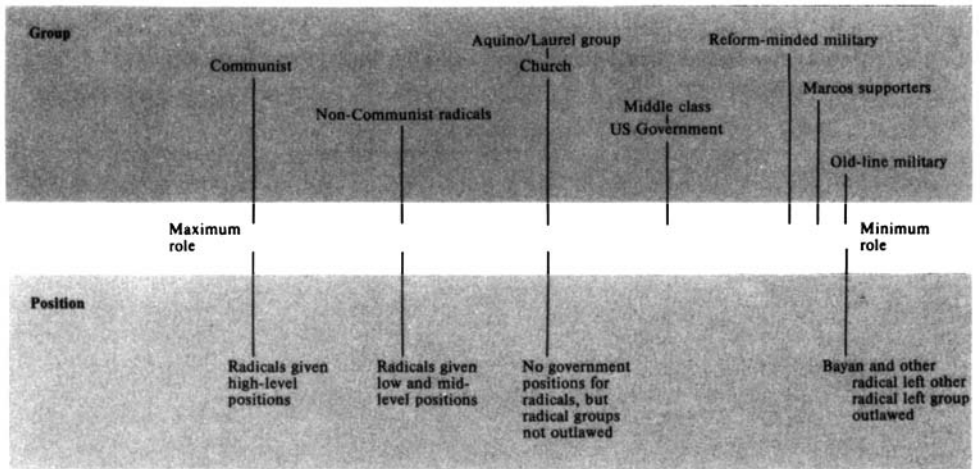
An analysis of this issue is presented below to illustrate how Policon works

Diagram 3
Legal Status/Political Role of Radical Leftists

Groups to which this issue is:	Very important	Moderately important	Of low importance
	Non-Communist radical left US Government	Communist and Communist-influenced left Church Reform-minded military Middle class/business/technocrats	Aquino/Laurel group Marcos supporters Old-line military

Issue diagram

- Forecast of policy most likely to be adopted.



Secret *NOFORN*

308827 6-87

Copyright © 1995, Yale University Press. All rights reserved.

Table 3 Estimated Resources of Groups in the Philippines*

March 1986

Groups	Resources
Aquino-Laurel group	100
Reform-minded military	100
Church	70
US government	70
Middle class/Business/Technocrats	50
Marcos supporters	50
Old-line military	20
Communist and Communist-influenced left	10
Non-Communist radical left	10

* Many of the political groups in this table represent loose coalitions of like-minded groups/individuals rather than formal political alliances or organizations.

and some of the insights it might provide. The data on which the analysis is based are displayed in Diagram 3 and Table 3.

Under the new government of national reconciliation, the Aquino administration was going to have to decide how far to go in opening up the political process. When Aquino came to power, the Communist Party was illegal. Although the old-line military, Marcos supporters, and the reform-minded military would have liked to see even more leftist groups outlawed, many other political participants would have liked to see all groups invited to participate in open debate as a symbol of the new order. (See Diagram 3.) Communists and non-Communist radical leftists wanted to work their followers into government positions where they could influence policy.

As Diagram 3 indicates, the scope of the debate on this issue among members of the ruling coalition was quite broad; the Reform-minded military and the Aquino/Laurel group were at opposite ends of the political center. The Aquino/Laurel group did not want BAYAN or other Communist-influenced groups to participate in the government but was judged willing to allow them to operate in the political arena. The military, on the other hand, considered Aquino naive and favored continuing to restrict political expression. But at the time, the issue was considered to be not very important to members of the new coalition government.

The Policon analysis indicated that the Aquino/Laurel group and the Reform-minded military might eventually meet each other halfway on this issue, but that the process of compromise was likely to be highly contentious.

Copyright © 1995, Yale University Press. All rights reserved.

Compared to their positions on other issues, the Aquino/Laurel group and the Reform-minded military were far apart. Moreover, as can be seen on the issue diagram, the Aquino/Laurel group, along with the Church, appeared closer to the radical left on this issue than they were to the military. The Reform-minded military, for its part, was much closer to the Old-line military and Marcos supporters in this issue than to the Aquino moderates. These centripetal forces would, we believed, slow the process of compromise.

Tensions were expected to stay under control, Policon's expected utility model indicated, as long as the question of the radical left's political role remained of no more than moderate importance to members of the government coalition. If the Communists, BAYAN, and other radical organizations made enough noise to put this issue near the top of the government's political agenda, however, the centrists should have found themselves in a heated internal political battle.

Thus, although radical leftist groups were unable to influence policy regarding their political inclusion, they could have weakened the government or even brought the honeymoon period to an end by provoking serious conflict between the Aquino allies and the Reform-minded military.

Events during the summer and fall of 1986 were pretty much in line with what was forecast using the Policon approach. This issue did move to the top of Manila's political agenda, and Aquino and Enrile had a major falling-out as a result. True, Policon did not pick up conflicts between Aquino and Laurel, but this was due to our not being concerned about them when the analysis was done in March 1986.

Perhaps more importantly, however, at a time when there was a lot of concern about the stability of the new government and how effective it would be in dealing with the issues facing it, the model enabled us to predict which issues would not be troubling, and which would provoke a confrontation among members of the ruling coalition. The model also enabled us to assess how little influence the far right and far left would have on policy, but how they could influence the political process. In addition, the model enabled us to assess how Filipino groups would react to alternative policies the United States could adopt.

Shortcomings of Policon and FACTIONS. Policon and FACTIONS, like all methods of inquiry, are critically dependent on the quality of information used. The data that go into the voting and expected utility models are the judgments of country specialists, and the models—despite their methodological sophistication—cannot compensate for a lack of expertise.

While these methods provide insights into what developments will occur, they cannot forecast when and how fast events will unfold. The inability of the models to deal with time can be compensated for by analysts estimating the

Table 4 Policon Studies, 1982–86

Countries Studied	Sequence of Studies
Angola: Oct. '82	Oct. '82: Angola, Ghana, Mexico, South Africa
Argentina: Nov. '83	Nov. '82: Italy, Pakistan, Turkey
Asia, Southeast: May '83	Dec. '82: Nicaragua
Brazil: Jan. '84, Feb. '86	Jan. '83: Italy
Egypt: Apr. '86	May '83: Nigeria, Southeast Asia
France: Nov. '85	June '83: Spain, Yemen
Ghana: Oct. '82	July '83: Israel
Guatemala: July '85	Aug. '83: Mexico
Guinea: Apr. '86	Nov. '83: Argentina
Israel: July '83	Jan. '84: Brazil, Philippines
Italy: Nov. '82, Jan. '83, May '84	Apr. '84: Pakistan
Japan: Sept. '84	May '84: Mexico, Italy
Mexico: Oct. '82, Aug. '83, May '84, Nov. '85	Sept. '84: Japan, Philippines
Mozambique: Mar. '85	Oct. '84: Pakistan
Nicaragua: Dec. '82, June '86	Jan. '85: Sudan
Nigeria: May '83, Jan. '86	Mar. '85: Mozambique
Pakistan: Nov. '82, Apr. '84, Oct. '84	Apr. '85: South Africa
Panama: Apr. '86	June '85: Paraguay, Saudi Arabia
Paraguay: June '85	July '85: Guatemala
Philippines: Jan. '84, Sept. '84, Aug. '85, Oct. '85, Feb. '86	Aug. '85: Philippines
Saudi Arabia: June '85	Sept. '85: South Korea
South Africa: Oct. '82, Apr. '85	Oct. '85: Philippines
South Korea: Sept. '85	Nov. '85: France, Mexico
Spain: June '83	Jan. '86: Nigeria
Sudan: Jan. '85, Mar. '86	Feb. '86: Brazil, Philippines
Turkey: Nov. '82	Mar. '86: Sudan
Yemen: June '83	Apr. '86: Egypt, Guinea, Panama
	June '86: Nicaragua

The items in this listing have been rearranged for clarity of presentation—HBW.

conditions under which changes might occur and the rates at which groups may become stronger or weaker, alter their political agendas, or modify their positions on issues. Scenarios incorporating a number of possible changes in the political system can be examined to anticipate the changes and assess their implications. However, when a crisis occurs in a country or the political lineup shifts significantly, a new Policon or FACTIONS study needs to be undertaken. But this would be the case with any form of analysis.

In summary, FACTIONS and Policon are methods for structuring political analyses and use mathematical models of political processes. They are analytic

tools that enable a country or issue expert to sharpen and expand the depth of his or her analysis. With Policon or FACTIONS, analysts can reliably process their informed impressions of issues, actors, policy preferences, and resources to forecast policy outcomes and processes.

Forecasts and analyses using Policon have proved to be significantly more precise and detailed than traditional analyses. Additionally, a number of predictions based on Policon have contradicted those made by the intelligence community, nearly always represented by the analysts who provided the input data. In every case, the Policon forecasts proved to be correct.

A growing number of analysts are taking advantage of Policon and FACTIONS. Given the increasing demand for analysis that is specific, unambiguous, and forward leaning, continued growth in the use of these methodologies within the Agency seems both justified and inevitable.

Barbara Pace and Anne Rudolph, Office of Global Issues, contributed to this article.