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Beyond the Crystal Ball: Modelling Predictions about Quebec and Canada

PATRICK JAMES and MICHAEL LUSZTIG

Within the field of Canadian politics, intense debate over the constitution is a central and abiding concern. Given the failure of the Meech Lake and Charlottetown Accords, it is suitable to reflect on Canada—and especially Quebec—as a political entity in the greater setting of North America. The passage of the North American Free Trade Agreement (NAFTA), which creates economic alternatives for Quebec, makes this an especially appropriate time to examine the prospects for significant (or "macro") constitutional change.

Neither executive federalism nor popular referenda have succeeded in producing lasting agreement on basic principles of government between Quebec and the Rest of Canada (ROC). After the intense conflict over the Charlottetown referendum, while much of Canada retreated into constitutional hibernation, Quebeckers, possibly buoyed by anticipated passage of the NAFTA, boldly elected fifty-four members of the independentiste Bloc Québécois (BQ) in the federal election of 1993, and a separatist Parti Québécois (PQ) government in the provincial election of the following year. Given the passage of the NAFTA and the political uncertainty that still exists in post-referendum Quebec and Canada, constitutional issues promise to attain even greater centrality. Thus, the time is right for appraisal of constitutional problems and prospects within a new theoretical frame of reference. After all, one of the few apparent points of agreement about previous rounds of bargaining is that time pressure and lack of foresight are enemies of constructive change.

This research note introduces to the study of Canadian politics a new technique for predicting the outcome of bargaining over key issues. Although the paper's aim is modest—to describe the technique—it also outlines a more substantial research project that is currently underway and should provide insights into the outcomes of two fundamental issues facing Quebec-Canada relations in the aftermath of the 1995 referendum on sovereignty in Quebec. More specifically, the project seeks to predict the outcome of Quebec-Canada constitutional bargaining and the outcome of bargaining over a sovereign Quebec's attempt to join the NAFTA.

The investigation unfolds in three stages. The first presents the Decisions Insights expected utility forecasting model. The second de-
scribes the current political and economic setting of the ROC and Quebec, and offers some predictions based upon the model as a means of presenting the outlines of a promising research program. The third and final stage encourages extension of the research project on both intellectual and practical grounds.

Toward an Expected Utility Model

Constitutional bargaining and negotiations among governments and interest groups can be studied in any number of ways. Conventional approaches combine (in varying degrees) empirical theory from political science and historical analysis. The result is a set of informative case studies that collectively trace the evolution of bargaining over distribution of power between the federal and provincial governments, most notably Quebec.

Models based on rational choice, or the application of microeconomic theory to the study of politics, are well suited to the analysis of the kind of bargaining that can be expected between Quebec, the ROC, and a range of others. These models begin with the assumption of self-interest and focus directly on how and why policies are made. The specific characteristics that link economic thought to political processes may be summarized as follows: first, methodological individualism as a point of departure; second, the assumption that individuals strive after their own interests in a rational way and try to maximize utility—this assumption may be called the fundamental behavioral hypothesis; and, third, use of methods and techniques of economic analysis. Thus, rational choice is a theoretical perspective with well-developed methods that can be applied to the integration of horizontal and vertical elite bargaining. A wide range of applications in normative theory, and comparative and international politics, already exists (Booth, James, and Meadwell 1993). Activity in the field of Canadian and Quebec constitutional studies, however, is at a relatively early stage.

Expected utility is an approach with a successful history in the field of rational choice, from models of voting behavior onward (Downs 1957). Some of the most striking successes in recent years have occurred in the realm of international politics, especially with regard to explaining the causes of war. With its extension to bargaining among representatives of coalitions (Bueno de Mesquita 1994), expected utility becomes interesting to students of constitutional politics.
Expected utility refers to the value that an actor anticipates from some course of action. It begins with the fundamental assumption that a rational actor compares strategies and selects the one with the highest anticipated payoff. This principle is the foundation for the model of coalitional bargaining developed by Bueno de Mesquita (1994). Aside from the usual assumptions about complete and transitive preferences (Riker and Ordeshook 1973), the model entails two constraints: first, issues are one-dimensional; and, second, an actor’s preferences for potential outcomes diminish steadily with distance from its ideal.

Suppose there is a set of actors bargaining over a range of issues. For any given issue, an actor is assumed to have an ideal outcome, with values that range arbitrarily from zero to 100. Each actor possesses some level of capability to affect outcomes for the issues. Capabilities range from zero (none) to 100 (all of those available; that is, the power to act unilaterally). The relative importance of each issue to each actor varies from zero (minimum) to 100 (maximum). The salience score for each issue determines the relative allocation of capabilities (that is, effort) toward bargaining in that area. Knowledge of capabilities, ideal outcomes, and relative importance is sufficient for the model to predict substantive results from bargaining (and prospects for stability, when subject to revision). The process used to predict outcomes can be expressed most rigorously in mathematical terms, but that is not essential for present purposes. Basic features of the model, rather than the equations used to represent its mechanics, will be described.

For a given issue, each actor’s policy preference will appear at some point along the continuum from zero to 100. A basic voting model would predict the median preference as the outcome. Expected utility, however, simulates a weighted voting procedure. Differential capabilities mean that some actors count for more than others, so the median may not be the best predictor of what will result from bargaining. Expectations are refined further by the importance attributed to the issue, because the actor’s applied capabilities may be different than its potential.

How does the model arrive at an equilibrium, or “point,” prediction? An algorithm is used to produce an outcome, at some given stage, with the following property: No counter-proposal exists that can win against the proposal that exists at that stage. For example, suppose that the model predicts a dominant outcome of sixty (whatever that may mean in substantive terms). This means that no other value is as “centered” among the actors’ respective positions, adjusting for capabilities and presumed
effort. No other proposal, greater or less than sixty, is more in line with preferences aggregated in that manner.

Aggregation of positions held by the actors, weighted by respective capabilities, focuses on dyads. Each member of a pair of actors is compared with respect to perceptions of its ideal point versus that of its rival. There are three possibilities:

- Each actor in the pair sees its position as weak (that is, negative expected utility from confrontation) and there is mutual adjustment of positions toward each other.

- One actor perceives positive expected utility and the other negative, meaning that the latter will adjust its position toward that of the former.

- Each actor in the pair perceives positive expected utility and the positions hold firm.

This point, it is hoped, is clarified in the following rather lengthy quotation:

To gain an intuitive sense of what happens within the logic of the model during each iteration, think of the decision makers as being engaged in a game of cards. At the outset, each player is dealt a hand. The quality of the hand dealt to each player depends on the commonly known characteristics of each player. Stronger players (or those with strong backing from others) generally draw better cards than weaker players. Because of variations in salience, some players pay closer attention to their cards and of the whole playing out of the game than do others and so form different perceptions of the situation. Based on the cards they hold and the known characteristics of other players, decision makers form perceptions about how good the hand is of each rival relative to the hand dealt them. With that information, each player decides on proposals or bids to make to the other decision makers. It is as if they are playing a game of bridge with a potentially large number of other players and they are bidding without knowing who their partners are. If a player believes his or her hand is very weak compared to a specific rival, then no proposal is made to that actor. If $i$ expects to lose to $j$, for instance, then $i$ does not make a proposal to $j$. If, however, $i$ thinks it holds a good hand relative to $j$, then $i$ makes a proposal in the form of a suggested change in position by $j$ on the issue at hand. If $i$ thinks $j$ stands to lose quite a lot, then $i$ will propose that $j$ accept $i$'s current position. If $i$ thinks it has a good enough hand to shift $j$'s position, but not so good that $j$
will give in to what i wants, then i proposes a compromise somewhere between i's position and j's.... When the players finish sorting out their choices among proposals, each shifts to the position contained in the proposal it accepted, thereby helping to create new coalitions, strengthening some old coalitions and weakening others.... The issue is resolved when a dominant outcome is reached (Bueno de Mesquita 1994, 92-94).

After all adjustments are made, the model produces a forecast of the new overall position. The model continues recalculating adjustments through further iterations until a threshold is reached: when further changes in the outcome would be so marginal that transaction costs effectively rule out the effort. If confrontation persists among many dyads, then the overall forecast is regarded as unstable.

Expected utility focuses on how actors relate to anticipated payoffs from a menu of alternatives. It is well suited to forecasting in a wide range of areas. The Quebec-Canada conflict provides an excellent area of application.

The Political and Economic Setting of Quebec

Before significant progress can be achieved, it is essential to deal with the two fundamental and seemingly irreconcilable problems that have plagued constitutional reform in Canada: intergovernmental relations and the expanding range of relevant actors. The problem manifests itself in two ways.

First, there is difficulty with horizontal (or interstate) bargaining. Rather than the traditional dichotomy between Quebec and the ROC, the constitutional agenda has become both crowded and clouded. Indeed, other provinces have begun to seek specific constitutional bounty, which ranges from jurisdictional to material in nature (see James 1994). For example, Newfoundland's demand for more control over fisheries (and possibly even hydroelectric power) during Meech Lake was but one harbinger of the demands that proliferated in the Charlottetown Round. A similar example, of course, is the West's ongoing call for parliamentary redistribution (Lusztig 1995).

Vertical (or state-society) bargaining is the second problem. As executive federalism experienced more intense attacks in the Quebec Round, popular legitimization (or ratification) gained status approaching
that of a constitutional convention. This adds a reinforcing dimension to the already intractable constitutional negotiations (see Lusztig 1994). Elites must strike a horizontal bargain that is universally acceptable among governments and also ensure that the agreement does not alienate societal constituencies.  

In short, greater understanding of the constitutional quagmire requires analysis of bidimensional bargaining. Both horizontal and vertical components must be recognized and understood. Furthermore, it is essential to strike a balance between the intellectual challenges represented by explanation and prediction. While the traditional case-study approach to Canadian politics provides important insights and detail, it has very limited applicability to predicting a future that promises to incorporate an expanding, and often unspecified, number of actors. It is here that the Decisions Insights model becomes a pertinent and powerful research tool. It allows us to make predictions regarding constitutional bargaining, while remaining sensitive to the problems created by the imperative of horizontal and vertical bargaining.

The expected utility forecasting model also provides important insights into the economic aspect of separation. Given that a hypothetically independent Quebec's aspirations may necessitate economic reliance on countries outside of Canada, problems associated with vertical bargaining have the potential to extend to the international community. More specifically, Courchene (1986) and Meadwell and Martin (1996) have argued that despite the nationalistic thrust of the independence movement in Quebec, internationalism—essentially some sacrifice of economic sovereignty—is an integral means to self-determination. The logic is that Quebec could compensate for its historical economic reliance on Canada (a reliance that has limited severely Quebec's constitutional maneuverability in the past), 11 by institutionalizing trade relations with its North American neighbors. The NAFTA, it follows, provides a unique opportunity for Quebec to secure its economic future abroad, thereby providing it with a wider range of options in its constitutional negotiations with Canada.

The expected utility forecasting model allows us to assess the possibility of "market nationalism," as Courchene (1986) calls it. Indeed, it generates predictions regarding Quebec's prospects for successful integration into the NAFTA, as a counterweight to bargaining in the constitutional arena.
A Brief Illustration of the Model

The UDI and NAFTA. On December 6, 1994, the PQ government introduced a unilateral declaration of independence (UDI). This UDI, to be passed immediately by the National Assembly, would come into force only upon its ratification (by a majority of votes cast) in a province-wide referendum. The Referendum, held on October 30, 1995, was, and remains, a controversial issue in Quebec. Indeed, the closeness of the vote—50.56 percent to 49.44 percent—ensured that the issue of Quebec independence has remained prominent within Canada and Quebec well into the post-referendum era. Much of the controversy has centered on the nature of Quebec-Canada relations after sovereignty, an event that 73.8 percent of Quebeckers predict will occur (Mackie 1996).

The UDI announced that Quebec would retain a common currency with Canada (and presumably would retain a voice in a common monetary policy), that Quebeckers would keep their Canadian citizenship, and that Quebec and Canada would maintain close economic ties (Quebec 1994). This was also the implicit message of the referendum question that sovereigntist leaders agreed to in the summer of 1995.12

The reaction of federalist leaders to the idea of Quebec retaining special economic and political ties to the ROC has been negative. While Canadian Prime Minister Jean Chrétien’s government has made some half-hearted concessions to Quebec’s demands for a constitutional veto and for constitutionally recognized status as a distinct society, its so-called Plan B has been to take a hard line against separatists. Thus, despite polls showing that Quebeckers prefer renewed federalism to separation by a margin of two to one (Winsor 1996), the federal government has refused to be drawn into yet another round of macro-constitutional bargaining. As a result, the hypothetical outcome of another round of constitutional negotiations remains a source of widespread speculation.13

Another source of disagreement has centered on Quebec’s prospects for joining the NAFTA. The separatists claim that Quebec will accede by right to the NAFTA and other multilateral organizations (Québec 1994; Séguin 1994). The position of the Canadian government, however, is that Quebec’s place within the NAFTA is by no means assured. Chrétien declared on December 21, 1994, that: “They say, ‘we will be part of NAFTA,’ but I know very well that to be part of NAFTA they will need the consent of Canada, the United States, Mexico, and—if we accept Chile before the end of [next] year—Chile. So when they say ‘everything
will go smoothly, dear friends,’ it is my duty to say ‘hold on a minute’” (Stewart 1994). The fact that the United States has refused to commit itself over the issue of Quebec's future in the NAFTA (Séguin 1995) has made the outcome of this issue even less clear.

Predictions. Once again, it is our contention that the clouded constitutional and economic picture can be made much clearer through the use of expected utility forecasting. Data provided in the spring of 1995 by two experts in the field of Canadian constitutional affairs, and one in the realm of North American trade politics have been processed.

Table 1 reveals a range of possible constitutional outcomes that could emerge from negotiations between the ROC and Quebec.

<table>
<thead>
<tr>
<th>Scale Point</th>
<th>Substantive Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Atomistic Independence of Quebec</td>
</tr>
<tr>
<td>10</td>
<td>PQ Unilateral Declaration of Independence</td>
</tr>
<tr>
<td>20</td>
<td>Devolution Consistent with the Allaire Report</td>
</tr>
<tr>
<td>30</td>
<td>Devolution Consistent with the Meech Lake Accord</td>
</tr>
<tr>
<td>40</td>
<td>Status Quo</td>
</tr>
<tr>
<td>50</td>
<td>Increased Centralization of Powers</td>
</tr>
<tr>
<td>70</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>Federal Exclusivity in all Shared Jurisdictions</td>
</tr>
</tbody>
</table>

The policies range from atomistic independence (0) to federal exclusivity in all shared jurisdictions (100). These polar points, along with the rest of the scale, are derived in consultation with area experts. To counteract bias, the scholars are knowledgeable about the substance of the issue, but not informed about the model. Two experts on Quebec and Canada independently produced the coding that appears in Table 1.14

Table 2 lists the positions, power capabilities, and issue salience of all relevant actors in the constitutional debate.
TABLE 2: Constitutional Actors

<table>
<thead>
<tr>
<th>Actor</th>
<th>Position</th>
<th>Importance</th>
<th>Capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Government/Liberal Party of Canada</td>
<td>45</td>
<td>100</td>
<td>80</td>
</tr>
<tr>
<td>Reform Party of Canada</td>
<td>30</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>Jean Charest</td>
<td>30</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Bloc Québécois</td>
<td>05</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>Quebec Government/Parti Québécois</td>
<td>05</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>Liberal Party of Quebec</td>
<td>30</td>
<td>100</td>
<td>40</td>
</tr>
<tr>
<td>Quebec Big Business</td>
<td>40</td>
<td>80</td>
<td>40</td>
</tr>
<tr>
<td>Quebec Medium/Small Bus.</td>
<td>10</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>Quebec Anglo/Allophones</td>
<td>50</td>
<td>100</td>
<td>20</td>
</tr>
<tr>
<td>Quebec Cree</td>
<td>40</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>Quebec Mohawks</td>
<td>10</td>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td>Ontario Government</td>
<td>45</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>Atlantic Governments</td>
<td>60</td>
<td>60</td>
<td>20</td>
</tr>
<tr>
<td>Alberta/BC Governments</td>
<td>30</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>Sask./Man. Governments</td>
<td>50</td>
<td>60</td>
<td>50</td>
</tr>
<tr>
<td>ROC Big Business</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>ROC Aboriginal Groups</td>
<td>30</td>
<td>80</td>
<td>50</td>
</tr>
<tr>
<td>Feminists/Other Charter Groups</td>
<td>60</td>
<td>80</td>
<td>50</td>
</tr>
<tr>
<td>International Financial Community</td>
<td>40</td>
<td>50</td>
<td>90</td>
</tr>
</tbody>
</table>

As might be expected, Table 2 suggests a number of powerful actors with strong interest in the issue. The most powerful actors, the governments of Canada and Quebec, are both aligned, on this issue at least, with a cadre of supporters. Clustered at the separatist end of the spectrum are the PQ, BQ, small- and medium-sized business in Quebec, and a portion of the aboriginal community. At the end of the distribution more committed to centralization of power are the Canadian government, Quebec big business, Quebec Anglo- and Allophones, Quebec Cree, all other provincial governments except those of Alberta and British Columbia, the ROC and international business and financial communities, and feminists and other Charter group Canadians. In between are those willing to submit to a degree of devolution roughly akin to that contained in the Meech Lake Accord of 1987.

The Decisions Insights model was able to predict a fairly stable bargaining outcome of between 29.9 and 30.1 after two simulated iterations. This outcome, which mirrors the degree of devolution contained in the Meech
Lake Accord, has significant implications for Quebec. Clearly, the outcome falls far short of what the PQ government and BQ party are willing to accept from the rest of Canada. This outcome suggests two interesting conclusions. First, as a predictive counterfactual, political bargaining between Canada and an independent Quebec in the aftermath of a Yes vote would have led to far fewer political and economic ties than were promised by the Quebec government in the UDI and in the referendum campaign. The ROC just would not have conceded to such a decentralized institutional arrangement. Second, and more pertinently, renewed constitutional negotiations in the future will not yield a result satisfactory to Quebec nationalists. In other words, the results suggest that Peter Russell was justified in referring to renewed bargaining as the “idiot’s choice” (Russell 1995).

The second issue that we examine concerns the likelihood of an independent Quebec’s ascension to the NAFTA, a scenario that would mitigate Quebec’s economic reliance on the ROC, and perhaps militate against risk aversion on the part of those who reject separatism on economic grounds.

Table 3 constitutes the range of possibilities that might confront an independent Quebec with respect to continental free trade.

### TABLE 3: A Scale of Continental Trade Outcomes

<table>
<thead>
<tr>
<th>Scale Point</th>
<th>Substantive Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Quebec’s Exports Subject to High Duties Throughout North America</td>
</tr>
<tr>
<td>10</td>
<td>Quebec’s Exports Subject to Moderate (ie Pre-FTA) Duties Throughout North America</td>
</tr>
<tr>
<td>30</td>
<td>Quebec’s Exports Treated Favorably, Yet Not Subject to the Same Treatment as NAFTA Members in North America</td>
</tr>
<tr>
<td>70</td>
<td>Status Quo</td>
</tr>
<tr>
<td>100</td>
<td>Full Continental Integration</td>
</tr>
</tbody>
</table>
Table 4 lists the range of relevant actors. Once again, Table 4 reveals few surprises.

**TABLE 4: Trade Policy Actors**

<table>
<thead>
<tr>
<th>Actor</th>
<th>Position</th>
<th>Importance</th>
<th>Capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quebec Government/Parti Québécois</td>
<td>100</td>
<td>90</td>
<td>70</td>
</tr>
<tr>
<td>Canadian Government</td>
<td>40</td>
<td>50</td>
<td>60</td>
</tr>
<tr>
<td>Liberal Party of Quebec</td>
<td>60</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>US Multinationals</td>
<td>90</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>Canadian Business</td>
<td>80</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>US Government</td>
<td>70</td>
<td>50</td>
<td>90</td>
</tr>
<tr>
<td>US Congress</td>
<td>70</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>Mexican Government</td>
<td>50</td>
<td>30</td>
<td>50</td>
</tr>
</tbody>
</table>

Only the Canadian government, the Quebec Liberal party, and the Mexican government support a position that would see additional restrictions placed on exports from an independent Quebec. Moreover, these are among the weakest players in the field.\(^{15}\) The results from the Decision Insights model confirm that an independent Quebec would be well integrated into the NAFTA. Indeed, continental integration is predicted to increase, thereby institutionalizing access to North American markets for Quebec's exports.

This finding potentially has implications for Quebec. It is economic dependence on the ROC, of which market access is no mean component, that traditionally has suppressed support for independence in Quebec. Ironically, our predictions show that integration into the NAFTA is a chicken-and-egg problem for Quebec. Once independent, integration into the NAFTA would militate against economic problems; however, fear of economic catastrophe appears to be standing in the way of the independence necessary to gain official membership in the NAFTA (Gibbon 1996).

Taken together, our findings show that in order for Quebeckers to achieve the degree of self-determination many seem to desire, independence is the only viable route. Renewed constitutional bargaining will fall short of Quebec's demands. Moreover, our prediction of Quebec's admittance to the NAFTA, and the deepening of integration within that agreement, lends credence to the Meadwell and Martin (1996) hypothesis that continental free trade can undermine economic dependence on the ROC.
Conclusion

This investigation, and the larger project associated with it, offers a path toward enhancement of the research enterprise on Canada and Quebec in at least four further (and more specific) ways. First, it grants pride of place to rational choice, a theoretical approach and method that is lacking in the study of Canada and Quebec. The introduction of rational choice to this subject area may help to improve the overall state of theory, which a recent review found wanting (Mahler 1993: 61-62). Second, it introduces the ability to predict, and not just explain, the constitutional and economic future of Quebec within North America. A third contribution would be to build bridges between Quebec studies—a relatively neglected field in the United States—and other academic communities. Given the prevalence of multiethnic states, restructuring of polities around the globe, increasing numbers of democracies (especially federal systems), and the fact that the institutional outcome for Quebec and the ROC remains in doubt, this project has considerable cross-national relevance. Finally, the paper introduces a technique that is of general relevance, not just to constitutional studies in Canada, but to any issue in which the outcome of future bargaining is in question.

This article has provided insights into a larger, ongoing project. An expanded and more technical exposition of our findings should help to illustrate some of the wider applications of an important and promising research tool. In addition, future work, using different experts, will allow for validity testing of our findings, by examining consistency over time. Finally, the model will be used to test the cohesiveness of the rather disparate coalition of interests supporting Quebec's new PQ Premier Lucien Bouchard. Indeed, given Bouchard's commitment to tackling Quebec's pressing fiscal problems, the cohesiveness of his coalition will determine the prospects for the long-term viability of the separatist agenda.

NOTES

We would like to thank the following for their kind assistance on this project: Decisions Insights Inc., Donald Abelson, Lui Hebron, Jacek Kugler, Douglas Lemke, Pierre Martin, Chris Manfredi, Hudson Meadwell, James Lee Ray, Sidney Weintraub, Robert Young, and the two anonymous reviewers for this journal.

1. For more detailed treatments of the enhanced importance of trade to Quebec's political and constitutional aspirations in North America, see Meadwell and Martin (1996) and Martin (1994).
2. The concept of macro constitutional change, which entails issues that shape the fundamental identity and principles of the polity, is discussed most effectively in Russell (1991, 1992) and Mansfeldi (1993).

3. Constructive change refers to the Pareto criterion: All of those involved must gain or be at least as well off from whatever bargain arises. This rule emerges from rational choice theory, which provides the intellectual basis for the forthcoming analysis. For an exegesis of rational choice theory see Mueller (1989).

4. Important examples of such studies include Banting and Simeon (1983) and Whyte, Romanow, and Leeson (1984) on the constitutional negotiations leading to patriation in 1982; Monahan's (1991) comprehensive account of Meech Lake; and recent volumes edited by McRoberts and Monahan (1993) and Cook (1994) on the Charlottetown Accord. The failure of this last round renders the future of Quebec's role within Canada uncertain.


7. The description that follows is adapted from Bueno de Mesquita (1994).


9. With n actors there are \( \frac{n(n-1)}{2} \) dyads to consider. For example, ten relevant actors would yield 45 dyadic profiles. It is important to note that the model's algorithm considers each dyadic profile simultaneously.

10. Complications associated with this second bargaining dimension are evident in the Charlottetown Round. In the West, in aboriginal communities, and even within Quebec, elites proved unequal to the task of responding sufficiently to the demands of their constituents. By the conclusion of bargaining over contents of the Charlottetown Accord, even non-state actors presented constitutional demands. Within the ROC, the active and largely successful campaign by pressure groups effectively diluted the perceived legitimacy of Quebec's aspirations. The sixty amendments that ultimately composed the Charlottetown Accord testify to the incoherence of the bargaining process.

11. This explains, for example, the PQ's decision under Premier René Lévesque to seek "sovereignty-association"—that is, political sovereignty with economic association—rather than complete independence from Canada during the late 1970s and early 1980s (Québec 1979).
12. The revised question read: "Do you agree that Quebec should become sovereign, after having made a formal offer to Canada for a new Economic and Political partnership, within the scope of the Bill respecting the future of Quebec and of the agreement signed on June 12, 1995?"

13. The most comprehensive study of this question, in the context of a Yes vote, is Young (1995).

14. Repeated applications have shown that the model operates most efficiently with two experts. For this project, our experts came to the project with widely divergent political orientations. Such ideological discrepancy, however, does not prejudice the results. Neither scholar is familiar with the mechanics of the expected utility model. It also might be noted that, even if an expert had familiarity with the model, its very complexity virtually rules out the potential to "rig" the results (Bueno de Mesquita 1994). To save space, the results generated by only one expert are presented here. Results from the other expert are similar.

15. The characterization of these players as "weak" may come as a surprise to some. However, it is important to reemphasize that our data are provided by area experts. There is no bias, in other words, towards any preexisting opinions that the authors may have held.

REFERENCES


Modelling Predictions about Quebec and Canada


