

**Analytical Narratives and Social Choice Theory in EU  
Research**

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Nuffield College Politics Working Paper 2003-W5  
University of Oxford

In the last fifteen years, the study of the European Union has undergone a theoretical revolution. The Union itself is undergoing a constitutional revolution, which began with the granting of greater powers to the European Parliament under the co-decision procedure. The constitutional revolution is incomplete at the time of writing, with decisions pending on the admission of new Member States and on proposals from the Giscard constitutional convention. In this paper I review each revolution in the light of the other. The review focuses on two things:

- First, two recent efforts to tell analytical narratives about the EU. An analytical narrative ‘combines analytic tools that are commonly employed in economics and political science with the narrative form, which is more commonly employed in history’. (Bates et al 1998, p. 10).
- Second, some recent efforts to apply the mathematics of social choice to constitutional design in the EU. Such efforts are not new. What is new is that some people outside the hermetic social choice community may possibly be listening.

For the first three decades of the existence of the EU and its predecessor organisations, all political science literature on it of which I am aware was purely descriptive. This literature, while essential to understanding the Union, gave no insights, no read-across to or from comparative politics in general, and no testable predictions about the behaviour of actors in EU politics. In the subfield of international relations, the dominant tradition

treated the EU as an intergovernmental body in the Westphalian system of states. Few scholars were prepared to treat it as a supranational body despite the decision of the founding parties to create a supranational High Authority (Rittberger 2002; Milward 2002 p.46).

The sources of the theoretical revolution have been game theory and the theory of social choice. Both of these are variously regarded as intimidating; as mathematisation and obfuscation for their own sakes; and as adding little or nothing to descriptive accounts of EU politics. In this section I try to show that these views are incorrect. Both game theory and social choice theory have a great deal to contribute to the study of the EU, and they do not have to be taken to a high level of mathematics in order to yield important insights. I do not go into technical details because Dowding (2000) and Hug (2003) have already reviewed the theory in this journal. Readers are referred to their articles.

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It has become commonplace for political scientists to talk, unfortunately rather loosely, about 'path dependence'. The phrase has a technical meaning in social choice. But it is more commonly used to convey the idea that the path which is available for us to follow was set a long time ago. Marx put it more elegantly:

Men make their own history, but they do not make it just as they please; they do not make it under circumstances chosen by themselves, but under circumstances directly encountered, given and transmitted from the past. (Marx 1852/1968, p.96)

The circumstances we encounter, given and transmitted from the past, are the constitutions and practices of the Union and its predecessors since 1950. Three new(ish) books throw light on this in complementary ways, namely those by Moravcsik (1998), Milward (2002), and Tsebelis (2002) The first two are analytic narratives; the third is analytic but not a narrative, although Tsebelis has told many stories that depend on his veto game model.

Although all new members have to acquire the *acquis communautaire*, only quite recently have analysts applied modern insights to the question: *Why did the framers of the ECSC construct a supranational, not an intergovernmental, set of institutions?* An analytical narrative that throws light on this, but that could easily be overlooked, is Milward (2002). This appears in a series so venerable that it dates back to the First World War. It is an *Official History*, no less. Milward is rightly somewhat embarrassed by this out-of-date format. An official historian is normally granted privileged access to unreleased public records. This gives boundless opportunities for bias. In Milward's case, however, all the UK public records relating to Britain's attitude to the EU from the Schuman Plan to de Gaulle's veto were already in the public domain. So it might be hard to see the point of an official history, which comes in an offputting format of small grey type. But Milward is a distinguished economic historian and the analysis is worth digging

out. It shows that the UK was not a monolithic actor. Departments had their own agendas, some economically literate and others less so. The Treasury wanted a return to the free-trading open global economy of 1912, which Commonwealth and US protectionism had so distorted by the early 1950s that Australia (population 10 million) was the UK's largest trading partner. Other departments, including the Board of Trade and the Commonwealth Relations Office, had more protectionist or mercantilist aims. Northern Ireland had a law requiring everybody wishing to work there to obtain a work permit first. This was designed to prevent Irish (Catholic) workers from storming the Protestant citadel, but as late as 1961 the Conservative Chief Whip could still write to Edward Heath "“You know how we cosset these people [the Ulster Unionists]’ .... Heath did include a phrase appropriate enough to appease the Unionists” (Milward 2002, p. 455, quoting M. Redmayne to E. Heath 02.08.61). Truly the past is another country; they do things differently there.

Despite its extremely old-fashioned format, Milward's narrative is analytical. It helps explain the puzzle of why the framers of the ECSC treaty created a supranational High Authority, a Council of Ministers, an assembly, and proposed a court. Truly the constitution of the EU is path-dependent - all the institutions of today are there in embryo in the ECSC constitution.

Moravcsik's (1998) massive analytical narrative has already been extensively reviewed and cited - nearly 200 citations to it appeared in the Web of Science *Social Science Citation Index* when consulted in mid February 2003. Another full-scale review of it is

pointless: if readers of this journal do not already know what it says, it is high time that they found out for themselves. Moravcsik analyses five path-determining events in the history of the EU. They are: the Treaties of Rome; the origins of external tariff harmonization and internal protection (especially the CAP) in the 1960s; the movement towards monetary union up to 1983; the single European Act; and the Maastricht Treaty commitment to monetary union. Moravcsik's

central claim is that the broad lines of European integration since 1955 reflect three factors: patterns of commercial advantage, the relative bargaining power of important governments, and the incentives to enhance the credibility of interstate commitments. Most fundamental of these was commercial interest (Moravcsik 1998, p.3).

As with the earlier generation of IR scholars, Moravcsik sees the EU as a primarily intergovernmental body, but one whose members have rationally bound themselves with supranational institutions: the Commission, the Court of Justice, and (at least since they agreed for it to be directly elected) the European Parliament. Earlier traditions either ignored the existence of these supranational components, or failed to provide a rational account of why their creators should have bound themselves before this multi-masted schooner. Some things still seem ineffably mysterious, such as *Why did Margaret Thatcher pilot the Single European Act through the UK Parliament? Was she unaware of what was in it?* Moravcsik's answer, of course, is "commercial interest". Completion of the single market was most in the interests of the most open economies within the EU,

and least in the interest of the most autarkic economies. The small northern Member States have always been open economies exposed to international trade. The UK had moved a very long way from the era Milward describes to the 1980s, partly indeed because EU membership itself marked a sharp shift in the UK's economic interest from, in the old phrase, Empire Free Trade back to the older Cobdenite vision of free-trading internationalism.

To overcome the vested interests of autarkic Member States, the single market programme had to extend qualified majority voting to internal-market decisions.

Moravcsik locates the change firmly with the large member states, not the Commission:

After 1983 internal market liberalization emerged as the most consistent target for reform in government proposals from all three major governments [viz., UK, France, Germany - IM]; QMV was supported by two of the three. The direct result was pressure for single market reform and a credible threat of exclusion [of the UK - IM] to achieve QMV.... [T]he single case of a government accepting a reform it did not support - British acceptance of formal treaty changes mandating QMV - was achieved through the explicit threat of exclusion. The British were particularly vulnerable not simply because exclusion would be costly but because the Thatcher government strongly supported internal market reform (Moravcsik 1998 pp. 369, 374).

One could go further than Moravcsik. The internal market could not have been completed without QMV. It was therefore, as Marxists would say, in Mrs Thatcher's objective interest to accept QMV on internal markets. She and her fellow British Conservative Eurosceptics did not see it that way, especially when sauce for the goose was served on the gander. All Member States including the UK contain protectionist industry lobbies. Any industry which is not internationally competitive has an interest in lobbying for protection in an open economy. In the UK in the 1980s, there were still a number of such industries, such as coal and fish. For internal political and geographical reasons, lobbying for coal failed. Apart from anything else, coal miners were concentrated in constituencies where the Conservatives were uncompetitive. Fishermen were scattered, but some of them were in constituencies where the Conservatives were competitive and under threat. In the 1983 Parliament, the Conservatives held Falmouth, Torbay, and Banff & Buchan, and had come within 1.5% of winning Great Grimsby. They lost Banff & Buchan in 1987. They now hold none of the UK's main fishing seats. The governing Conservatives and all their challengers were therefore equally tender to the plight of UK fishermen, and outraged by the *Factortame* decisions which outlawed the UK's protectionist legislation in the immediate interest of Spanish fishing companies and the more general interest of the internal market. As Samuel Brittan has wisely said, most commentators overestimated Mrs Thatcher's grasp of economics and underestimated her grasp of politics. Nevertheless, Moravcsik has provided the most intellectually satisfying explanation of the UK adherence to the Single European Act and the extension of QMV.



The extension of QMV interacts with the expansion of the Union in painful ways, as any expansion forces Member States to consider the voting weights in the Council of Ministers. On this there have been two entirely disjoint literatures, a practitioner literature and a mathematical literature, which are at last starting to converge. The practitioner literature has been important but wrong. The mathematical literature has been right but until recently unimportant. If policy-makers could not understand it, it did not matter how right it was.

Voting *weight* is not the same thing as voting *power*. Although politicians argue about what weights each Member State should have in the Council, weights are only a means to an end. What concerns politicians (perfectly properly) is power.

The voting weight of a Member State is simply the number of votes it wields in the Council. Voting weights have always been roughly, but only roughly, proportional to population. It is more accurate to say that they have been proportional to the square root of population. If a Member State with a population of 400,000 has one vote in the Council, then one with 6,400,000 population (16 times greater) has 4 votes (4 times greater). The actual weights do not fit this toy example, but they have tended to follow this square-root pattern. The mathematical justification for the square-root rule was explained by Lionel Penrose (1946), the first mathematician to study the paradoxes of voting weight and voting power. So far as I am aware, the closeness of the EU voting weights to the Penrose rule is simply a happy accident .

To see that voting weight is not the same as voting power, consider a simplified Council in which there are 3 Member States A, B, and C, with weights 49, 49, and 2, and that a proposal needs a simple majority of votes (here 51) to be carried. A Member State has bargaining power if it can either turn a losing vote into a winning vote by joining a coalition, or a winning vote into a losing vote by leaving a coalition. In this case, none of the three Member States can carry a proposal on its own, but any pair – any pair - can carry a proposal. Furthermore, each member of the successful pair is essential. If it drops out, the proposal goes from winning to losing. There are three winning coalitions, {A, B}, {A, C}, and {B, C}. In other words, each of the three Member States has identical power, because each is equally well equipped to threaten to turn a winning proposal into a losing won. Voting weight is not the same thing as voting power, *QED*. Furthermore, the square root rule the EU unconsciously uses cannot ensure that each citizen of the EU has equal power over the Council’s decisions.

In the European Parliament, Member States also have different weights in the shape of their number of seats in the Parliament. However, MEPs almost never vote in national blocs, so there is no weighted-voting issue to address in that body. But votes in the Council are cast in blocs. Each Member State casts its vote, which is weighted according to the number of votes that Member State controls. If the votes for a proposal exceed the QMV threshold, it passes; otherwise, it fails. It is therefore important for democracy and legitimacy

- o that each Member State should have a fair voting weight; also
- o that it is neither too easy nor too difficult for the Council to act; and

o that the system can cope with enlargements in a less cumbersome way than the Nice process, with its two Irish referenda, has done to date.

Both academics and politicians divide into two camps. The first camp believes that voting in the Council follows a single issue dimension; the second believes that it follows multiple dimensions, according to the issues for discussion. The UK governments of Margaret Thatcher and John Major, and the leading academic analysts Garrett and Tsebelis (1999), took the first view. The second view is less associated with individual politicians, but I believe accords with the working practices of UK Ministers. Its main academic exponents are Felsenthal and Machover (1998), and Leech (2002).

On the Thatcher-Tsebelis view, there is a single issue dimension in the politics of the EU. At one end lie federalists who on every vote prefer the option that tends towards 'ever deeper and closer union', and at the other end lie Eurosceptics who on every vote prefer the option that tends towards the most minimal possible role for the EU institutions. It is well known that the Thatcher and Major administrations in the UK mostly saw the EU in this light.

If (or in so far as) this characterisation is correct, the outcome can always be predicted by the median voter theorem (Black 1958). First establish the current threshold under QMV. (This number has varied slightly at each enlargement, but it is usually around 71%. In other words, a proposal passes if and only if weighted Member State votes amounting to at least 71% of the votes cast are cast in its favour). Second, align all Member States

along the Eurosceptic-federalist dimension. Most commentators assume that the UK and the Nordic members lie at the Eurosceptic end, and that some of the original 6 members lie at the federalist end. Thirdly, compare the current proposal to the status quo. If carried, would it shift the status quo in the 'federalist' or the 'Eurosceptic' direction?

If it would shift the status quo in the federalist direction, then the Member State holding the 71st percentile least federalist vote - equivalently, the 29th percentile most Eurosceptic vote - is decisive. If that Member State prefers the proposal to the status quo, it will carry; otherwise, it will fail.

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Two comments on this model are in order:

1. It helps to show the conservative effect of QMV. Most proposals that are put up fail. So do all proposals that might be put up but are not because their advocates realise it would be a waste of time. Therefore the status quo is very stable - whether or not that is regarded as a good thing.

2. If the UK is (as some hope and others fear) the extreme outlier on the free-trading but Eurosceptic dimension of EU policy making, then it is a dummy player. Its bloc of 10 votes in the Council comprises 11.5% of the total (it was 13.2% from 1986 to 1994, before the last expansion). Therefore, it never controls the 29th or the 71st percentile vote, so it is never in a position to influence policy except in so far as it can influence those Member States that do hold the crucial vote.

However this scenario is probably false. And the more the EU is enlarged, the more probably it is false. The idea that ideology is single-dimensional is implausible. Even in the Thatcher and Major administrations, it was not always the case that the UK wished to block every proposal in the Council, nor that it was always at one end of the ideological spectrum among Member States. Apart from other considerations, 'free-trading' and 'Eurosceptic' are not identical: they imply different alignments of Member States on different issues. Nor is the UK interest (even on the Thatcher-Major interpretation) always served by rejecting proposals. Proposals to speed up the implementation of the Single Market, or to reform the CAP, which open-economy Member State governments favour, are equally likely to fail to the stability of the status quo as are radically federalist proposals.

The rival approach to studying voting power makes opposite assumptions. Whereas the single-dimensional approach assumes that all issues before the Council fit on the same issue dimension, the 'voting power' approach assumes that voting is (mathematically) chaotic. That is, that any coalition is as likely as any other, or (equivalently) that there are

as many issue dimensions as questions before the Council. Given that the Council has a shifting membership according to the agenda, this seems a more realistic model of the messy real world than the Thatcher-Tsebelis model. Furthermore, the accession of new members, who will for sure bring new issues to the table, makes it more and more the appropriate model.

The truth probably lies between the two models. Opinion is structured, but it is not so structured that every issue falls on just one issue dimension. Luckily (for the purposes of clear exposition) it is a mathematical property of the structure of opinion that once the number of dimensions goes above two, the probability that any configuration of Member States for and against a proposal is as likely as any other increases rapidly.

All voting power indices operate by studying all the logically possible voting outcomes that could arise. The best indices for the current purpose are the Penrose or modified Banzhaf (see Banzhaf 1965; Felsenthal and Machover 1998) indices. The Banzhaf family of indices ask how often a Member State can expect to be pivotal (in the sense defined in the previous section). That is to say, out of all possible combinations of Member States, how often does the given Member State make the difference between the combination's being a winning and a non-winning one?

Leech (2002) is the latest of a number of social choice scholars to consider the Banzhaf weights of Member States under the post-Nice arrangements. The weights of the existing 15 member states are correct with two exceptions: Spain is over weight and Germany is

under weight. However, the Nice process reduces *the power of the Collectivity to act* (Leech 2002); and it fails to provide an algorithm for automatic reweighting.

Since the foundation of the EU, the QMV threshold has hovered between 70.6% and 71.4% - it is currently 71.3%. Under Nice, the QMV threshold stays at 71.3% if there is no enlargement, but it rises to 73.9% in the event of all 12 of the then candidate countries joining (hereafter labelled EU27). Perhaps the motivation for this rise was to prevent a conspiracy of the small against the great. At present, any three of the big four members acting together can veto a proposal. But under EU27 that would not be the case even at a QMV threshold of 73.4% - the required threshold would be 74.8%.

How can one say that a threshold is ‘too high’ or ‘too low’? Ultimately, these are matters of judgment to which there is no correct answer. That the QMV threshold has never fallen below 70% since the foundation of the EU sets a floor. The original members wished a threshold of at least 70%. It is reasonable to assume that one or more of them would not have joined had the threshold been lower. Each succeeding new Member has acquired the *acquis communautaire* - at least its government at the time of accession has done so. So all current member states know that the QMV threshold is around 71%, and joined the union in that knowledge. That entitles us to say that the threshold is not too low.

‘Too high’ is another matter. The apparently small increase from 71.3% to 73.9% in the QMV threshold has drastic consequences. Two numbers are relevant: the power of a

given member to prevent action, and the power of the body as a whole to act. A Member State may reasonably want to veto something that it sees as a vital interest under QMV. In EU27, assuming any coalition is as likely as any other, each of the big four member states can expect to be able to veto, single-handedly, over 80% of proposals it does not like. From a Eurosceptic point of view this might be fine. But note that this power belongs to each of the four largest Member States, with the next two (Spain and Poland) only just behind on about 78%. Thus France has an 80% probability of being able to defeat any amendment to the CAP it does not like. Further down the feeding chain, any one of Latvia, Slovenia, Estonia, Luxembourg, and Cyprus would be able single-handedly to veto about 10% of proposals it does not like.

The counterpart of individual Member States' power to veto is, obviously, the inability of the collectivity to act at all. On the same assumptions as in the preceding paragraph, the power of the Council to act with a QMV threshold of 73.9% is 0.02. Only 2% of all possible resolutions that might be put forward can be expected, *a priori*, to pass. This means that the power to veto mentioned above is nugatory. Everybody has it, so nobody can do anything. If the current constitution-writing process gives any opening to reduce the QMV threshold, it should be taken. The Nice rules are a recipe for immobilism.

This brings us back to Tsebelis. His characterisation of EU politics as single-dimensional may be too simple, but his organising notion of veto players is a very powerful device. His book *Veto Players* (Tsebelis 2002) is not explicitly about the EU, but he and others have applied the theory he develops there most powerfully to the EU.



Tsebelis' non-modest claim is that his basic concepts of veto players, policy stability, and winsets can do more for less than anybody else's. He offers a way of looking at government that is more general than any of:

- o the Duverger (1954) literature on the relationship between electoral systems and party systems;
- o the Linz/ Stepan and Lijphart literature (e.g., Linz 1996, Stepan and Skach 1993, Lijphart 1992) on the properties of presidentialism compared with those of parliamentarism;
- o Riker's (1982, 1986) programme of analysing political upheavals such as the US Presidential Election of 1860 in terms of creative or destructive disequilibrium.

Tsebelis' audacious claim is that his approach is more general, not just than any one of these, but than all of these put together. Veto players are, as the name suggests, individuals or groups who have the power to block a proposal. They come in two varieties: institutional and partisan. An institutional veto player is one who has the legal power to block. Such a player may be an individual (the US President) or a chamber (the House of Lords). And the veto may be unconditional (the US President's at the end of a session of Congress, when there is no time to override it; the House of Lords on all non-monetary matters before 1911). Or it may be conditional (the US President when his veto may be overridden; the House of Lords since 1911, when it remains a veto player in the last year of a parliament but not otherwise). A partisan veto player is a party (or other)

group that may block a proposal so long as the group coheres. A governing party with over half of the seats in a chamber is a unique partisan veto player over all proposals that are carried if a simple majority votes for them. More than one party may be a veto player in a chamber where no party holds half the seats, or where more than a simple majority of those present is required to pass a measure.

The status quo is stable if it is relatively hard to upset. The more veto players there are in a political system, or the larger the qualified majority required for a proposal to pass, the more stable is the status quo. Equivalently, as either the number of veto players or the qualified majority threshold rises, the winset of the status quo diminishes, and the core, or the uncovered set, of the game gets bigger. The winset means the set of alternative policies that could be carried against the status quo. The core means the area of policy which, once reached, cannot be abandoned. It is close, but not identical, to the concept of (Nash) equilibrium.

Stability is neither good nor bad in itself. Most of us probably want the constitution to be stable and ordinary laws dividing spoils among interest groups to be unstable. An example of an unstable constitution would be that of Weimar Germany, after Hitler with a little help from his friends had drastically reduced the number of veto players to one. A good example of an over-stable distributive law is the CAP, which is protected by the multiple vetoes and high qualified-majority thresholds of the EU.

Tsebelis trumps Duverger because Duverger's Law may be read as a statement of a special case. A multi-party system may be reclassified as a system with numerous partisan veto players. From this you can read off the greater stability (for both good and ill) of policy under proportional than under majoritarian electoral systems. He trumps Linz and Stepan because 'number of veto players' is a more powerful variable than 'presidentialism'. It explains more about the policy stability of regimes than does the dichotomous division between parliamentary and presidential. It may also show that the veto players can be in unexpected places - the congress in a presidential regime, and the executive in a parliamentary regime. He trumps Riker because Riker used the chaos theorems of social choice to explain why policy is sometimes spectacularly unstable. Tsebelis uses the more recent technical results of social choice, which circumscribe the dramatic chaos results of the 1950s to 1970s, to show how and when policy is usually stable.

Thus the convergence of the academic and policy literatures on the European Union is very much for the good of both sides. It might even lead to clearer-headed decision making than in the past.

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