PARTY COHESION, PARTY FACTIONS AND LEGISLATIVE PARTY DISCIPLINE IN ITALY

Daniela Giannetti  
University of Bologna  
giannett@spbo.unibo.it

Michael Laver  
New York University  
michael.laver@nyu.edu

Abstract

Moving beyond a unitary actor assumption that models members of a self-evidently collective entity such as a political party “as if” they all shared a single brain, this paper explores the cohesion and discipline of party legislators in multi-party systems operating under the constitutional rules of parliamentary government. We do this in the context of Italian politics, for which a consistent received wisdom is that many of the main political parties have a well-defined factional structure, with intra-party factional politics driving how parties behave in the wider political system. We first review some of the theoretical issues arising from treating political parties as endogenous coalitions of politicians, exploring the incentive structure of legislators at the levels of electoral, legislative and executive politics. We then elaborate these issues at an empirical level by mapping the internal factional structure of the main Italian left-wing party, DS (*Sinistra Democratica \ Democratic Left*), then using this to explain why different DS deputies regularly voted in different ways on the same key foreign policy roll calls.

We gratefully thank Elisabetta De Giorgi, an invaluable source of information about the Italian DS.

1. INTRODUCTION

Moving beyond a unitary actor assumption that models members of a self-evidently collective entity such as a political party “as if” they all shared a single brain, this paper explores the cohesion and discipline of party legislators in multi-party systems operating under the constitutional rules of parliamentary government. We do this in the context of Italian politics, for which a consistent received wisdom is that many of the main political parties have a well-defined factional structure, with intra-party factional politics driving how parties behave in the wider political system. We first review some of the theoretical issues arising from treating political parties as endogenous coalitions of politicians, exploring the incentive structure of legislators at the levels of electoral, legislative and executive politics. We then elaborate these issues at an empirical level by mapping the internal factional structure of the main Italian left-wing party, DS (Sinistra Democratica /Democratic Left), then using this structure to explain why different DS deputies regularly voted in different ways on the same key foreign policy roll calls.

2. POLITICS INSIDE PARTIES: COHESION, DISCIPLINE, FACTIONS

Party cohesion and discipline have been the subjects of extensive and wide-ranging debate within political science. The distinction between the two concepts, viewed in a dynamic context, is that party cohesion is an essentially emergent “coordinated” behavior reflecting the interacting incentives of individual legislators, whereas party discipline is the outcome of a strategic game played within political parties, in which legislators who are party members respond to rewards and punishments determined by some internal party decision-making regime (and, potentially, a “meta-regime” under which a party’s decision-making regime is itself selected – although to our knowledge this has not yet been discussed in the literature). The vast bulk of this debate deals in practice with party cohesion and concerns the roll-call voting behavior of members of the US Congress¹.

¹ See, for example, Aldrich (1995); Cox and McCubbins (1993, 2005); Krehbeil (1993, 1998); Nokken (2000), McCarty, Pool and Rosenthal (2001); Snyder and Ting (2002)
although reference has also been made to the cohesion and discipline of party groups within the European Parliament.² It is striking that neither of these constitutional settings involves “parliamentary government”, in which the executive is responsible to the legislature. This is important because the strategic incentives associated with both party cohesion and party discipline are very distinctive under parliamentary government, where a lack of cohesion and/or indiscipline among parliamentarians belonging to government parties may jeopardize the very existence of the government.

Certainly from the perspective of making and breaking governments, levels of party discipline are very high in European parliamentary democracies. There are very few examples indeed of parties that have been “half-in, half-out” of government, in the sense that legislators from the same government party have voted in different ways on key legislative motions of confidence and/or investiture. In this sense parties do go into and come out of government as if they were unified actors, a pattern noted by Laver and Schofield (1998) and often cited by other authors when defending their own use of unitary actor assumptions in models of government formation.

At the same time there can be no doubt that European parliamentary parties comprise individual politicians who can and sometimes do switch party membership, form new parties, or openly defy the decisions of their own party’s decision-making regime. The most casual observation of politics in any parliamentary democracy instantly reveals complex interactions between different politicians belonging to the same political party. Figure 1, for example, shows a cartoon from the Times, published on 17 December 2004 (drawn in the style of the painting History of the World, by Jeremy Deller, which had just won the Turner Prize for 2004.)³ This presents an informal model of the internal politics of the British Labour Party following the hair-raising domestic adventures of one of its most senior politicians, David Blunkett. While Labour was not about to split down the middle and suddenly fall out of office on 18 December 2004, to a large extent British party politics at this time was all about the internal politics of the British Labour Party, sketched in Figure 1.

---

² See, for example, Hix (2001)
³ The original painting mapped the musical connections linking “brass bands” to “acid house”.

3
A version of Figure 1 could be drawn for most significant European political parties at most points in their history. Indeed one of the mysteries of parliamentary government concerns how the operation of a complex system of the type sketched in Figure 1 can generate behavior by members of parliamentary parties that is disciplined enough to sustain governments in office over extended periods of time and generally allow the governmental process to be non-chaotic.

Political scientists have offered a trinity of solutions to this mystery. The first part analyzes electoral incentives for legislators that arise from the value of a party label. The second part analyzes strategic incentives within the legislature that reward legislators who behave in a coordinated fashion. The third part analyzes the ability of party leaders to implement a system of rewards and punishments within some sort of game of legislative party governance that imposes “party discipline” by changing the incentive structure of party members.
Electoral incentives

Arguments about why electoral incentives might generate emergent party cohesion typically describe parties as creating labels or brands that are used by voters to infer information about candidates in elections. Putative legislators join political parties to signal policy positions to voters, doing this so long as it increases their chances of election or re-election. A widely cited recent formulation and analysis of the argument that parties provide informative brand labels, building on arguments made by scholars such as Cox and McCubbins (1993, 2005), can be found in Snyder and Ting (2002), with recent interesting extensions by Levy (2004). This argument about the endogenous rationale for political parties developed from influential work on party-free electoral competition between “citizen-candidates” by Osborne and Slivinski (1996) and Besley and Coate (1997). One of the characterizing assumptions of this approach is that voters make inferences about candidates’ policy preferences only by observing their party membership, treating this as a costly signal and ignoring as cheap talk everything that candidates might actually say about their own policy preferences. Candidates in these models do have underlying policy preferences and thus prefer to join parties comprising like-minded colleagues. This is because the party policy positions that are part of the brand with which each member is associated are influenced by the positions of all party members. Party membership involves two types of cost. There are costs arising from associating with a party label signaling a unique policy position that differs from the ideal point (or stated policy position) of the member – and of being associated with a party that will actually implement this position if it is in a position to do so. And there are deadweight costs arising from the non-policy obligations of membership – attending party meetings, performing administrative chores for the party, and so on.

Since the primary focus of this type of work is on the electoral phase of the political game, and despite occasional references to “party discipline”, this approach involves no explicit model of intraparty politics – save for the assumption that the party policy platform is chosen by either a dictatorial leader or simple majority voting by party members (Snyder and Ting 2002:102). In addition, the approach assumes that politicians are allowed to join, and to remain within, any party they choose. The only “filter” on party entry in such models is party policy itself which, combined with the deadweight
costs of party membership, discourages legislators with very divergent policy positions from joining the party (Snyder and Ting 2002: 95)

This means that the underlying process being modeled is an essentially non-strategic sorting of politicians between parties. As McGann (2002) points outs, this interpretation opens up the analysis of party cohesion to a longstanding literature on sorting typically associated with Teibout (1956). McGann models an electoral game that describes the partitioning of voters between parties, but the logical engine of this model could also be applied to explain the sorting of politicians between parties on the assumptions that party positions are some function of the positions of party members and that politicians want to affiliate to the party with the closest position. Similarly, dynamic spatial models of competition between parties for votes, such as those proposed by Kollman, Miller and Page (1992, 1998, 2003), de Maarchi (1999, 2003) or Laver (2005), could be reinterpreted in terms of competition between parties for legislator affiliations. Indeed, in a multidimensional multi-party context, the AGGREGATOR adaptive behavior modeled by Laver (2005) – under which the party policy position continuously adapts to the mean position of party members – would result in a system not unlike that modeled by McGann (2002) if all parties in the adopted AGGREGATOR behavior.

While this large body of work gives us useful intuitions about electoral incentives for legislators to affiliate to parties, the main lesson we draw from it in the present context is that electoral incentives may well make a party label a valuable commodity. Thus, if a party’s decision-making regime can credibly threaten to withdraw the party label from party legislators if they fail to abide by party decisions about legislative behavior, then this will make those decisions easier to enforce. On this perspective, party discipline is about legislators responding to explicit or implicit threats by party leaders to impose electoral costs by withdrawing the party label, by casting legislative votes in otherwise costly compliance with party policy.

**Legislative incentives**

A second set of incentives for legislators to leave to political parties derives from improved expectations in relation to a range of legislative payoffs that accrue to

---

4 See also Kollman, Miller and Page (2003)
legislators who belong to larger rather than smaller cartels or coalitions of legislators. A large part of the relevant literature has been concerned with the role of party in the US Congress, and a recent very comprehensive overview of this can be found in Cox and McCubbins (2005), to which the reader is referred. Quite a large part of this work is highly US-centric, in that it deals either with rather specific aspects of US legislative procedure, and assumes an institutional setting in which the main business of the legislature is legislation and a single legislative party commands a majority position. For Cox and McCubbins (2005), the main legislative resource that can be captured by a majority coalition of legislators (in the US context these are all members of the single majority party in some house of the legislature) is agenda control. This is achieved by controlling the allocation between legislators of agenda-setting legislative offices, such as committee chairs. On this argument, the power to make such allocations is delegated by party members to the party hierarchy, which can use this power to enhance party discipline, which in turn feeds back to enhance the value of the party label in the electoral game. Cox and McCubbins set this argument in a more general context of comparative legislative behavior – for example making reference on several occasions to the Laver-Shepsle (1996) portfolio allocation model as describing a way of allocation agenda-setting roles in a parliamentary government system. But the essentially US backdrop to the whole argument means that the legislative agenda control is seen as important because the legislature is the main political arena in which legislators seek to fulfill their objectives, policy and otherwise.

The Cox-McCubbins argument that US parties impose discipline on their members by manipulating scarce agenda-control resources is in contrast an alternative influential argument, associated with Keith Krehbiel (1993, 1998). This holds that what looks like legislative party discipline is an essentially emergent phenomenon. On Krehbiel’s account, what looks like coordinated behavior arises because US legislators choose which party to affiliate to on the basis of their intrinsic policy preferences – in effect joining a party of like-minded individuals and then quite voluntarily behaving in the same way as these on the floor of the House without the need for any “externally” imposed party effect.
Despite the stark theoretical distinction between these two approaches to the analysis of apparently coordinated legislative party roll-calls, distinguishing them empirically is harder than it might seem. This is because the two approaches may well be observationally equivalent for same “disciplined” party roll call. It may be that legislators are voting the same way because they like the same policies, or because they are responding to the same non-policy incentive structure put in place by the party hierarchy. Snyder and Groseclose (2000) present an innovative empirical analysis that sets out to distinguish these effects. They do this by making a distinction between two types of roll call. On one hand there are “lopsided” roll calls. Snyder and Groseclose assume, first, that legislators will treat these as a forgone conclusion and, second, that party leaders will see them as offering no rationale for the (by assumption costly) deployment of party discipline. On the other hand there are “close” roll calls, for which coordinated legislator behavior makes the difference between winning and losing. Snyder and Groseclose find strong evidence that the “party effect” is much higher for close than for lop-sided roll calls. They infer from this that US parties can and do influence the behavior of their legislative members when this makes a real difference, and do not attempt to do so when it does not. Snyder and Groseclose then go on to look at roll calls on issues that the party leadership has publicly identified as a priority, and find much more of a party effect on these than on issues that are not party priorities.

McCarty, Poole and Rosenthal (2001: 674) challenged this argument on the basis of their own empirical work, arguing that “the main influence of party discipline is not on the votes on specific roll calls but on the choice of ideal point made by the representative”. To come to this conclusion they observed changing patterns of roll call voting among party-switchers and inferred that legislators appear to coordinate on roll calls because they change policy preferences to reflect those of their parties, a conclusion robustly contested on methodological and empirical grounds by Snyder and Groseclose (2001). Furthermore it is not clear theoretically what, other than random behavior, might be driving party switching if – as McCarty, Poole and Rosenthal claim – there is no independent party effect and party switchers adapt their ideal points to that of the party to which they currently belong.
While this body of work is ingenious empirically, its theoretical underpinnings do not really deal with the obvious endogeneity of the anticipated “closeness” and “lop-sidedness” of roll-calls, especially in a two-party context. In a nutshell in the US system, if a roll call is expected to be lop-sided, this amounts to an expectation that party discipline will not be applied – but how is this expectation formed? Thus a party effect may be capable of being measured but, as Snyder and Groseclose freely admit in their conclusions, we do not come much closer to explaining it. All in all, the main lessons that we draw from this work concern the incentives for legislators to form cartels enabling them better to fulfill their objectives within the institutional structure of parliament, and the possibility that members of those cartels will (as a solution to potential intra-cartel collective action problems) delegate to “party leaders” (however these might be selected) the right to allocate key political resources captured by the party. We also note the methodological innovation of Snyder and Groseclose in using the distinction between lop-sided and close legislative roll calls to gain some purchase on the existence, if not the explanation, of a party effect in roll call voting that goes beyond the observation of similar behavior by people with similar preferences.

**Incentives arising from the making and breaking of governments**

The main reason why the huge body of work on party cohesion and discipline inspired by the US constitutional setup is not directly portable to the European context has to do with the role of the legislature in making and breaking governments. Under the constitutional regime of parliamentary government that is pervasive in Europe, almost certainly the most important role for the legislature, and hence for legislators, arises from the fact that the executive gains and retains office as long as it maintains the confidence of the legislature. This requirement is constitutionally manifested in the parliamentary vote of confidence/no confidence in the government (Huber 1996; Lijphart 1992, 1999). The executive under parliamentary government, furthermore, is invariably a collective entity – a “cabinet” of ministers bound together under the constitutionally embedded rule of collective cabinet responsibility. The stability and effectiveness of the government thus depends upon the ability of government parties to maintain disciplined behavior by party legislators. Effective party discipline means that a government is not defeated – either on
votes of confidence/no confidence or on key pieces of legislation – because some legislators who belong to government parties vote against the government. Thus, while the vote of no confidence is the constitutional underpinning of parliamentary government, the behavioral underpinning can be seen as party discipline. If the government parties maintain firm discipline on the part of their legislators, and if they control sufficient legislative support to take office in the first place, then they can maintain themselves in office, with firm control over the entire political process and facing few legislative impediments to the implementation of their policy and other objectives. Conversely, if government parties cannot maintain firm party discipline, then they cannot retain a secure hold upon office. The key point in all of this concerns the huge incentive in a parliamentary government system for senior party politicians – who themselves will often be members of the government – to maintain firm discipline over the members of their party.

The resources party leaders can deploy to structure the incentives of legislatures in a way that ensures party discipline include those we have already discussed in the US context: control over electorally valuable party labels and control over sought-after perquisites in the legislature. But this incentive structure has an important new dimension under parliamentary government, arising from the fact that the legislature typically functions as a recruitment pool for the executive, while the career ambition of many legislators in such systems is to hold high government office. (This and other aspects of the agency relationship between members of parliament and government ministers in parliamentary government systems are discussed by Saalfeld, 2000). When legislative parties do move into government, control over the allocation of important government jobs, whether these are cabinet or junior ministries or other key patronage appointments, typically rests in the hands of a very small number of senior party politicians, who can and do use these offices to reward loyal party members and who can and do punish mavericks by denying them the fruits of office.

While we are not aware that this has been extensively discussed in the literature, what is striking about incentives for party cohesion and discipline under parliamentary government, as opposed to presidential government, is that these incentives cast the role of party leaders in a completely new light. Thus the profession’s account of party
discipline under presidential government as we have seen, is to a large extent a search for reasons why legislators would want to affiliate to political parties. When (US-style) parties are modeled as more than manifestations of the emergent common behavior of legislators who share the same preferences, the “party” as a political system in its own right, and “party leaders” as distinguished actors within this system, tend to play shadowy and implicit roles. Explicitly or implicitly, party leaders tend to be seen as entrepreneurs and/or agents who essentially offer coordination and enforcement services to party members. As agents, such party leaders have incentives to shirk. Imposing party discipline, by whatever means, is thus seen in these accounts as the costly fulfillment of obligations, so that the explicit or implicit games modeled involve a decision by some abstract “party leadership” to impose “costly” discipline.

The reason such models of party discipline can look bizarre and unrealistic in the context of parliamentary government is that an “agency/expensive-discipline” model of party leadership seems implausible in a constitutional environment where party leaders are senior politicians who are the key players in a series of interlocking games at the heart of the political process. Not only do party leaders make the really key decisions – about making and breaking governments, calling elections, and the like. But they also enjoy the lion’s share of the consumption benefits of office when this is achieved – whether these are perquisites such as the fat pay check, the government jet or the ministerial Mercedes, or opportunities to shift policy outputs in preferred directions as a result of controlling vetoes and agendas. In a nutshell, maintaining tight party discipline is highly incentive compatible for party leaders under parliamentary democracy. Indeed it is difficult to think of reasons why party leaders in a parliamentary government system would NOT want to maintain tight party discipline. (If it is in the interests of a party leader NOT to have a coordinated party vote on some matter – perhaps on a highly sensitive issue such as gay marriage or stem cell research for which it is against party interests to be identified with a single unambiguous position – then a legislative “free vote” can be declared on the matter and legislators can be allowed to vote with their “consciences”. But the systematic ability to turn free votes on and off is surely a manifestation of firm party control over the behavior of party legislators.) Given this, the substantive puzzle of party discipline in a parliamentary government system is not “why do we observe as much party
cohesion/discipline as we do?”, as in the US. Rather it is “why are all parties not authoritarian regimes in which rank-and-file legislators are forced to dance to the tune of party leaders, on pain of being exiled to the badlands beyond party politics?”

Towards an understanding of party discipline under parliamentary government

While the development of a rigorous and realistic model of party discipline under the constitutional regime of parliamentary government is an ambitious undertaking that is beyond the scope of this paper, we can distill from the preceding discussions an understanding of what some of the component parts of such a model will be. We begin by describing what we mean by a political party.

Political parties and parliamentary government: “political clubs”? 

Rather than seeing political parties as endogenous coalitions of legislators, it may be useful to regard parties as institutions in their own right. They are endogenous institutions to be sure, but at the same time are more deeply embedded into the constitutional rules of the political game of parliamentary government than a mere behavioral coalition of legislators. In this context it is notable that almost all of the mainstream Western European political parties have been in existence since before most western European politicians were born. (For a recent review of the literature on the long-term stability of European party systems, see Gallagher, Laver and Mair (2005: Chapter 9). Given all of this, it might be attractive to see political parties under parliamentary government as “political clubs”, defining a political club as an autonomous political system in its own right with the following properties:

a. Membership rules. A party, seen as a political club, is a group of legislators that has an unambiguously defined membership. Membership may have more than one category. Members must be explicitly admitted by the club according to its rules (see below). Membership is entirely voluntary. No legislator can be compelled to join any club; any legislator is free to leave a club of which s/he is a member at any time. Any member may be expelled from the club according to its internal rules, whether or not s/he agrees to this.
b. *Constitution*. A party, seen as a political club, has a constitution comprising, among other things, rules that describe:

- how members are admitted to, and expelled from, the club;
- how members change category (e.g. from rank and file member to member of the executive or leader);
- how collective decisions are made on behalf of the club membership, including decisions on party policies, general membership obligations, and the rewards and punishments applied to individual club members.

There is a considerable literature on the economics of clubs, most of it in a tradition that can be traced to Buchanan (1965). (For an excellent and comprehensive review of this literature see Sandler and Tschirhart, 1997.) To a large extent this literature sees clubs as “solutions” to the problem of providing excludable collective consumption goods (*aka* “club goods”). Much of this work is of limited use in the context of multiparty politics since it either considers a world with only one club, which potential members are considering joining and to which existing members are controlling admissions, or deals with competition between large numbers of small clubs, analyzed in the tradition of general equilibrium theory where it is assumed no single club can move the market. (See, for example, Ellickson et al., 1999). In addition, a basic premise of much of this literature is that “the presence of crowding requires a restriction of group size” (Sandler and Tschirhart, 1997: 336), which does not seem particularly realistic in the context of political parties.

All of this suggests that we will need a new model of the politics of “political clubs” – as defined above – for which we may well want to draw inspiration from Tiebout-style sorting of political actors between policy jurisdictions. For a recent essay in this area see Perroni and Scharf (2001).

*Incentive structure of legislators*

We can certainly take from our discussion of the benefits to legislators of belonging to political parties the possibility that one of the consumption benefits of party/club
membership concerns the electoral advantage of the party label. This is a benefit that is collectively produced when party/club members behave in a coordinated manner, in a situation in which individual members have an incentive to avoid paying the costs of coordinated behavior if they can get away with doing so. It is also excludable in the sense that members can be exiled from the party and thereby denied access to the party label. However, when we consider parties in parliamentary government systems, it is hard to escape the view that the private incentives for legislators to belong to a political party dwarf the collective electoral benefits of the party brand as a signal of policy position. These private benefits and arise because political parties occupy a distinguished position in a parliamentary government system, as organizations that allocate a substantial portion of the payoffs accruing to, and dramatically structure the life chances of, most legislators. For example, political parties in a typical parliamentary government system control the following aspects of the incentive structure of a typical legislator.

a. A place on the party ballot. This is very much more than the reputational value of a party label, discussed above. Parties have the right to endorse particular candidates as official party candidates. Under the list-PR electoral systems that are very common in parliamentary democracies, furthermore, parties absolutely control access to and candidate placement on the party list. It is uncontroversial to assume, therefore, that parties in parliamentary democracies directly control access to the party label on the ballot. If denied this, a putative candidate must be admitted to and endorsed by another party, or must form a new party, or must run as an independent. It is reasonable to assume that each of these alternatives to own-party endorsement has significant additional costs.

b. Access to legislative perquisites. For career politicians who are not also members of the government, the legislature is their official place of business. Standing orders of most legislatures privilege political parties in the allocation of perquisites in the legislature, whether these are physical office accommodation, speaking time on the floor of the house (perhaps to impress constituents at the next election), or paid positions with access to considerable resources, such as committee chairs. There are
thus plenty of opportunities for party hierarchs to reward and punish individual legislative party members as they go about their daily lives.

c. Access to executive perquisites. Above all, however, parties in parliamentary government systems enjoy almost complete control of high government office. This is typically embedded in the constitution via the provision that it is the Prime Minister who is directly responsible to the legislature, and who has the power to nominate candidates for ministerial positions – either individually or as a collective entity – typically subject to legislative approval. Since the Prime Minister is almost invariably a very senior party politician (indeed is only rarely not a party leader), this means that the constitution typically gives to some senior party politician the right to nominate all cabinet ministers.\(^5\) Under parliamentary government, therefore, enormous private rewards for party members – the largest private rewards in the entire political game – are in the hands of those party leaders who are either in government or are credibly expected to be so.

Since independent non-party legislators in practice have very little control over either legislative or executive perquisites, it is reasonable to conclude that most of the main payoffs to politicians in parliamentary democracies arise from being a member of some political party or another. Thus, for working politicians, the choice is not “will I or won’t I belong to a political party?”, but “\textbf{which} political party should I belong to?”

\textit{Incentive structure of party leaders}

In the light of all of this, consider the incentive structure for party leaders. Since the work of Leubbert (1986), nobody has much quibbled with the assumption that the driving motivation of party leaders is to remain party leaders, and that this in turn is the main reason why party leaders want their parties to be “successful”. It is difficult to think of any reason why a party leader would want to lead an undisciplined rather than a disciplined party. There are (just barely) conceivable occasions when a leader may wish

\(^5\) For coalition executives, the PM may in practice cede this right, in relation to ministers from other government parties, to the leaders of those government parties. But that is part of the coalition deal, and the other nominators of ministers are also almost always party leaders.
to use uncoordinated behavior by party members to signal that the party does not have a rigid position on some issue. But this signal only makes sense in contrast to coordinated party behavior on other issues – in other words the effective signal is that party discipline has been turned off for this issue, which implies that discipline exists. For the most part, however, most plausibly assumed incentives for party leaders are that they prefer to lead coordinated and disciplined parties. Furthermore the rewards and punishment at their disposal – which can be used to reward disciplined party members and punish mavericks – do not seem in any sense costly for party leaders to deploy. Administering these rewards and punishment thus seems highly incentive compatible for party leaders. In this sense, in parliamentary government systems it is not party discipline that needs to be explained, but the relatively rare instances of party indiscipline.

**Party factions as intra-party political clubs**

When we begin to think seriously about party indiscipline, we need to distinguish between what we might think of as “structured” and “random” indiscipline.

Random indiscipline refers to maverick behavior by party legislators that cannot be characterized in a structured way – arising from individualized incentives facing a particular legislator that we cannot generalize. Random indiscipline will tend to increase if the rewards for disciplined behavior reduce, or the punishments for this increase. If we characterize party leaders in parliamentary government systems as finding it highly incentive compatible to impose the rewards and punishments that generate disciplined behavior in general, then random indiscipline will be a product of highly idiosyncratic incentives facing a particular legislator on a particular occasion and will be to all intents and purposes random behavior, when viewed in a general context.

Structured indiscipline refers to behavior that departs from behavior officially mandated by the party in a structured way. This must arise because of some structured variation within parties of the incentive structure facing party legislators. Generically, we can think of this intra-party structuring of incentives as being described in terms of party “factions”, with different factions exposed to different incentive structures. Returning to our characterization of parties under parliamentary government as being political clubs that allocate substantial private rewards and punishments to party members, competing
incentive structures can arise within parties if parties themselves contain internal political 
clubs that control at least some aspects of the private incentive structures of their 
members. Think of these intra-party political clubs as “factions”, applying the definition 
of a political club set out above. Set aside for the time being the difficult question of how 
such factions might emerge endogenously within some political party. Once they do 
indeed exist, if intra-party factions have (a) an unambiguous membership and (b) control 
over the private rewards and punishments of members, then they are likely to generate 
behavior that does not comply with the “official” party line.

*******

In the second half of this paper, we set out to gain further insight into these matters by 
exploring a particularly clear example of faction-structured undisciplined behavior within 
a significant European political party, the Italian DS.
2. BRIEF HISTORY OF THE DS AND ITS DIVISIONS ON FOREIGN POLICY

While left wing parties are often considered more cohesive and disciplined than others, the recent history of the major Italian left-wing party (the former PCI, then PDS, now DS) involves a series of splits and fusions, resulting in the emergence of quite explicit factional politics inside the party.

The former Italian Communist Party, the PCI, held what was to be its final party congress in 1991, two years after the “revolution of 1989” had resulted in the fall of Communist regimes throughout Eastern Europe. At this congress, the PCI changed its name to *Partito Democratico della Sinistra* (PDS; the Democratic Party of the Left). Some of its members split away to form a more left-wing left party, the PRC (Communist Refoundation). Other members founded a left-wing faction inside the PDS, called *Comunisti Democratici*.

The PDS held two party congresses, the first in 1995 and the second in 1997. While the first congress was mostly devoted to discussing practical party strategies for the coming 1996 national election, debates during the 1997 congress clearly showed the emergence of minority factions inside the party. While only one policy document was debated and only one official candidate ran for party leadership, several amendments were presented by both left and right wing minority group leaders.

The second key turning point in the history of the major Italian left-wing party was the National Assembly (*Stati Generali della Sinistra*) of the PDS held in Florence in February 1998. Here, the PDS changed its name to DS (*Sinistra Democratica* /Democratic Left*). At the same time, several outside groups entered the party. These included: *Laburisti* (a splinter of the former PSI, born in 1994); *Cristiano Sociali* (a splinter of the former DC, born in 1993); *Comunisti Unitari* (a splinter of PRC, born in 1995); and *Sinistra Repubblicana* (a splinter of former PRI).

The emerging divisions within the DS were to a large extent a product of internal differences over foreign policy. “Much more than by matters of economic policy, the traditional identity of the Italian communism was shaped by matters of foreign policy, the alignment of Italy in the international system and its affiliation to military alliances”, such as NATO (Bellucci *et al.* 2000: 154). After the fall of the Soviet Union, the official
position of the PDS/DS increasingly moved towards an explicit adoption of the security policy of Europe and NATO. However, the internal left faction within the party was always closer to the much more explicitly pro-peace and anti-NATO policy positions of Communist Refoundation (PRC). Such internal dissent on foreign policy issues was clearly visible in 1999, when the center-left Ulivo coalition government – of which DS was a member – sent Italian troops to support NATO military intervention in Kosovo. There was a major split in the party’s legislative voting on the Kosovo crisis. This split was controversial and significant for Italian politics as a whole because, for the first time in Italian history, the Prime Minister was actually the leader of the DS.

Dissent within the DS was also manifested when the Italian government, now led by the center-right Polo coalition with DS in opposition, declared its support for the military operation Enduring Freedom by sending Italian troops to Afghanistan on 7 November 2001, and confirmed this support on 3 October 2002.

Divisions within the party were again clear during political debates in Italy over the Iraq war, the third international crisis during the period under consideration. Iraq was potentially less divisive for the DS because the leadership of the party was united with the internal left in opposition to any military intervention in Iraq. However, this foreign policy issue became crucial, both inside the DS and for the party’s external critics. Despite its generally hostile approach to the Iraq war, any particular DS policy response to Italy’s practical role in the international situation, given Prime Minister Berlusconi’s support for the military intervention, generated divisions between DS factions. These divisions undermined the ability of the party to present itself in the wider political system as a credible and united party of government.

---

6 We excluded this from our analysis because the first two Congresses of the DS for which we have data were held afterwards.

7 On this point Sartori (2004) argues that “The DS is now a unitary party only in terms of electoral statistics ... one third of the DS ... is not reformist but extremist ... if approximately the 7% of the DS (which means a third of the total party vote) is added to the 12-13% of the radical left, the situation is that Bertinotti [leader of the PRC] controls 20% of the left leaving to poor Fassino only 13%.”
3. DS PARTY CONGRESSES INVESTIGATED AND KEY MOTIONS DEBATED

The factional structure of the DS can most easily be observed during party congresses, during which debate is organized around comprehensive omnibus motions that are in effect policy documents mapping out the overall ideological orientation of the party. In the party congresses analyzed, there was always a major motion proposed by the official party leadership, as well as either one or two rival motions proposed by party factions opposing the leadership. Huge numbers of party delegates signed one or other of these congress motions, thereby publicly declaring their alignment within the party to the faction proposing the motion that they signed.

The first congress of the DS was held in Torino, 13-15 January 2000. Two alternative motions were debated. The first motion was proposed by the party leader, Veltroni, and was titled “Una grande sinistra, un grande Ulivo, per un'Italia di tutti”. The second motion was proposed by the internal leftist component (Sinistra DS) and was titled “Per un partito di sinistra, per una coalizione riformatrice, per rinnovare i valori del socialismo europeo”. The only official candidate for the party leadership, Veltroni, was elected as party leader with the 79.9 percent of delegates’ votes. New party rules were also approved at this congress, allowing the formation of “political clubs” and thereby officially recognizing the existence of different factions inside the party.

National elections were held in Italy on 13 May 2001, in which the centre-left coalition was defeated and the DS gained the 16.6 percent of the popular vote. Later in the same year (16-18 November 2001), a second DS party congress was held in Pesaro. Delegates discussed three motions: (i) “La sinistra cambia per governare il futuro. Con l’Italia. Nell’Ulivo”; (ii) “Per tornare a vincere” and (iii) “Per salvare i DS, consolidare l’Ulivo e costruire un nuovo unitario partito del riformismo socialista”. The first two were proposed, respectively, by the leadership and internal left faction; the third was proposed by a recently emerged liberal faction, located to the right of the party leadership. For the first time, there were three official candidates for party leader: Piero Fassino (leadership faction), Giovanni Berlinguer (internal left faction) and Enrico Morando (liberal faction). Fassino was elected leader with 61.7 percent of the vote,
ahead of Berlinguer with 34.1 percent, and Morando with 4.2 percent. Massimo D’Alema was elected party president with 63.4 percent of delegate votes.

4. DATA AND OPERATIONALIZATION

Our first task is to estimate the location of individual DS members vis-à-vis the two main internal party factions, the “leadership” faction and the “internal left” faction. As we have seen, the two party congresses under investigation involved extensive debate on significant motions – in each case one motion proposed by each faction – setting out the conflicting views of the factions on the preferred ideological direction of the party. Large numbers of congress delegates signed these competing motions. Taking which motion a delegate signed as a clear public signal of factional affiliation, we collected data on delegate signatures and used these to identify each signatory with the faction proposing the motion signed.

Smaller (but still large) numbers of delegates spoke in the congress debates on these motions. We collected these speeches and analyzed their content, using the “word-scoring” technique for computational text analysis devised by Laver, Benoit and Garry (2003), to estimate the closeness of each speaker to the faction positions set out in the motions. Essentially this technique estimates for one or more policy dimensions the (unknown) positions of a set of “virgin” texts under investigation, stating these positions in relation to the (known or assumed) positions of a particular set of “reference” texts. In the present context what we set out to do was establish the positions of individual party delegates, treating their congress speeches as the virgin texts under investigation, in relation to the official policy positions of the party factions, represented by the congress motions they proposed, which we treated as reference texts. These congress motions are substantial bodies of text in their own right, each setting out in some detail the policy position of the faction proposing it. Since both conferences took place close together in time, and since the motions were essentially concerned with the same issues, we

---

8 The word scoring software for conducting this analysis, which integrates as a set of subroutines into Stata 8, can be downloaded from http://www.tcd.ie/Political_Science/kbenoit/wordscores.
combined the two motions proposed by the leadership faction at the Torino and Pesaro congresses, also combining the motions proposed by the internal left faction at these congresses.

Our next task is to characterize the legislative voting behavior of individual DS deputies on crucial foreign policy motions relating to the internally divisive issues discussed in Section 2. We constructed a dataset that includes 38 roll call votes taken between October 2001 and June 2003, listed in Table 1. Two of these roll calls concern final votes on the passing of a law: the vote of 4 June 2002 converted into law a government decree concerning the continuation of Italian support for international military operations; the vote of 3 June 2003 was on a bill related to the agreement on a common European defense policy. The other roll calls concern different motions or resolutions proposed by either government or opposition parties on the political response of Italy to some important aspect of the international situation. Thus:

- the session of 9 October 2001 included six votes, on two separate motions proposed by government and opposition, concerning the application of Article 5 of the NATO Treaty;
- the session of 7 November 2001 included seven votes, on two separate motions proposed by government and opposition, concerning sending Italian troops to Afghanistan (the *Enduring Freedom* operation);
- the session of 3 October 2002 included ten votes, on six separate resolutions proposed by the government and different opposition parties, concerning the continuation of military operations in Afghanistan;
- the session of 3 April 2003 included six votes, on six separate resolutions proposed by the government and different opposition parties, concerning Italian involvement in military operations in Iraq;
- the session of 15 April 2003 included seven votes, on six separate resolutions, concerning Italian involvement in military operations in Iraq.

<<Table 1 here>>

---

9 Some motions (or resolutions) may involve a vote on separate parts of the same motion.
The DS leadership faction articulated for each motion an “official” party position, with which individual legislators’ roll call votes can be compared. More generally, we can identify the position of the majority of each DS faction on each motion. On some occasions the positions of all three factions are the same; on other occasions these positions differ. For each roll call we can observe for each legislator whether s/he voted in accordance with a particular faction position. An aggregate estimate of the “roll-call loyalty” of each legislator to the official DS party position can be derived by averaging the number of times, in split roll calls, the legislator voted in the same way as the leadership faction, as a proportion of all possible opportunities to do this.

5. ANALYSIS

Faction membership and voting behavior in key foreign policy roll calls

We first investigate the extent to which we can use faction membership, identified by signatures attached to party congress motions, to predict individual legislator behavior on key foreign policy roll calls. Tables 2 and 3 give examples of key roll calls on which DS legislators did, and did not, split their votes.10 Table 2 cross-tabulates the factional affiliation of DS legislators against their roll call votes on a motion on Italian military involvement in the US-led “Enduring Freedom” operation in Afghanistan – a motion proposed by a deputy from the PRC, as we have seen a splinter of the former Communist Party located to the left of DS. It is clear that DS deputies were split on this motion, with members of the majority and liberal factions voting “no” and the bulk of the internal left faction voting “yes”. We can use the chi-square statistic for this faction/voting table to measure the depth of this split. When all party factions vote in an identical manner there will be a very low and insignificant chi-square; when factional affiliation predicts voting behavior there will be a much higher and statistically significant chi-square. For the roll

10 We excluded from this table and all subsequent analysis the roll call classification “away on official business”. This applies to only a very few deputies in any single roll call and has no strategic significance, unlike the distinct classifications “abstain” and “present but did not vote”. There were 135 DS deputies during this period, and the number “away on official business” is thus 135 minus the valid N for any given voting table.
call reported in Table 2 we find, as we would expect, a high chi-square and a very significant statistical relationship between factional affiliation and roll call voting. Compare the pattern in Table 2 with that in Table 3, which shows a unified response by DS legislators to a motion relating to NATO proposed by a member of the *Margherita* – a parliamentary grouping to the right of DS. All DS factions voted in the same way, with just the odd exception. The faction/voting table has a much lower, and insignificant, chi-square statistic; there is no statistical association in this roll call between factional affiliation and legislator behavior.

<<Tables 2 and 3 here>>

Table 4 summarizes the level of faction-based party splitting in each of the set of foreign policy roll calls analyzed. The first column identifies the roll call – all votes held on the same day were taken in the course of a debate on the same issue. The remaining two columns show the extent to which the DS vote was split, summarized by the chi-squared statistic for the faction-voting tables analogous to those shown in Tables 2 and 3. Table 4 thus shows a significant number of foreign policy roll-calls in which the split in the DS vote was statistically significant – in the sense that faction membership predicts roll-call voting behavior.

<<Table 4 here>>

There can be high levels of faction-structured vote splitting in DS roll calls, even when the majority of deputies from each faction voted in the same way. Table 5 illustrates this with a DS roll call for another motion on NATO, proposed (this time by a member of *Forza Italia*) during the same debate as the motion reported in Table 3. The majority of deputies in each DS faction voted in the same way, abstaining. However a very significant minority of deputies from the internal left voted “no”, while no member of the leadership or liberal factions did this. This is the second roll call listed in Table 4, from which we can see that this faction/voting table has a highly significant chi-square statistic.
Overall Table 4 shows us that, for each foreign policy debate except the June 2003 debate on European defense policy, there was at least one legislative roll call that significantly split the DS on factional lines. Factional affiliation, indicated by signatures attached to motions at the party congresses, is clearly structuring the legislative voting behavior of DS deputies.

**Faction membership and the aggregate foreign policy voting profile of DS deputies**

We now move from the behavior of DS legislators on individual roll calls, to their aggregate voting behavior across the set of foreign policy debates investigated. An index of roll call loyalty was calculated for each deputy. This aggregates his or her behavior across all of the “deeply divided” roll calls reported in Table 4. A deeply divided roll call was taken as one with a very highly significant (<0.001) chi-square statistic for the relevant faction-voting table – these roll calls can thus be identified from Table 4. The “roll-call loyalty” score for a given deputy is the number of times s/he voted in the same way as the majority of leadership faction in such roll calls, as a proportion of all opportunities to do so. Thus a deputy who always voted with the leadership faction would score 1, while a deputy who never did would score zero.

The top panel of Figure 1 shows the distribution of DS deputies’ roll call loyalty scores, broken down by factional affiliation. This sums up in a very graphic way the deep divisions between DS factions over foreign policy – with the internal left showing very much lower levels of roll-call loyalty to the party line on foreign policy motions than members of the leadership or liberal factions. The lower panel of Figure 1 shows that the loyalty scores of internal left members were on average half of those of members of the leadership factions. The average member of the internal left faction in the DS voted the party line in only 43 percent of these divisive foreign policy roll calls, compared to an 89
percent score for the average member of the leadership faction, a difference of means that is highly significant statistically.

<<<Figure 1 here>>>

**Congress speech content and the factional affiliation of DS delegates**

As noted above, the DS party congresses at Torino and Pesaro debated “rival” motions about the ideological orientation of the party, each motion proposed by one of the party factions and summarizing its overall position. We have already used the signatures attached to these motions to identify the factional affiliation of individual DS legislators. We now use the words spoken during the debates on these motions to develop a more refined estimate of the ideological orientation of individual delegates. Taking the substantial content of these motions – which range in length from 7,000 to 17,000 words – as reference texts, we used the Laver, Benoit and Garry (2003) word scoring technique to score as virgin texts the congress speeches of each DS delegate.

The two party congresses under investigation took place within 22 months of each other and the motions debated at them dealt with each faction’s view of overall party policy. In order to generate reference texts with as many words as possible, and also to be able to score speeches made at both conferences on the same underlying policy dimension, we generated a reference text for the leadership faction by concatenating the texts of the motions proposed at the Torino and Pesaro congresses by that faction; the resulting reference text had 27,934 words. This reference text was given an assumed policy score of zero, thereby locating the leadership faction at the origin of an *a priori* policy dimension distinguishing the leadership from the internal left. We generated the reference text for the internal left faction by concatenating the texts of the internal left motions at both Torino and Pesaro; the resulting reference text had 15,932 words.\(^{11}\) This text was given an assumed policy score of −1. The two reference texts thus generate a

\(^{11}\) The liberal faction also proposed a motion at Pesaro, but we did not use this since only four members of this faction spoke at the Pesaro congress. These speeches were scored, as were all others, on the internal party policy dimension generated by the internal left and leadership faction reference texts.
latent policy dimension on which leadership faction congress motions are located at the origin and internal left congress motions are located on the left at an arbitrary position of \(-1\). Word scores were generated for this \textit{a priori} dimension using the Laver, Benoit and Garry (2003) technique.

The texts of all delegate speeches at the Torino and Pesaro congresses were then treated as virgin texts and scored on this policy dimension in terms of their relative similarity with the content of the internal left and majority faction motions, allowing us to identify the position of each speaker relative to these two factions. Figure 2 describes the set of 119 congress speeches that were scored as virgin texts. From the top panel we see that a typical speech contained about 1000 – 1500 scored words \(^{12}\), although a few speeches were much longer and some were quite a bit shorter. From the bottom panel of Figure 2 we see that, given the substantial size and hence large word universe of the reference texts, the word-scoring rate for the virgin congress speeches was high, averaging about 86 percent of the words in each speech and almost never dipping below 80 percent. Despite the relatively (for many congress participants no doubt mercifully) short length of the congress speeches – and short text length is a feature of analyzing speeches in almost any context – their high proportions of scored words augur well for locating these speeches in relation to the congress motions that were used as reference texts.

<<Figure 2 here>>

The substantive results of the word scoring of DS congress speeches are summarized in Figures 3-5. The top panel of Figure 3 shows a box plot summarizing the scores of the speeches at the Torino conference, broken down by factional affiliation within the DS for those speakers attaching signatures to congress motions. This shows that computerized word scoring of the congress speeches very clearly distinguishes between speeches given by members of the two party factions. The lower panel of Figure 3 shows the different means of the virgin text scores for the speeches made by members of the two factions. Recalling that the reference score for the leadership motions was zero

\(^{12}\) Scored words are words in a virgin text that could be found in one or other reference text.
and for the internal left motions was –1, the mean score of speeches made by the leadership faction at the Torino congress was –0.15, and that for members of the internal left was –1.08, a difference of means significant statistically at better than the 0.001 level.

<<Figures 3 – 5 here>>

Very similar patterns can be seen in Figure 4 for speeches at the Pesaro congress. The speeches by members of the leadership faction at this congress look somewhat more left wing, but there remains a large and highly significant difference between the text scores of the speeches made by members of the two factions. Figure 5 combines the estimated positions of speeches made at both Torino and Pesaro congresses, broken down by party faction.

Almost uniquely for a technique of content analysis, and arising from its essentially statistical method, computerized word scoring allows the calculation of standard errors for the estimated dimension positions of all virgin texts. (Most other content analysis techniques deliver only point estimates of relevant variables, with no associated standard errors. This gives no sense of the confidence intervals around the variables estimated from texts, in a measurement context where we can be almost certain there is indeed considerable error.) Figure 6 displays the distribution of the standard errors associated with the estimated positions of the 119 speeches analyzed. This shows that a typical standard error was of the order of 0.35, expressed on the metric of the dimension under investigation. Thus the short speech lengths are generating rather high standard errors, as would be expected. However, not only does the word scoring technique at least tell us what these standard errors are, but in this case the order of magnitude of the standard errors does not undermine the very strong patterns shown in Figures 3 – 5, which show that the differences on the same metric between the mean internal left speech and the mean leadership faction speech were 0.93 for the Torino congress and 0.71 for the Pesaro congress.

<<Figure 6 here>>
In short, the text scores of the DS congress speeches very clearly reflect faction membership; the content of most delegates’ speeches was scored as being closer to the motion proposed by their own faction than to that of the rival faction. We can feel confident that computerized word scoring has migrated successfully to the scoring of delegate speeches at this Italian party congress, and that using the written congress motions as reference texts for the spoken conference speeches did not cause serious problems. (It is perhaps worth recalling in this context that the word scoring technique treats words purely as data, uses no knowledge of Italian, and uses no information about faction membership in scoring the positions of each speech.) This gives us some confidence in using the faction loyalty scores of the congress speakers to predict their legislative voting behavior.

Congress speech content and the legislative voting behavior of DS deputies

Although the roll call information we have relates to all 135 DS deputies, only a small proportion of these deputies made speeches at the party congresses. Thus only 21 DS deputies made speeches at the Torino congress, 19 at the Pesaro congress, and only 12 deputies made speeches at both. For this small subset of 28 DS deputies, however, we can investigate the extent to which their legislative voting behavior on divisive foreign policy issues is explained by their policy position within the party, estimated by scoring their congress speeches. The top panel of Figure 7 shows a scatterplot with the policy score of the congress speeches of DS deputies on the horizontal axis and their roll-call loyalty scores on the vertical axis, with deputies categorized by party faction. Once more, the patterns are quite striking. DS deputies associated with the internal left faction have both highly negative policy scores for their congress speeches and low roll-call loyalty scores.

Roll call voting would be a more reliable way to identify faction members than congress speeches, however, because it turns out that DS congress speakers from the leadership faction who were also deputies tended to make more left-wing congress

---

13 When a deputy spoke at both congresses, the score for his/her Pesaro speech was used since the Pesaro congress more immediately preceded the roll calls under analysis. When a deputy spoke at only one congress, the score of this speech was used.
speeches than non-deputy members of the same faction. This can be seen by comparing the mean speech scores, by faction, in the lower panel of Figure 7 with the equivalent panels of Figures 3-5. The overall pattern shown in Figure 7 is that, while the congress speeches of the internal left deputies are distinctively left-wing – and are associated with distinctively low levels of roll-call voting loyalty – the congress speeches of deputies from the leadership faction tend to range more widely from right to left.\textsuperscript{14} In other words, deputies in the DS leadership faction are inclined to sign motions associated with the leadership faction and to vote loyally on foreign policy, but they may well give relatively left-wing congress speeches. In contrast, deputies from internal left are easy to identify, giving left-wing congress speeches and often not voting the party line on key foreign policy roll calls.

\textit{<<Figure 7 here>>}

6. CONCLUSIONS

This paper has achieved a number of things, which combine to show that an analysis of the internal politics of the Italian DS, manifested in debates held during its party congresses, can be used systematically both to map the factional structure of the party and to characterize the legislative behavior of its deputies. First, it has shown that signatures attached to DS congress motions can be used to identify delegates’ affiliations with party factions, relating this directly to the behavior of DS deputies in individual roll calls on divisive legislative motions on foreign policy (Tables 2, 3 and 5). Second, it has characterized split roll calls in a systematic way, using the chi-square statistic for faction/voting tables relating to particular roll calls to describe the depth of the party split (Table 4). Third, it has aggregated legislator behavior across a range of deeply split roll calls on foreign policy, and has related this characterization strongly to faction membership (Figure 1). Fourth, it has used the computerized word scoring of DS congress speeches (Figures 2 and 6) systematically to show that the content of congress

\textsuperscript{14} The cluster of four “left-wing” leadership faction deputies in the top left of the scatterplot comprises Bersani, De Luca, Filippeschi and Lucá.
speeches is closely associated with the faction membership of the speakers (Figure 3-5). Finally, it has shown that, particularly for members of the internal left, the content of the congress speeches of DS deputies is closely related to subsequent voting behavior on key foreign policy roll calls (Figure 7).

Substantively, this analysis has systematically documented the divisions within the DS over foreign policy, divisions that have hindered the ability of the party to present itself in the wider Italian political system as a party of government. It has also systematically related these divisions to the very explicit factional structure within the party. Members of the different DS factions not only sign different congress motions and make congress speeches that look different when analyzed using computer word scoring, but they vote differently in key foreign policy roll calls. Table 4 shows that the tendency for DS split roll calls on foreign policy may be declining over recent years, but that the DS nonetheless still does not behave as a unitary actor in the legislative arena and that this may be attributed to the party’s ongoing factional structure.

Methodologically, the main contribution of this paper has been to extend the use of computer word scoring to the analysis of speeches at party congresses. This has confirmed the conclusion (Giannetti and Laver, 2005) that the word scoring technique can be applied successfully to speeches in Italian, and has extended this by locating speeches on motions at a party congress relative to the substantive content of the motions themselves. The word-scored estimates of the positions of the congress speakers were strongly cross validated by quite independent data on the attachment of the signatures of speakers to the motions debated – information not used in any form by computer word scoring. Word scoring of the congress speeches allows a mapping of the internal policy space of the party – albeit on the single policy dimension defined by the congress motions that were used as reference texts. This provides further encouragement that the systematic analysis of texts generated by individual politicians holds considerable promise as a way to map the internal policy space of a political party. And this in turn greatly facilitates the empirical elaboration of theories of party competition that model party decision making based, not on the anthropomorphich assumption that a political party functions as if it had a single brain, but on the assumption that party decisions are the outputs of internal political processes in which each party member is a discrete decision-maker.
REFERENCES


Table 1: Roll call votes on key foreign policy issues in Italy, 2001-2003

<table>
<thead>
<tr>
<th>Date and official number of roll call votes</th>
<th>Issue</th>
<th>Final vote, motions or resolutions</th>
<th>Government party sponsor</th>
<th>Opposition party sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 09 01 v128</td>
<td></td>
<td>Res. Vito n.6-00004 part I</td>
<td>FI</td>
<td></td>
</tr>
<tr>
<td>Oct 09 01 v129</td>
<td></td>
<td>Res. Vito n.6-00004 part II</td>
<td>FI</td>
<td></td>
</tr>
<tr>
<td>Oct 09 01 v130</td>
<td></td>
<td>Res. n.6-00006 (motivation)</td>
<td>Margherita</td>
<td></td>
</tr>
<tr>
<td>Oct 09 01 v131</td>
<td></td>
<td>Res. Rutelli et al n. 6-00006</td>
<td>Margherita</td>
<td></td>
</tr>
<tr>
<td>Oct 09 01 v132</td>
<td></td>
<td>Res. Rutelli et al n. 6-00006 p.9</td>
<td>Margherita</td>
<td></td>
</tr>
<tr>
<td>Oct 09 01 v133</td>
<td></td>
<td>Res. N. 6-00007</td>
<td>Margherita</td>
<td></td>
</tr>
<tr>
<td>Nov 07 01 v1</td>
<td></td>
<td>Res. N.6-9 Vito cap. I, II, III, V, VI</td>
<td>FI</td>
<td></td>
</tr>
<tr>
<td>Nov 07 01 v2</td>
<td></td>
<td>Res. N.6-9 Vito cap. IV</td>
<td>FI</td>
<td></td>
</tr>
<tr>
<td>Nov 07 01 v3</td>
<td></td>
<td>Res. N.6-10 Rutelli (motivation)</td>
<td>Margherita</td>
<td></td>
</tr>
<tr>
<td>Nov 07 01 v4</td>
<td></td>
<td>Res. N.6-10 Rutelli cap. I, II, III</td>
<td>Margherita</td>
<td></td>
</tr>
<tr>
<td>Nov 07 01 v5</td>
<td></td>
<td>Res. N.6-9 Vito disp and Res.</td>
<td>Gov. and opposition combined</td>
<td></td>
</tr>
<tr>
<td>Nov 07 01 v6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov 07 01 v7</td>
<td></td>
<td>Doc. LVII n.1-bis Res. 6-11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun 04 02 v17</td>
<td></td>
<td>Conversion into law of decree n.64/2002 (AC 2666) (final vote)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct 03 02 v4</td>
<td></td>
<td>Res. Bertinotti et al. n.6-32 part I</td>
<td>PRC</td>
<td></td>
</tr>
<tr>
<td>Oct 03 02 v5</td>
<td></td>
<td>Res. Bertinotti et al. n.6-32 part II</td>
<td>PRC</td>
<td></td>
</tr>
<tr>
<td>Oct 03 02 v6</td>
<td></td>
<td>Res. Ramponi et al n 6-33</td>
<td>AN</td>
<td></td>
</tr>
<tr>
<td>Oct 03 02 v7</td>
<td></td>
<td>Res. Rizzo et al. N.6-34 p. I</td>
<td>PdCI</td>
<td>Misto (Other)</td>
</tr>
<tr>
<td>Oct 03 02 v8</td>
<td></td>
<td>Res. Pisicchio et al. n.6-35 p.I</td>
<td>Misto (Other)</td>
<td></td>
</tr>
<tr>
<td>Oct 03 02 v9</td>
<td></td>
<td>Res. Pisicchio et al. n.6-35 p.II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct 03 02 v10</td>
<td></td>
<td>Res. Fassino et al. n. 6-36</td>
<td>DS</td>
<td></td>
</tr>
<tr>
<td>Oct 03 02 v11</td>
<td></td>
<td>Res. Castagnetti n.6-37 p. I</td>
<td>Margherita</td>
<td></td>
</tr>
<tr>
<td>Oct 03 02 v12</td>
<td></td>
<td>Res. Castagnetti n.6-37 p. II</td>
<td>Margherita</td>
<td></td>
</tr>
<tr>
<td>Oct 03 02 v13</td>
<td></td>
<td>Res. Castagnetti n.6-37 p. III</td>
<td>Margherita</td>
<td></td>
</tr>
<tr>
<td>Apr 03 03 v10</td>
<td></td>
<td>Motion M.Cossutta et al 1-00175</td>
<td>PdCI</td>
<td></td>
</tr>
<tr>
<td>Apr 03 03 v11</td>
<td></td>
<td>Motion Violante et al 1-00177</td>
<td>DS</td>
<td></td>
</tr>
<tr>
<td>Apr 03 03 v12</td>
<td></td>
<td>Motion Burani Procaccini et al 1-00182</td>
<td>FI</td>
<td></td>
</tr>
<tr>
<td>Apr 03 03 v13</td>
<td></td>
<td>Motion Intini et al. n. 1-00186</td>
<td>Misto (Other)</td>
<td></td>
</tr>
<tr>
<td>Apr 03 03 v14</td>
<td></td>
<td>Res. Craxi 6-58</td>
<td>Misto (Other)</td>
<td></td>
</tr>
<tr>
<td>Apr 03 03 v15</td>
<td></td>
<td>Res. Vito 6-59</td>
<td>FI</td>
<td></td>
</tr>
<tr>
<td>Apr 15 03 v1</td>
<td></td>
<td>Res. 6-60 Arrighi et al</td>
<td>AN</td>
<td></td>
</tr>
<tr>
<td>Apr 15 03 v2</td>
<td></td>
<td>Res. 6-61 Grignaffini et al</td>
<td>DS</td>
<td></td>
</tr>
<tr>
<td>Apr 15 03 v3</td>
<td></td>
<td>Res. 6-62 Belillo et al</td>
<td>PRC</td>
<td></td>
</tr>
<tr>
<td>Apr 15 03 v4</td>
<td></td>
<td>Res. 6-63 Violante et al Part I</td>
<td>DS</td>
<td></td>
</tr>
<tr>
<td>Apr 15 03 v5</td>
<td></td>
<td>Res. 6-63 Violante et al Part I</td>
<td>DS</td>
<td></td>
</tr>
<tr>
<td>Apr 15 03 v6</td>
<td></td>
<td>Res. 6-64 Colasio et al</td>
<td>Margherita</td>
<td></td>
</tr>
<tr>
<td>Apr 15 03 v7</td>
<td></td>
<td>Res. 6-65 Vito et al</td>
<td>FI</td>
<td></td>
</tr>
<tr>
<td>Jun 03 03 v77</td>
<td></td>
<td>DDL 1927 B Agreement on European Defense (final vote)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2: Deeply split DS roll call on Afghanistan

<table>
<thead>
<tr>
<th>Faction</th>
<th>Liberal component</th>
<th>Internal left</th>
<th>Party leader loyal</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vote</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>21</td>
<td></td>
<td>1</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>No</td>
<td>11</td>
<td>6</td>
<td>65</td>
<td>7</td>
<td>89</td>
</tr>
<tr>
<td>Abstain</td>
<td>6</td>
<td>2</td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Present, but did not vote</td>
<td>4</td>
<td>6</td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>37</td>
<td>73</td>
<td>8</td>
<td>129</td>
</tr>
</tbody>
</table>

Chi-Square Tests

- Pearson Chi-Square: 80.3, df = 9, Sig. = .000
- Likelihood Ratio: 88.8, df = 9, Sig. = .000


Table 3: Unified DS roll call on NATO

<table>
<thead>
<tr>
<th>Faction</th>
<th>Liberal component</th>
<th>Internal left</th>
<th>Party leader loyal</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vote</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>11</td>
<td>33</td>
<td>69</td>
<td>8</td>
<td>121</td>
</tr>
<tr>
<td>Abstain</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Present, but did not vote</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>38</td>
<td>73</td>
<td>10</td>
<td>132</td>
</tr>
</tbody>
</table>

Chi-Square Tests

- Pearson Chi-Square: 6.60, df = 6, Sig. = .360
- Likelihood Ratio: 6.81, df = 6, Sig. = .339

Table 4: Summary of factional impact on DS split roll calls

<table>
<thead>
<tr>
<th>Roll call</th>
<th>Chi-square</th>
<th>Sig. chi-square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 09 01 v128</td>
<td>1.8</td>
<td>.621</td>
</tr>
<tr>
<td>Oct 09 01 v129</td>
<td>49.0</td>
<td><strong>.000</strong></td>
</tr>
<tr>
<td>Oct 09 01 v130</td>
<td>5.4</td>
<td>.500</td>
</tr>
<tr>
<td>Oct 09 01 v131</td>
<td>6.5</td>
<td>.367</td>
</tr>
<tr>
<td>Oct 09 01 v132</td>
<td>6.6</td>
<td>.360</td>
</tr>
<tr>
<td>Oct 09 01 v133</td>
<td>24.2</td>
<td>.019</td>
</tr>
<tr>
<td>Nov 07 01 v1</td>
<td>52.0</td>
<td><strong>.000</strong></td>
</tr>
<tr>
<td>Nov 07 01 v2</td>
<td>5.8</td>
<td>.444</td>
</tr>
<tr>
<td>Nov 07 01 v3</td>
<td>23.1</td>
<td><strong>.000</strong></td>
</tr>
<tr>
<td>Nov 07 01 v4</td>
<td>8.3</td>
<td>.041</td>
</tr>
<tr>
<td>Nov 07 01 v5</td>
<td>29.7</td>
<td><strong>.000</strong></td>
</tr>
<tr>
<td>Nov 07 01 v6</td>
<td>48.2</td>
<td><strong>.000</strong></td>
</tr>
<tr>
<td>Nov 07 01 v7</td>
<td>10.6</td>
<td>.101</td>
</tr>
<tr>
<td>Jun 03 02 v17</td>
<td>72.7</td>
<td><strong>.000</strong></td>
</tr>
<tr>
<td>Oct 03 02 v4</td>
<td>33.8</td>
<td><strong>.000</strong></td>
</tr>
<tr>
<td>Oct 03 02 v5</td>
<td>80.3</td>
<td><strong>.000</strong></td>
</tr>
<tr>
<td>Oct 03 02 v6</td>
<td>14.5</td>
<td>.024</td>
</tr>
<tr>
<td>Oct 03 02 v7</td>
<td>18.1</td>
<td>.033</td>
</tr>
<tr>
<td>Oct 03 02 v8</td>
<td>42.8</td>
<td><strong>.000</strong></td>
</tr>
<tr>
<td>Oct 03 02 v9</td>
<td>11.7</td>
<td>.069</td>
</tr>
<tr>
<td>Oct 03 02 v10</td>
<td>8.0</td>
<td>.233</td>
</tr>
<tr>
<td>Oct 03 02 v11</td>
<td>50.6</td>
<td><strong>.000</strong></td>
</tr>
<tr>
<td>Oct 03 02 v12</td>
<td>33.9</td>
<td><strong>.000</strong></td>
</tr>
<tr>
<td>Oct 03 02 v13</td>
<td>26.7</td>
<td>.002</td>
</tr>
<tr>
<td>Apr 03 03 v10</td>
<td>2.5</td>
<td>.481</td>
</tr>
<tr>
<td>Apr 03 03 v11</td>
<td>5.4</td>
<td>.145</td>
</tr>
<tr>
<td>Apr 03 03 v12</td>
<td>22.4</td>
<td>.008</td>
</tr>
<tr>
<td>Apr 03 03 v13</td>
<td>5.0</td>
<td>.174</td>
</tr>
<tr>
<td>Apr 03 03 v14</td>
<td>4.7</td>
<td>.580</td>
</tr>
<tr>
<td>Apr 03 03 v15</td>
<td>15.1</td>
<td>.020</td>
</tr>
<tr>
<td>Apr 15 03 v1</td>
<td>2.2</td>
<td>.530</td>
</tr>
<tr>
<td>Apr 15 03 v2</td>
<td>2.2</td>
<td>.530</td>
</tr>
<tr>
<td>Apr 15 03 v3</td>
<td>3.4</td>
<td>.762</td>
</tr>
<tr>
<td>Apr 15 03 v4</td>
<td>1.3</td>
<td>.734</td>
</tr>
<tr>
<td>Apr 15 03 v5</td>
<td>2.0</td>
<td>.572</td>
</tr>
<tr>
<td>Apr 15 03 v6</td>
<td>3.1</td>
<td>.386</td>
</tr>
<tr>
<td>Apr 15 03 v7</td>
<td>87.2</td>
<td><strong>.000</strong></td>
</tr>
<tr>
<td>Jun 03 03 v77</td>
<td>8.0</td>
<td>.237</td>
</tr>
</tbody>
</table>

PNV = Present, but did not vote
Table 5: Moderately split DS roll call on NATO

<table>
<thead>
<tr>
<th>Faction</th>
<th>Liberal component</th>
<th>Internal left</th>
<th>Party leader, loyal</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vote</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>11</td>
<td>20</td>
<td>67</td>
<td>9</td>
<td>107</td>
</tr>
<tr>
<td>Abstain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present, but did not vote</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>38</td>
<td>71</td>
<td>12</td>
<td>132</td>
</tr>
</tbody>
</table>

**Chi-Square Tests**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>48.99</td>
<td>6</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>48.71</td>
<td>6</td>
<td>.000</td>
</tr>
</tbody>
</table>

Figure 1: DS deputies’ roll call voting loyalty, by faction

<table>
<thead>
<tr>
<th>Faction</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader</td>
<td>75</td>
<td>.886</td>
<td>.138</td>
<td>.016</td>
</tr>
<tr>
<td>Left</td>
<td>38</td>
<td>.430</td>
<td>.292</td>
<td>.047</td>
</tr>
</tbody>
</table>

*Difference of means significant at better than 0.001 level.*
Figure 2: Description of scored speeches at Torino and Pesaro congresses
Figure 3: Policy scores of delegate speeches at DS Torino congress, by faction
Figure 4: Policy scores of delegate speeches at DS Pesaro congress, by faction
### Figure 5: Policy scores of speeches at DS Torino and Pesaro congresses, by faction

<table>
<thead>
<tr>
<th>Faction</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader</td>
<td>59</td>
<td>-0.238</td>
<td>0.722</td>
<td>0.094</td>
</tr>
<tr>
<td>Left</td>
<td>24</td>
<td>-1.070</td>
<td>0.514</td>
<td>0.105</td>
</tr>
</tbody>
</table>

*Difference of means significant at better than 0.001 level.*
Figure 6: Standard errors of the estimated policy scores of DS congress speeches
Policy score of congress speeches

Mean congress speech scores of DS deputies

<table>
<thead>
<tr>
<th>Faction</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader</td>
<td>14</td>
<td>-0.499</td>
<td>.985</td>
<td>.263</td>
</tr>
<tr>
<td>Left</td>
<td>9</td>
<td>-1.420</td>
<td>.430</td>
<td>.144</td>
</tr>
</tbody>
</table>

Difference of means significant at 0.016 level.

Figure 7: Policy scores of speeches at DS congresses, by roll-call voting loyalty on foreign policy, by faction.