VU Research Portal

From text to political positions: The convergence of political, linguistic and discourse analysis

van Elfrinkhof, A.M.E.; Maks, I.; Kaal, A.R.

published in

From Text to Political Positions: Text analysis across disciplines
2014

DOI (link to publisher)

[10.1075/dapsac.55.14elf](https://doi.org/10.1075/dapsac.55.14elf)

[Link to publication in VU Research Portal](#)

citation for published version (APA)

van Elfrinkhof, A. M. E., Maks, I., & Kaal, A. R. (2014). From text to political positions: The convergence of political, linguistic and discourse analysis. In A. R. Kaal, I. Maks, & A. M. E. van Elfrinkhof (Eds.), *From Text to Political Positions: Text analysis across disciplines* (pp. 297-324). (DAPSAC; No. 55). John Benjamins.
<https://doi.org/10.1075/dapsac.55.14elf>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

E-mail address:

vuresearchportal.ub@vu.nl

Chapter 14

From Text to Political Positions:

The Convergence of Political, Linguistic and Discourse Analysis¹

Annemarie van Elfrinkhof, Isa Maks and Bertie Kaal

VU University Amsterdam

Abstract: This chapter explores how three methods of political text analysis can complement each other to differentiate parties in detail. A word-frequency method and corpus linguistic techniques are joined by critical discourse analysis in an attempt to assess the ideological relation between election manifestos and a coalition agreement. How does this agreement relate to the policy positions presented in individual election manifestos and whose issues appear on the governmental agenda? The chapter discusses the design of three levels of text analysis applying text-as-data analysis; words-as-meaningful-data involving lexical-semantic analysis of subjectivity; and words-in-context analysis for variation in constructions of worldviews. We found that better results can be achieved for party positioning in combinations of qualitative and quantitative approaches.

1 Introduction

There is a clear need for reliable estimates of party positions to inform the public and to predict election outcomes. In this chapter we explore how different methods for the analysis of political texts can complement each other to differentiate parties using subtle distinctions. We combine a

---

¹ Pre-final version. Van Elfrinkhof, A., I. Maks and B. Kaal. 2014. From Text to Political Positions: The convergence of political, linguistic and discourse analysis. In B. Kaal, I. Maks and A. van Elfrinkhof (Eds), *From Text to Political Positions: Text analysis across disciplines*. Amsterdam: Benjamins, pp. 297-323.

word frequency method with a lexical-semantic analysis of modal subjectivity and a discourse analysis of worldviews to position Dutch political parties as well as the coalition agreement between the government parties following the 2010 national elections. The aim of the chapter is therefore two-fold. First, in applying both quantitative and qualitative approaches we point out methodological constraints to party positioning and show how a combination of methods could lead to a refinement of the individual methods. Second, we compare results between coalition parties and the Coalition Agreement to gauge the ideological influence of parties on the composition of this agreement as evidence for further political interpretations. The Netherlands is an example of a multi-party system, with over a dozen political parties vying for a position in Parliament. Dutch Governments are traditionally coalition governments that seek common ground after national elections are held. The differences between parties are subtle and strategic: they are competitive and at the same time they keep options open for coalition agreements. In this setting, a fine-grained method is needed to distinguish between parties' positions and possible coalition agreements.

Concepts and words have no explicit stance, but stance is constituted in conceptual and verbal networks that can validate abstract ideas about values, relations and roles in dynamic processes, as Kleinnijenhuis and Van Atteveldt mention (this volume). The challenge is to combine these three levels of communications: what do parties foreground, in which terms and how does content and language use constitute intentions that are packaged in party programmes. Framing seems to be the binding force in the three methods of analysis used in this chapter. The Wordscores analysis results in typical word-frames, whereas the linguistic and discourse analyses identify attitudinal frames of explicit and implicit ideological stance: "Most frames are defined by what they omit as well as include, and the omissions of potential problem definitions,

explanations, evaluations, and recommendations may be as critical as the inclusions in guiding the audience" (Entman 1993: 54).

The idea of word frequency methods is that the relative frequency of words reflects the policy positions of parties. Previous chapters have discussed and shown the abilities of word frequency methods in extracting political positions from texts. In their analysis of parliamentary debates Hirst et al. (this volume) demonstrate that automated quantitative methods can extract competition on the basis of texts. However, they find a government–opposition dichotomy rather than an ideological spectrum and therefore they cannot measure party positions, only the role parties play at a certain moment in time. Collette and Pétry’s analysis (this volume) focuses on the influence of the structure of language on the results of the word frequency methods, Wordscores and Wordfish. They compare the English and French editions of Canadian election manifestos and indicate a number of grammatical differences that might be of influence in the positioning of the parties. Both chapters conclude that word frequency methods are sensitive to language characteristics, but they do not control for these linguistic features in their method. In this chapter we apply the quantitative automated word frequency method Wordscores and add knowledge of linguistic features of stance taking to improve the performance of the method.

We focus on one main similarity across election manifestos which relates to the purpose of the genre, namely, each party outlines their desired world to voters. These worlds are constructed subjectively and support party stances on individual issues. We first extract the subjective, deontic constructions from the texts and then apply Wordscores. We find that this indeed improves the performance of the method when positioning parties on an economic dimension. However, the results do not improve for a progressive/conservative dimension. Relating to the chapters by Montesano Montessori, Eleveld and Filardo Llamas (this volume) we

propose that the discursive construction of ideologically motivated worldviews forms the argumentational backbone rationale of a party programme. It is argued that this rationale needs to be taken into account for a valid positioning of parties on the progressive/conservative dimension. For the critical discourse analysis we have selected particularly meaningful text segments that outline worldviews and set the scene for political action. An adapted version of Chilton's Discourse Space Model (2004, 2007) is applied to find parties' ground perspective to position them. The worldview approach takes into account the importance of contextual knowledge in the positioning of parties and adds an argumentational and conceptual dimension to the word-frequency method.

The Vote Compass (Kieskompas) (see Krouwel and Wall, this volume) serves as the Gold Standard against which we cross validate our results. Like the analyses in this chapter, the Vote Compass uses election manifestos to unearth party positions. However, where the Vote Compass is mainly a qualitative method for party positioning, we explore how the complementarity of quantitative and qualitative methods drawn from different disciplines can improve the estimation process of party positions.

The following section describes the Dutch political landscape to contextualise the study and account for the data selection. The design of each approach is then described in detail, providing results of their applications to the corpus. We first use the quantitative method Wordscores which treats words as data, by using only relative frequencies to position parties and the coalition agreement. In a second analysis we add knowledge of semantic subjectivity markers to the Wordscores analysis. This allows us to treat words as meaningful data. The expectation is that the addition of semantic-categories to data improves the performance of the Wordscores analysis. The third method is a more interpretive discourse based analysis that posits words-in-context to

account for variation in discursive aspects of meaning constructions and stance. After the cross-validation of the three methods, the parties and the coalition agreement are positioned in the Dutch political landscape. The chapter concludes with an evaluation and discussion of the three methods.

1.1 Coalition formation and coalition agreements in The Netherlands

The analyses focus on the Dutch national elections of 2010. With up to twenty parties participating in the national elections, the Netherlands has a typical multi-party system. Parties are often close to each other, both ideologically and in the number of votes they receive, with no single party gaining a majority of the seats. This situation has made coalition governments a necessity. Coalition agreements have become an integral part of the process of coalition formation over the past decades. The 2010 elections resulted in two separate coalition agreements. After five rounds of negotiations with changing negotiation partners, the largest party, the VVD, reached an agreement with the Christian Democrat Party (CDA) to form a minority government with the support of the Party for Freedom (PVV). The VVD and CDA preferred this construction over a ‘normal’ majority government in which the PVV would be a full member, because of irreconcilable ideological differences on the PVV’s main issues: immigration and integration. The three parties reached a tolerance agreement that would secure a Parliamentary majority on a large number of issues, rather than having to find majority support in parliament on a case-by-case basis (Müller and Strøm 2000). Instead of one coalition agreement, the ‘Rutte I Government’ is based on a traditional coalition agreement as well as on a tolerance

agreement. In the analysis we will consider the relation of both documents to the coalition parties' own election manifestos.

In the Netherlands, competition between political parties takes place on two policy dimensions: an economic left-right dimension, ranging from market correcting to market liberating policy preferences, and a progressive–conservative dimension. The latter dimension used to have a religious connotation but has gradually changed its focus to issues of integration and immigration (Aarts and Thomassen 2008; Kriesi et al. 2006, 2008; Marks et al. 2006). The likelihood of parties joining forces in a coalition depends on ideological similarities and the vote share of the parties. If one assumes that political parties are policy-seekers, that they seek agency to implement their policy preferences rather than simply seeking the power of office, it is to be expected that coalition partners will be closely positioned ideologically on at least one of the two dimensions. When parties share policy preferences it is more likely that they will come to an agreement which reflects their shared policy preferences. It is furthermore to be expected that the major coalition partner, the party with most of the votes, will be the dominant partner and be able to determine most of the agreement in its favour (Warwick 1996). Warwick (1996) also points to the special position of the party that, although it has not gained the most seats, has the largest increase in number of seats. They are relative winners, and this gives them more leverage than can be expected based on the number of seats alone, as was the case with the Party for Freedom in the 2010 elections. This context leads to the hypotheses given in Box 1, which will be tested in order to find advantages and constraints in applying the three methods on ten election manifestos and the two agreements.

<i>Box 1: Hypotheses</i>
1. Ideology: The coalition agreement is the ideological mean of the coalition parties.   2. Ideology and Size: The coalition agreement is ideologically closest to the largest coalition party.   3. Change in Size: The party with the largest increase in the number of seats has the most influence on the coalition agreement.

2 Data Description

We used five sets of data to analyse the positions of ten political parties that succeeded in gaining seats in the Dutch Parliament following the 2010 national elections. Each of them is described below.

2.1 Election manifestos

Our main data source consists of election manifestos. The great advantage of using texts for party positioning rather than expert surveys or opinion polls, is that texts are stable. Texts do not change as a result of an inquiry or over time. Election manifestos present the ideas and policies of parties simultaneously, at a particular point in time. Manifestos are produced at regular intervals (Budge 1994) and this makes them an excellent source to study position shifts over time (Laver and Garry 2000). Furthermore, election manifestos are authoritative documents representative of the party community as they are usually amended and approved by a General Assembly. Manifestos are a political-text genre that functions to form shared beliefs, around a political organisation and to create a coherent party identity for an epistemic community (Van Dijk 2004:

9). They are then carefully composed with the intention to communicate the party's official position to a broad audience during an election campaign (Benoit and Laver 2006). Their primary function is to bind the party community as well as to make the positions of the party known in a cohesive and communicatively persuasive message. As such, manifestos are the substantive focal point for political communication during election time (Lamond 2012). The general public might not read them, but learns about them through public appearances of politicians and in reports by the media (Laver 2001). At the same time they serve as a guideline for the party's politicians who can be held accountable if they divert from the party line laid down in the manifesto (Laver 2001). Finally, election manifestos share these characteristics across parties. In other words, election manifestos can generally be regarded as a stable text genre with the goal of presenting parties' policy positions at a specific point in time. This makes them an excellent source to compare party positions across time and with each other. For the application of Wordscores, Laver et al. (2003) stress that it is important to compare 'like with like'. Given the discussion above, the genre-specific characteristics of election manifestos make them 'like' texts for a reliable comparison. For this study we use the Dutch election manifestos of 2006 (EM2006) and 2010 (EM2010), together making up the corpus EM-full.

2.2 Coalition agreement and tolerance agreement

The 2010 coalition agreement between the VVD and the CDA is comparable to an election manifesto in both format and content. It discusses policies elaborately by presenting a view on the present, ideas about the future and policies to realize them. Therefore, the coalition agreement resulting from the Dutch 2010 elections can be viewed as the manifesto of the coalition and hence as a 'like' document (Laver et al. 2003).

The tolerance agreement is a list of agreements, and agreements to disagree, between the two coalition parties and the tolerating party (PVV). Therefore, it has a slightly different format. We do not expect this to be a problem for the quantitative analyses. From a discourse perspective, however, the lack of argument structure is problematic. The discourse analysis focuses on text segments that explicitly express party-specific perspectives on the state of affairs (worldviews) as their motivation for policies and goals. Since the tolerance agreement does not contain a comparable text segment, it is exempted from the discourse analysis.

2.3 Chapel Hill Expert Survey

In order to position parties on political dimensions with Wordscores, we use the Chapel Hill Expert Survey (Hooghe et al. 2010) as reference scores. The 2006 Chapel Hill Expert Survey provides positions for eight Dutch political parties on two relevant dimensions. For the election year 2010 we are interested in the positioning of ten political parties. The parties that were not included in the 2006 Chapel Hill Expert Survey are the Animal Rights Party (PvdD) and the Christian Orthodox Party (SGP). Since we have enough variation with eight parties, we feel confident positioning these parties on the basis of the positions of the eight parties in 2006. The Chapel Hill Expert Survey operationalises the progressive/conservative dimension as GAL/TAN, a scale ranging from Green, Alternative and Libertarian (GAL) to Traditional, Authoritarian and Nationalistic (TAN) (Marks et al. 2006). This operationalisation is used throughout this chapter. Table 1 presents the scores of the 2006 Chapel Hill Expert Survey. The parties are positioned on a scale from 0 to 10. On the Left/ Right dimension 0 is the most left position and 10 is the most right position. On the GAL/ TAN dimension 0 is the most GAL position and 10 is the most TAN position.

Table 1. *Chapel Hill Expert Survey positioning of political parties 2006.*

Left/Right	SP	GL	PvdA	CU	D66	CDA	VVD	PVV
	1.11	2	3.56	4.13	5.22	5.56	7.89	8.29

GAL/TAN	GL	D66	PvdA	VVD	SP	PVV	CDA	CU
	2.4	2.5	3.7	5.1	5.22	6.57	6.7	8.4

2.4 *A Dutch news and opinion corpus*

A reference corpus (NO) consisting of selected news and opinion articles of 2006 was used in the words-as-meaningful-data analysis. The news and opinion texts were randomly selected from a large database of Dutch newspapers. This ensures the focus on national political news. Further information on this corpus follows in section 3.2.

2.5 *Vote Compass*

As we see in this volume, quite a variety of methods can be used to position political parties: expert surveys, voter surveys, and party surveys are used as well as a range of content analytic methods. Wordscores belongs to the relatively new quantitative content analysis methods and, as such, it is not fully developed yet. Hence, to assess the validity of the method we compare the results to a manual content analysis method, that of the Vote Compass. The Vote Compass method is fully explained and discussed in Chapter 13 (Krouwel and Wall, this volume). It is a qualitative method that uses expert coders to position parties within a political space based on election manifestos and other relevant textual sources. The positions are numerical scores on an economic left/right dimension and a progressive/conservative dimension. The checks and

balances applied by Vote Compass secure the validity of the party positions and we have therefore chosen to use the Vote Compass data (Figure 1 and Table 2) as a gold standard against which we can cross-validate Wordscores and worldview results.

Table 2. *Vote Compass positioning for Dutch national elections 2010.*

Left/Right	SP	PvdA	GL	PvdD	CU	PVV	D66	SGP	CDA	VVD
	-1.76	-0.88	-0.82	-0.82	-0.58	0	0.23	0.35	0.76	1.29

GAL/TAN	D66	GL	SP	PvdD	PvdA	VVD	CU	PVV	CDA	SGP
	1.07	1.07	0.76	0.69	0.61	-0.46	-0.53	-0.92	-1	-1.53

Figure 1. *Visual Vote Compass positioning for the Dutch national elections of 2010.*

3 From Text to Political Positions: Three methods for detailed manifesto analysis

3.1 Words as data

Wordscores is a quantitative text-analysis method developed by Laver et al. (2003). Rather than coding the text on the basis of a coding schema, Wordscores treats words purely as data to determine the position of a text on a dimension on the basis of relative word frequency. With regard to election manifestos, the underlying logic is that political parties do not use the same words with the same frequency. Political parties on the right propose “to cut taxes” in their election manifesto. Political parties on the left do not use the words “to raise taxes”, although their plans might imply it. The word “tax” is considered indicative of right-wing parties. Left-wing parties occasionally use the word “tax”, but this is a fraction of the times right-wing parties use the word (Laver and Garry 2000: 625). The relative frequency of words can therefore be used to differentiate between parties’ stances. That is: each political party frames issues by selecting relevant words from a particular semantic field (Beigman Klebanov et al. 2008: 96) that can be indicative of party positions. Wordscores uses this formalised concept of frames to distinguish between documents.

Wordscores uses two sets of texts: reference texts and virgin texts. From the reference texts we know two things: (1) the words used in these texts; and (2) the position of this text on the dimension we want to investigate. The latter knowledge is derived from external sources such as expert surveys. From the virgin texts we know only which words it contains; we do not know their positions. By comparing relative frequencies of words, Wordscores is able to scale the virgin texts on the same dimension as the reference texts. This can involve any dimension a

researcher is interested in: an economic left/right dimension, a pro- or contra-dimension, or any other dimension, as long as the dimension is relevant to both the reference texts and the virgin texts and the source of the positions of the reference texts is reliable.

Whereas Collette and Pétry (this volume) use Wordscores to examine the ability of Wordscores to position political parties by comparing the same manifestos produced in two languages, we aim to position agreements between parties in the same political space as the election manifestos.

3.2 Words as meaningful data

Wordscores functions on the full text level, but texts construct subjective meaning more explicitly in some parts than in others. The main assumption is that some parts are more crucial to constructing its message than others and that a selection of such meaningful text segments should yield better results on stance than the analysis of the entire text. For the analysis of words as meaningful data, Wordscores is used again, but only on those parts of the manifestos that are more relevant and meaningful than others.

In this study we have chosen for a lexical-semantic approach to extracting words that indicate attitude, or deontic modality. It appears that deontic expressions (words and phrases expressing attitude) are more frequent in election manifestos compared to other text genres and are therefore considered a typical text marker of the manifesto corpus (Table 3).

Election manifestos express parties' worldviews and their 'desired world' on moral and ethical grounds. They propose policy measures that are deemed necessary to realise this desired world through linguistic expressions of deontic modality indicating degrees of necessity, desirability, and urgency of proposed policies and change. Deontic language is a semantic

category that indicates “the degree to which an assessor [...] can commit him- or herself to the state of affairs in terms of certain principles” (Nuyts et al. 2010: 17). These principles refer to moral, ethical and socio-cultural norms, values and ideals as well as to more personal ethical norms. However, moral obligation is not the only drive for political action and therefore we follow Palmer’s (1986) approach to deontic modality that also accounts for notions of volition and intention that express degrees of desirability. Deontic expressions are particularly relevant to political stance in that they often refer to a future state of affairs in a positive way, indicating what the world *should* be like. Moreover, deontic expressions often refer to some kind of action towards that ideal. In Palmer’s approach, deontic modality is concerned “with the expression by the speaker of his attitude towards possible actions by himself and others” (Palmer 1986:121). For these reasons, we regard deontic expressions in political text analysis as cues for moral attitude and desirability of policy measures.

This assumption is confirmed by a comparison of the election manifestos with texts from other genres. We compare the word frequencies of EM2006 and EM2010 (EM-full) with the word frequencies of a corpus of news and opinion texts (NO). The texts included in the NO corpus are randomly collected from a large database of Dutch newspapers in the year 2006 with a focus on national political news. We use the corpus-based frequency profiling method developed by Rayson and Garside that “aims to discover features in the corpora that distinguish one corpus from the other” (2000: 2): in this case, election manifestos from the news and opinion corpus. Since the news and opinion corpus roughly covers the same time period and the same themes as the manifesto corpus, the two corpora have a maximal overlap of thematic words and a minimal overlap with regard to stylistic, functional and other genre-specific words. Therefore, we expect the comparison to highlight the words that are specific to the genre (as opposed to the content) of

election manifestos.

First, for all words in the text the part-of-speech tag and the lemma (i.e., the canonical form) were automatically determined using the Alpino parser. Then, lemma frequencies were measured for each lemma in the two corpora and log-likelihood statistic (LL) was calculated for those lemmata relatively more frequent in EM-full than in NO (cf. table 3: over-represented in EM-full = +). The higher the log-likelihood, the more significant the difference between the two frequency scores and the more we expect the difference between the two corpora to be meaningful. If the LL of the result is greater than 10.83, the probability of the result happening by chance is less than 0.1% ($p < 0,001$). The list was then sorted by the LL values and results in a ranking of LL values of which the top is presented in Table 3.

Table 3. *Top-8 ranking of saliency of words in EM-full.*

Lemma	Pos	EM-full-freq	NO-freq	log-likelihood	Over-represented in EM-full
<i>worden</i> (be, become)	verb	8889	2303	2864.08	+
<i>moeten</i> (must)	verb	5157	1551	1353.92	+
<i>overheid</i> (government)	noun	1444	149	961.41	+
<i>dier</i> (animal)	noun	730	10	775.23	+
<i>zorg</i> (health care)	noun	1002	98	684.25	+
<i>dienen</i> (must)	verb	784	50	631.21	+
<i>onderwijs</i> (education)	noun	918	100	594.95	+
<i>duurzaam</i> (sustainable)	adj	559	8	591.25	+

NB: Pos = part of speech; EM-full-freq = frequency in election manifesto (EM-full); NO- freq = frequency in news and opinion texts.

The top of the list shows not only genre-specific words but some traces are left of thematic salience related to animals, (health) care, education, and sustainability. However, there is also salience of functional words: *worden* (be), *moeten* (must), and *dienen* (ought to). The over-representation of the highly deontic auxiliary verbs *dienen* (ought to) and *moeten* (must) is

particularly interesting for the purpose of party positioning as they indicate degrees of desirability/necessity.

Second, we compiled a list of conventional expressions of deontic modality (Haeseryn et al. 1997; Palmer 2000) and used it as a set of lexical indicators to extract sentences expressing deontic modality. Examples (1) and (2) are examples of such sentences, extracted from the manifestos:

(1) [Deontic-*moeten*] *Nederland moet bereid zijn humanitaire hulp te geven.*

(The Netherlands must be prepared to give humanitarian aid)

(2) [Deontic/volitional-*willen*] *We willen een open en dynamische samenleving waarin iedereen kan ...*

(We want an open and dynamic society in which everyone can ...)

We compiled a sub-corpus of these deontic sentences from each election manifesto and from the coalition agreement and the tolerance agreement. This sub-corpus (EM-deon), which covers approximately 66% of the full manifesto corpus, was analysed with Wordscores using EM-deon-2006 as reference corpus and EM-deon-2010 as virgin corpus. The results are presented in the following sections.

3.3 *Comparing Wordscores results of words-as-data to words-as-meaningful data*

Before we turn to the hypotheses with regard to the position of the coalition and tolerance agreements, we will evaluate the results of the two Wordscores approaches and hold them against our gold standard, Vote Compass, in a quantitative as well as a qualitative way to assess their ability to position texts. Both words-as-data and words-as-meaningful-data approaches give numeric results which represent the position of the parties on the Left/Right and GAL/TAN

dimensions. In order to compare the positioning we have normalized the positions of all three methods on a scale from 0 to 1. Figures 2 and 3 show the scores for Vote Compass and present the results of the words-as-data method and the words-as-meaningful-data method. Figure 2 gives the results with regard to the Left/Right dimension where each series of scores starts with the most left position at 0 and the most right position is 0.9. Figure 3 shows each series of scores with positions between 0 (most TAN position) and 1.0 (most GAL position). The best outcome is achieved by the method whose results are closest to the gold standard scores, both with respect to ranking the parties and the distances between the parties. In order to determine the best outcome, we calculate the correlation between the scores of each method and the gold standard. We use Pearson's correlation coefficient (r), which is used as a measure of strength of linear dependence between two variables. The higher the correlation coefficient, the better the party positions predicted by the methods fit the actual party positions indicated by our gold standard.

Figure 2. A comparison of Vote Compass with words-as-data and words-as-meaningful-data on Left/Right (2010).

Figure 3. A comparison of Vote Compass with words-as-data and words-as-meaningful-data on GAL/TAN (2010).

The results show that both words-as-data and words-as-meaningful-data have good scores with respect to the Left/Right dimension, but the correlation coefficients (r) express that words-as-meaningful-data scores significantly better than words-as-data with $r=0.90$ and $r=0.75$, respectively. With respect to the GAL/TAN dimension both words-as-data and words-as-meaningful-data methods have lower performance which is expressed by relatively low correlation coefficients, 0.66 and 0.72. Especially for words-as-meaningful-data the difference with the performance, which is $r=0.90$ vs. $r=0.66$, on Left/Right is compelling, and suggests that the extraction of deontic modalities works better for the economic Left/Right dimension than for GAL/TAN. Deontic modalities which are — linguistically speaking — attitudinal expressions of actions, correspond to the policy measures proposed by a party. A tentative conclusion is that the divergent performance is a result of the prominence of policy measures for the dimensions, where the Left/Right dimension is more starkly expressed in policy measures than GAL/TAN.

The spikes in Figures 2 and 3 indicate a different rank-order of parties on the words-as-data and words-as-meaningful data scales compared to Vote Compass. In Figure 2 the Social Democratic party PvdA has a more centre position on the Left/Right dimension in the Wordscores results than Vote Compass. Furthermore, the words-as-data analysis puts the PVV on a more extreme position than words-as-meaningful-data and Vote Compass. Figure 3 displays a number of peaks on the GAL/TAN dimension. Both Wordscores analyses position Green Left (GL), Christian Union (CU) and the Party for Freedom (PVV) in a different order than Vote Compass. The words-as-data analysis also positions the Animal Rights Party (PvdD) differently, that is, much more TAN than Vote Compass.

The improved performance of Wordscores on the Left/Right dimension, when applied to the meaningful parts of the election manifestos, also becomes visible when we look at the rank order of the parties. The difference between the two Wordscores analyses is in the position of the PVV. Whereas words-as-meaningful-data analysis positions the PVV in the centre on the Left/Right dimension, as Vote Compass does, the words-as-data analysis positions the PVV closer to its position in 2006 as indicated by the Chapel Hill Expert Survey (Table 1). It also shows that the poor performance of the words-as-meaningful-data corpus on the GAL/TAN dimension is mainly due to the position of the PVV. It is positioned as the second-most progressive party in the party system, whereas Vote Compass positions it as a conservative party. We conclude that both Wordscores methods give better results on Left/Right than they do on GAL/TAN.

3.4 *Words in context*

To overcome the unresolved positioning deviations for the PVV and the GAL/TAN dimension we propose a more qualitative approach to analyse constructions of meaning particular to a party's discourse. This meaning-based approach to text analysis assumes that party ideologies are constructed in worldviews that cannot be found in single words or deontic constructions, but they occur explicitly and implicitly throughout a discourse. Although worldviews are explicit only in some parts of a text, they function as anchors for an ideologically motivated rationale throughout a manifesto (Kaal 2012). We therefore looked for expressions in the data that seem to prompt assumptions about the current state-of-affairs and that sustain a cohesive worldview from which goals and policies unfold.

The selection of text segments containing worldview frames is motivated by the narrative structure of election manifestos and cognitive affordances of spatial representations. The theory of spatial cognition drawn upon here holds that thought patterns for making sense of the complex world we experience have a parallel in the organization of our spatial orientation (Levinson 2003). Spatial and temporal location is regarded as the basic ground for evaluative thought where, metaphorically, normative thought is mapped onto a spatial landscape. In this way, worldview provides a reference frame with boundaries and structure for abstract thought patterns that are anchored in real time and space. The particular affordance of such reference frames is that they can sustain a dual rationale by mapping normative attitude (e.g., what is presumed to be good) onto empirical evidence (a space-time reference) (Entman 1993: 55–56). In this way, time and space references make it possible to express normative worldviews by bringing them affectively closer to or more distant from the deictic centre. An example of the use of an affective

metaphor category in manifestos is COMFORT IS CLOSENESS. This schematic metaphor type suggests a rational structure that aligns affect with the logic of spatial orientation. The similarity in the thought pattern connects policy measures (to bring comfort closer) with goals (comfort is desirable) in a balanced relationship of ‘world-to-word-to-world direction of fit’ (Searle and Vanderveken 1985) that sustains the given worldview. Such schematic metaphors may not be expressed directly (Cienki 2008); for example, in this case, they concern a way of thinking that prompts entailments of a spatial source onto an implicit normative target domain. The structure provided by this schematic metaphor helps to make sense and thus provides rhetorical affordances by its appeal to shared knowledge and experience about a shared space. In election manifestos this is the space in which a party’s programme sounds (and feels) ‘right’. We assume that ideological party positions are expressed through these metaphorical spatial and temporal expressions and that they are fundamental to the construction of ideologically motivated worldviews.

The mapping of normative spatial orientation onto real space and time provides for a narrative textual structure by suggesting a measure and a coordinate centre for direction. Time and space therefore do not only function to represent abstract notions, but are directive, starting out from a subjective point of view (see Herman 2003: 10, 165–166). In this way, the spatial ground we find in manifestos functions as a coordinate system that constitutes ideological stance and directs political action, considering that:

An ideology is a more or less coherent set of ideas that provides the basis for organized political action, whether this is intended to preserve, modify or overthrow the existing system of power. All ideologies therefore have the following features:

(a) They offer an account of the existing order, usually in the form of a ‘world view’.

- (b) They advance a model of a desired future, a vision of the ‘good society’.
- (c) They explain how political change can and should be brought about — how to get from (a) to (b).

(Heywood 2007: 11–12)

We consider Heywood’s worldview (a) as the source from which predictions for future developments unfold and thus warrant political action (c) towards a desired future (b). Metaphorically, the source is situated in a time and space frame.

The aim of our discourse analysis is therefore to ‘locate’ the source and the scope of worldviews to be able to differentiate party-specific ideological grounds in which policies and goals ‘fit’. Where spatial frames set geographic boundaries to a party’s worldview, Time adds a dynamic dimension of duration and direction in a primary metaphorical relation of TIME IS MOTION ALONG A PATH (Grady 1997). Time and space are therefore regarded as anchors of ideologically motivated reference frames, or worldviews, that relate to GAL/TAN positions.

Contrary to Wordscores, the discourse analytic method did not involve reference texts but focused on discursive phenomena in the virgin texts to find subjectivity markers by abduction. The first step in this analysis was a close reading of the 2010 manifestos. This revealed that, typically, introductory paragraphs are characterised by propositions concerning ‘us’ in the ‘here and now’. These propositions delineate quite explicitly a static space with an ‘existing order’ that is evaluated from the party’s point of view. In that sense, they are ‘like’ text segments that can be analysed and compared for time and space localisation. The following section describes the specific model used for this purpose.

3.4.1 *A discourse space model for worldview analysis*

Chilton's Discourse Space Model inspired our schematic Time and Space method of discourse analysis. The original DSM (Chilton 2004), designed for a syntactic analysis of point-of-view, shows three relative vectors for Time, Space and Modality that emerge from a deictic centre. In our adapted model, conceptual expressions of time and space were mapped on the Time (T) and Space (S) axes (Figure 4). The relative distance of time and space to the deictic centre is marked by modifiers which were projected on a Modality scale (M). For example, what we believe to be true, right or desirable should be 'close' and what we believe to be false, wrong, or undesirable is distant from the ideal deictic centre. In this way, T, S and M axes construct a relative space that foregrounds political interests, priorities and actions.

A TSM codebook was developed around the sub-corpus of introductory paragraphs from the election manifestos of the coalition parties and the coalition agreement. The tolerance agreement was found to be lacking explicit references to time and space and was therefore not included. Temporal, spatial and modal expressions in the selected texts (EM2010-Intros) were annotated manually following the codebook (Cienki et al. 2010):

1. *Time* was annotated for historic events, to recent developments, to the present time, and into the future (*the next government period, future generations, always*, etc.). We also included events that refer to a time-space, such as the Spanish invasion of the Netherlands in the 16th century. Where time is expressed in spatial terms it was coded as time. The dominant deictic centre of Time was found in the clusters Present and Future<10 (Figure 5), the time-span in which government has agency.

2. *Space* was annotated for geographic references and its relative distance to ‘here’, providing the scope of worldview. The dominant spatial deictic centre was found in the clusters Local and National (Figure 6), the space in which Government has authorised agency.

3. *Modality* is a linguistic modifier of the relative ‘distance’ between the deictic here/now and Time and Space references that is indicative of attitude. Modality annotation was based on a Dutch translation of Chilton’s English modality scale for deontic and epistemic expressions (Chilton 2005; Werth 1999), and complemented with expressions of desirability because they were found in the sub-corpus. The list was then applied in a corpus-linguistic frequency analysis. The dominant Modality clusters are found in the empirical certitude and normative belief (*to be*, *to be necessary*) and normative acceptability (*could/might be*) (Figure 7).

Time and Space references were clustered in nodes that emerged as salient from the analysis (Figure 4). The resulting clusters were then ranked on the axes relative to the deictic centre. The T and S clusters are relevant for EM2010 and the coalition agreement’s introductory paragraphs but this may be different in other election years.

Figure 4. Adapted Discourse Space Model for EM2010 analysis, based on Chilton (2004, 2005).

3.4.2 Evaluation of TSM coding

The results presented here (Figures 5-7) concern the manifestos of the two coalition parties, the tolerating PVV, and the coalition agreement between CDA and VVD. The purpose is to find evidence as to which of the coalition parties' worldviews dominate the coalition agreement. The figures show normalised raw counts, rather than percentages, in order to have transparency about the actual number of occurrences in this small sub-corpus (N=8890 for the four documents). In this study we are concerned with differences in actual usage, however, percentages would give the same differentiation. Each figure shows one of the Time, Space and Modality axes individually.

Figure 5. Relative number of Time expressions (EM2010-Intro).

Figure 6. Relative number of Space expressions (EM2010-Intro).

Figure 7. Relative number of Modal words (EM2010-Intro) (Kaal and Maks 2011).

Results show that space is the most frequent marker of worldview: where space has a maximum score of 72.4, Time only scores 14. All parties score higher on the deictic centre of Government agency for all three categories: Here (NL), Now (Present, Future <10) and Modal (certain/possible/acceptable). This confirms their focus on the current state of affairs. According to Levinson's findings, this type of taking perspective applies a dominant relative frame of

reference with an egocentric centre (as opposed to allocentric) and is a cultural trait of the Dutch (and English) (Levinson 1996: 114, 127 ff.). His experimental findings support our assumption that time and space are powerful rhetorical vehicles.

Some striking features emerge from these first results when we cross-reference them. The PVV's high score on Past links with its high score on deictically close Space (Netherlands). This link sublimates a supposed traditional identity of resilience and enterprise by juxtaposing it to current public dissatisfaction, as in Example (3).

(3) Now, in the year 2010, more and more Dutch people wonder whether The Netherlands still holds a future for them. [...] Our ancestors saw the flooded delta and thought: this will be our oasis. (PVV, EM2010-Intro)

(Steeds meer Nederlanders vragen zich anno 2010 af of hun toekomst nog wel in Nederland ligt. [...] Onze voorouders zagen de ondergelopen delta en dachten: dit wordt een oase.)

The Christian Democrats and the Coalition Agreement share an interest in Eternity: the former on religious grounds and the latter want “to spare generations to come”. They take a long-term future perspective for different ideological reasons, which makes for an ‘unusual coalition’ (see Eleveld, this volume). On Space, the Coalition Agreement pays more attention to the Non-Western World and the Global than do the coalition parties. In the current political context, this could be interpreted as the coalition parties’ agreement to honour international agreements which were backgrounded in the manifestos. On the Modality scale, the liberal VVD articulates itself most strongly. They are optimistic and forceful, with higher scores on Acceptable and Necessary. The Christian Democrats are perhaps the most normative with higher scores on Desirable and

Unacceptable. To our surprise, the populist PVV articulates itself moderately in terms of Modality. In the following section we translate the TSM results in positions onto the political GAL/TAN dimension.

3.4.3 Translating TSM results onto GAL/TAN

The assumption is that a wide temporal and spatial reference frame includes a broader perspective and is interpreted as being more progressive (GAL). More space for deliberation would give room to ‘fit’ more complex solutions and afford a higher degree of tolerance to change and diversity. On the other hand, focus on a smaller deliberation space is considered more conservative (TAN) with less space to make solutions ‘fit’. As for Time, focus on specific national traits, based in the far past (e.g., Example 4), is translated as Traditional. Strongly nurturing past identity indicates a Traditional-Authoritarian attitude. And prioritising national interests is translated as Nationalistic. Combining TSM annotations can result in different translations. As described above, Time can refer to different positions on GAL/TAN, where both refer to tradition but not necessarily to nationalism, depending on the spatial setting. We have noted the PVV’s foregrounding of Past>10 as a period of brave founders of a nation as a Nationalistic reference frame. In contrast, the Christian Democrats score highly on the category Past>10 on religious grounds. However, Past can also be indicative of GAL when used as analogical evidence of patterns of change, for instance when comparing the 1930s crisis with the current economic crisis. There is clearly an ideological link between time and space frames and a desire for spatial proximity to the deictic centre.

Modality results were applied interpretively to modify positioning on the GAL/TAN scale. Past>10 with positive attribution (+) brings tradition closer to the experience of Now; spatial EU

with positive attribution (+) is closer to home than EU with negative attribution (-). In the translation schema, the value of modal expressions has been simplified to positive (+)/none/negative (-) attitude on a five-point scale (-2 to +2). Tables 4 and 5 show interpretive correlations between Time and Space scores and GAL/TAN.

Table 4. *Correlation of Time clusters with GAL/TAN.*

TIME	Modality	GAL	TAN
Past>10	+		Traditional/Nationalistic
	–	Libertarian	
Past and Future<10	+		Traditional
	–	Alternative/Libertarian	
Future>10	+	Libertarian	
	–		Authoritarian
Eternity	+	Green	Religious
	–		Traditional

Table 5. *Correlation of Space clusters on GAL/TAN.*

SPACE	Modality	GAL	TAN
Local/NL/Border	+		Trad./Authoritarian/Nat.
	–	Alternative/Libertarian	
EU/WW/NWW/Global	+	Alternative/Libertarian	
	–		Traditional/Nationalistic
Infinity	+	Green	Religious
	–		

Applying the five-point scale, Table 6 shows a ranking of TSM on GAL/TAN with combined TSM results in the bottom row. The CDA is moderately Traditional and Nationalistic, the VVD is Libertarian and Nationalistic, and the PVV is Traditional and Nationalistic, both in Time (high score on positive past) and Space (The Netherlands). The results show that GAL and

TAN are not consistent opposites, e.g., the coalition agreement is Libertarian and Nationalistic. In the following section these results are compared to our gold standard, Vote Compass, and to the results of the Wordscores analyses.

Table 6. *TSM results and GAL/TAN positions (EM2010-Intro) on a 5-point scale of -2 to +2.*

	CDA	VVD	Coalition	PVV
TIME	Trad. (religious)	Libertarian	Libertarian	Trad.
Modality	+1	+2	+2	+2
SPACE	Nat. + religious	Lib./Auth. Nat.	Nat.	Auth. Nat.
Modality	+1	+2	+2	+2
TSM	TN 1	L-AN 2	L-N 2	TAN 2

3.4.4 Cross-validating TSM with Wordscores and Vote Compass

In section 3.2 we concluded that the words-as-meaningful-data method performed better on the Left/Right dimension than the words-as-data method. On the GAL/TAN dimension neither method performed particularly well. In this section we compare the discourse-based words-in-context results to the Wordscores results and Vote Compass (Table 7).

Table 7. *GAL/TAN positioning of the three coalition parties.*

GAL/TAN	1	2	3	4	5	6	7	8	9	10
Vote Compass							VVD	PVV/ CDA		
Words in context					VVD	CDA				PVV
Words-as-data				VVD/ PVV		CDA				
Words-as-meaningful data			PVV	VVD		CDA				

Worldview analysis on TSM shows some variation with the gold standard but not dramatically. The CDA appears less TAN, probably because their stance on Past is based on religious grounds and is not interpreted nationalistic in the TSM ranking. The PVV comes out slightly more TAN on TSM because the frame of traditional Dutch resilience (Past>10) places them very traditional and nationalistic, which reduces their libertarian stance. The most striking TSM result in this study is that it places the PVV as more conservative than the Wordscores methods and slightly more than Vote Compass. TSM's sensitivity to the metaphorical relationship between time and space frames and normative values provides an additional layer of information by taking into account cognitive and narrative affordances of discursive worldview constructions.

4 Positioning the Coalition Agreement

4.1 The Left/Right dimension

We now turn to the hypotheses (Box 1) and include the positions of the coalition agreement and the tolerance agreement on the Left/Right dimension. Given the results of the cross validation we discuss the results of the words-as-meaningful-data analyses and leave out words-as-data results.

The words-as-meaningful-data analysis positions the coalition agreement in between CDA and VVD, which confirms Hypothesis 1: a compromise. Ideologically it is slightly closer to the CDA, which defies the expectation that the VVD has the largest ideological impact (Hypothesis 2). The fact that the PVV is to the left of the CDA in this analysis might have pulled the coalition agreement to the left, which give some leverage to the hypothesis that a considerable increase in

votes gives a party more influence (Hypothesis 3). The tolerance agreement is not close to any of the three parties and is in fact situated between the Social Democrat Party (PvdA) and the Christian Union (CU).

Table 8. *Positioning the coalition agreement and the tolerance agreement with words-as-meaningful data on Left/Right.*

Left/Right	0	1	2	3	4	5	6	7	8	9	10
Words-as-meaningful-data	SP			GL		PvdA PvdD	CU TA	D66 SGP	PVV CDA CA	VVD	

NB: CA = coalition agreement, TA = Tolerance Agreement

This leaves us to conclude that on the economic Left/Right dimension, the coalition agreement is ideologically indeed a compromise between the government parties CDA and VVD. However, the tolerance agreement was positioned at remarkable distance to the left of the governing parties and leads to the conclusion that the stylistic features of the tolerance agreement made it unsuitable for the analysis and could not be considered a ‘like’ text for the Wordscores analyses either.

4.2 *The GAL/TAN dimension*

The coalition agreement focuses, not surprisingly, on Local and National spatial issues but also extends to existing national commitments to the EU and international agreements (Figure 6). The high scores for time Present and Future<10 years (Figure 5) and the lack of reference to the past

can be explained by the function of the coalition agreement as a consolidation of government action for the next term of office. And finally, on Modality, the Agreement is less outspoken, which also makes sense, considering that the document functions to enable action, rather than to construct attitude (Figure 7). This results in the positioning of the coalition agreement as shown in Table 9.

Table 9. *Positioning the coalition agreement with words-in-context on GAL/TAN.*

GAL/TAN	1	2	3	4	5	6	7	8	9	10
Words-in-context				CA	VVD	CDA				PVV

NB: CA = coalition agreement

The words-in-context analysis shows that the coalition agreement is not the ideological mean of the coalition parties (Hypothesis 1), but that the largest party, VVD, has had the most influence on the coalition agreement on the GAL/TAN dimension (Hypothesis 2). The tolerating PVV is positioned at a considerable distance of the coalition agreement, which indicates that, although they had the biggest increase in number of votes in the 2010 election, they did not influence the coalition agreement on the GAL/TAN dimension (Hypothesis 3).

5 Conclusions: A comparison of the methods

We have illustrated the advantages and constraints of layered methods of text analysis by positioning three coalition parties and their two agreements in a political space. Testing the hypotheses required a fine-grained differentiation between parties that had come to a not-so unusual coalition as it seems. In the process, we have shown how the combination of a purely frequency-based method and a lexical-semantic approach improved the positioning of political

parties on the economic Left/Right dimension against a methodologically hybrid gold standard, Vote Compass. The extraction of deontic expressions did not, however, result in a more precise positioning on the GAL/TAN dimension. We inferred that Left/Right is more strongly characterised by subjective expressions of degrees of necessity, desirability and urgency of action. The positioning on the GAL/TAN dimension strongly concerns implicit beliefs and requires an analysis of the discursive ground of party rationale. Hence, a discourse-space model for Time and Space was developed that frames the point of view. The resulting frames provided ideologically motivated ‘worldviews’ that function as rational coordinate systems for political reasoning. This words-in-context analysis focused on time and space as a background setting for political action and was translated into positions on the GAL/TAN dimension.

The methods are based on three disciplines, each with their own approaches and aims. However, the common goal was to be able to position parties with high precision, for instance, to visualise positions accurately in voting advice applications. The two Wordscores methods need reference texts and expert surveys. A disadvantage is that the method requires that the political positions and themes of the reference texts must be close to those of the virgin texts because otherwise they may miss out on unique and new political positions. This is not a requirement for the words-in-context method, which can be applied to any text as long as it has some form of narrative structure to indicate variations in worldview constructions. The TSM model has so far been applied as a qualitative model to test the ground for rules that may be automated. We think it is not restricted to the GAL/TAN dimension but could also be applied to positioning on the Left/Right dimension as a second step in the analysis, after worldviews have been identified. This could indicate (in)consistency between worldview and issue positions. However, rules for automated analysis are not obvious because mapping TSM results onto political dimensions

requires a clearly contextualised research frame to be able to integrate cognitive, linguistic as well as political considerations.

The three methods have been applied at different text levels of the same corpus with the common aim to identify political positions on three levels of frames (word frames, deontic word frames, and spatial reference frames). The political-action oriented lexical-semantic method (words-as-meaningful-data) extracted policy measures at the micro (sentence) level, whereas the discourse analysis looked into the parties' perceptions of the world we exist in at the meso level (words-in-context). Identifying meaningful text segments required linguistic and cognitive-discourse knowledge and resulted in a more precise positioning than taking them as a full data set in the frequency-based words-as-data method (macro level) that disregards meaning and the rhetorical affordances of meaning constructions. The methods are not numerically guaranteed to be unbiased but use theories of linguistic and discursive aspects of meaning construction in texts to approximate unbiased results.

By identifying the problem areas of each method it becomes clear that together, the methods may give better results because they can combine qualitative and quantitative approaches. By doing justice to lexical and textual affordances of meaning making for stance taking, our approach seems to improve the results of the pure words-as-data analysis. We think that adding layers of analysis to extract how deontic words and discursive patterns create a sense of meaning and attitude results in a more precise positioning.

References

- Aarts, K. and J. Thomassen. 2008. Dutch voters and the changing party space 1989-2006. *Acta Politica* 43, pp. 203–234.
- Alpino Parser. Rijksuniversiteit Groningen. <http://www.let.rug.nl/vannoord/alp/Alpino/> (accessed 18 June 2012)
- Beigman Klebanov, B., D. Diermeier, and E. Beigman. 2008. Automatic annotation of semantic fields for political science research. *Journal of Information Technology & Politics* 5, pp. 95–120.
- Benoit, K. and M. Laver. 2006. *Party Policy in Modern Democracies*. New York: Routledge.

- Budge, I. 1994. A new spatial theory of party competition. *British Journal of Political Science* 24, pp. 443–467.
- Chilton, P. 2004. *Analysing Political Discourse: Theory and Practice*. New York: Routledge.
- Chilton, P. 2005. Vectors, viewpoints and viewpoint shift: Toward a discourse of space theory. *Annual Review of Cognitive Linguistics* 3, pp. 78–116.
- Cienki, A. 2008. The application of conceptual metaphor theory to political discourse: Methodological questions and some possible solutions. In T. Carver and J. Pikalo (Eds), *Political Language and Metaphor*. London/New York: Routledge, pp. 241–256.
- Cienki, A., B. Kaal and I. Maks. 2010. Mapping world view in political texts using Discourse Space Theory: Metaphor as an analytical tool. Presented at the eighth meeting of the Association for Researching and Applying Metaphor (RaAM 8), Amsterdam. <http://vu-nl.academia.edu/BertieKaal>
- Entman, R. M. 1993. Framing: Toward clarification of a fractured paradigm. *Journal of Communication* 43, pp. 51–58.
- Grady, J. E. 1997. Foundations of meaning: Primary metaphors and primary scenes. Unpublished PhD Dissertation, University of California at Berkeley.
- Haeseryn, W., K. Romijn, G. Geerts, J. de Rooij and M. van den Toorn. 1997. *Algemene Nederlandse Spraakkunst*. Groningen: Martinus Nijhoff/Wolters Plantyn.
- Herman, D. (ed.). 2003. *Narrative Theory and the Cognitive Sciences*. Stanford: CSLI.
- Heywood, A. 2007. *Political Ideologies* (4th ed.). New York: Palgrave MacMillan.
- Hooghe, L., R. Bakker, A. Brigeovich, C. de Vries, E. Edwards, G. Marks, J. Rovny and M. Steenbergen. 2010. Reliability and validity of measuring party positions: The Chapel Hill Expert Surveys of 2002 and 2006, *European Journal of Political Research* 4, pp. 684–703.
- Kaal, B. 2012. Worldviews: Spatial ground for political reasoning in Dutch election manifestos. *CADAAD* 6 (1), pp. 1–22.
- Kaal, B. and I. Maks. 2011. Stylistics in context: Semantic and discursive aspects of subjectivity in political texts. Paper presented at Stylistics Across Disciplines, Leiden, 16-17 June 2011.
- Kriesi, H., E. Grande, R. Lachat, M. Dolezal, S. Bornschier and T. Frey. 2006 Globalization and the transformation of the national political space: Six European countries compared. *European Journal of Political Research* 45, pp. 921–956.
- Kriesi, H., E. Grande, R. Lachat, M. Dolezal, S. Bornschier and T. Frey. 2008. *West European Politics in the Age of Globalization*. New York: Cambridge University Press.
- Lamond, I. 2012. Elections as points of discursive contestation: Using a critical approach to discourse as a source for empirical data for cultural policy studies. *CADAAD* 5(2), pp. 39–53.
- Laver, M. 2001. Position and salience in the policies of political actors. In Laver, M (ed.), *Estimating the Policy Positions of Political Actors*. New York: Routledge, pp. 66–75.
- Laver, M., K. Benoit and J. Garry. 2003. Extracting policy positions from political texts Using Words as Data. *American Political Science Review* 97, pp. 311–331.
- Laver, M. and J. Garry. 2000. Estimating policy positions from political texts. *American Journal of Political Science* 44, pp. 619–634.
- Levinson, S. C. 1996. Frames of reference and Molyneux's question: Crosslinguistic evidence. In P. Bloom, M. A. Peterson, L. Nadel and M. F. Garrett (eds.), *Language and Space*. Cambridge: Cambridge University Press, pp. 109–169.
- Levinson, S. C. 2003. *Space in Language and Cognition: Explorations in Cognitive Diversity*. Cambridge: Cambridge University Press.
- Marks, G., L. Hooghe, M. Nelson and E. Edwards. 2006. Party competition and European integration in the East and West, *Comparative Political Studies* 39, pp. 155–175.
- Müller, W. C. and K. Strøm (eds). 2000. *Coalition Governments in Western Europe*. Oxford: Oxford University Press.
- Nuyts, J., P. Byloo and J. Diepeveen. 2010. On deontic modality, directivity and mood: The case of Dutch *mogen* and *moeten*. *Journal of Pragmatics* 42, pp. 16–34.
- Rayson P., and R. Garside. 2000. *Comparing Corpora using Frequency Profiling*. Proceedings of the workshop on Comparing Corpora, held in conjunction with the 38th annual meeting of the Association for Computational Linguistics (ACL 2000), pp. 1–6.
- Palmer, F. R. 1986. *Mood and Modality*. Cambridge: Cambridge University Press.
- Searle, J. and D. Vanderveken. 1985. *Foundations of Illocutionary Logic*. Cambridge: Cambridge University Press.
- Van Dijk, T. A. 2004. Discourse, knowledge and ideology: Reformulating old questions and proposing some new

- solutions. In M. Pütz, J. Neff-van Aertselaer and T. A. van Dijk (eds.), *Communicating Ideologies: Multidisciplinary Perspectives on Language, Discourse, and Social Practice*. Frankfurt: Peter Lang, pp. 5–38.
- Warwick, P. V. 1996. Coalition government membership in West European parliamentary democracies
British Journal of Political Science 26, pp. 471–499.
- Werth, P. 1999. *Text Worlds: Representing Conceptual Space in Discourse*. London: Longman.