Analysing Manifestos in their Electoral Context: A New Approach with Application to Austria, 2002–2008

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Abstract. This paper presents an approach of how party manifestos can be analysed to benefit the placement of political parties per se and to advance the study of elections. Any quantitative analysis of political texts ought to meet the classic criteria for good data: high-quality documentation, validity, reliability, and replicability (King et al. 1994). The vibrant debate on political text analysis has identified related problems in extant party manifesto research. To these criteria we add the claims for theoretical neutrality, connectivity, and parsimony and show what specific challenges they create for manifesto analysis. Next we present how the AUTNES analysis of electoral manifestos (and other political texts) has coped with these challenges. We cross-validate and compare our results for the 2002, 2006, and 2008 Austrian elections with those yielded by previous studies that employ the entire range of measurement strategies available for the placement of political parties. We also demonstrate how we link our new manifesto data with other kind of data produced in AUTNES: especially mass and elite (party candidate) surveys.

Introduction

Elections constitute critical moments in the life of democracies. They rightly take a focal role in the study of individual political behaviour and party politics that are largely self-contained fields in political science. Election studies focus on the relevant choices of citizens (participation, party choice) and typically employ survey data. Party studies (or, to be precise, important sub-fields of party studies) try to understand how political parties place themselves relative to each other and how they reach out to the voters drawing on various sources and using a range of different methods. Over the years, electoral manifestos have acquired a central place in providing information about the parties' policy intentions and spatial placements. Of course, the ultimate goal of placing political parties relative to each other is to understand party competition. In real world politics, party competition is the interaction of political parties among themselves, with the mass media and the voters. Understanding the nature of democratic elections requires unravelling these interactions and relating party positions to government formation and subsequent public policy making.

A distinct body of literature combines data from election studies and party placements (e.g. Ezrow 2010; Adams and Somer-Topcu 2009). This literature faces the challenge of bringing together data that has been collected in separate, often major projects. While these studies have yielded important results, it is easy to see that they have been working under severe data constraints. Studies of mass media campaign coverage face the same problem. Our first ambition in this paper is to show how the study of party manifestos can be conceptualized to the mutual benefit of all these research interests. Our second ambition is of equal importance. It relates to the study of party placements as a self-contained goal. The prominence this sub-field has acquired in recent years is not only due to the substantive importance of its research question but also to a vibrant debate about methodological issues and controversies about alternative approaches. From this debate we have learned much about the problems to be addressed in any newly conceived analysis of electoral manifestos and other political texts. In this paper we identify these challenges and show one way how to cope with them.

The paper proceeds as follows. In the next section we outline the challenges any quantitative analysis of electoral manifestos or other political texts ought to meet. On the one hand, we highlight problems of existing manifesto research when confronted with the classic claims for high-quality documentation, validity, reliability, and replicability (King et al. 1994). On the other hand, we add the claims for theoretical neutrality, connectivity, and parsimony and show what specific challenges they create for manifesto analysis. Next we present how the

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AUTNES analysis of electoral manifestos (and other political texts) has coped with these challenges. Although the purpose of each new approach is to improve on existing ones, it would be unrealistic and pretentious to deny the relevance of earlier attempts at dealing with the same research question. This certainly applies when the results of such studies have been very influential in the discipline. We therefore engage in cross-validation and comparison of our results for the 2002, 2006, and 2008 Austrian elections with those yielded by previous studies that employ the entire range of measurement strategies available for the placement of political parties. We also demonstrate how we link our new manifesto data with other kind of data produced in AUTNES: especially mass and elite (party candidate) surveys. The conclusion summarizes the main points of this paper.

Challenges for Analysing Party Manifestos

When analysing party manifestos with a specific focus on individual elections, researchers have to deal with several challenges. Some of these challenges refer to general problems of social science investigation and all methods of manual content analysis respectively. Others are related to more specific problems resulting from comparing manifesto data with other kind of data: either as part of a broader election study such as AUTNES or for the purpose of cross validation. In the following, we will discuss these various challenges and also give examples how other approaches of manifesto research have dealt with them so far. Subsequently, we will introduce our own new method.

Certainly the best-known project in this field of research is the Comparative Manifestos Project[1] (CMP) (Klingemann et al. 2006; Budge et al. 2001). In more than thirty years of its existence the CMP has generated an impressive dataset including 856 parties in 55 countries and covering 596 democratic elections in the post-war period. Up to now the amazing number of 3,404 manifestos has been coded.[2] Researchers from all over the world routinely revert to this dataset and thus make it certainly one of the most frequently used datasets in political science. When discussing the various challenges of manifesto research and the solutions suggested so far we have therefore to primarily focus on the CMP. But apart from the CMP we also consider the coding procedure used by the Euromanifesto project, which is almost

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[1] This project started in the 1980s as 'Manifesto Research Group' (MRG) and is nowadays called 'Manifesto Research on Political Representation' (MARPOR).
[2] See http://manifestoproject.wzb.eu/ [last access 22 February 2012].

identical to the CMP's, and a system developed by Laver and Garry (2000). The latter, however, to the best of our knowledge was implemented only once (Gabel and Hix 2002). With respect to several earlier 'manual' examinations of manifestos and similar political documents (e.g. Borg 1966; Farbey et al. 1980; Ginsberg 1976) we do not have concise information about the methodological approach.

By 'manual content analysis' we refer to the systematic extraction of information from manifestos by human coders and – in most cases – the subsequent aggregation of information before conducting any kind of analysis. 'Judgemental coding', a specific method proposed by Harmel et al. (1995) and implemented in addition to 'actual' coding for example in the Euromanifesto project (Wüst and Schmitt 2007: 78), will not be considered. This approach, where coders judge parties' positions on predetermined policy scales after reading their manifestos (or other texts) goes back to the work of Thomas (1980, 1979, 1975) and is definitely closer to expert surveys. It therefore raises different questions and challenges for researchers (see Budge 2000 for some critical considerations).

Starting with some general 'guidelines' proposed by King et al. (1994: 23-27) for improving the quality of data in social science research, every analysis of party manifestos should come up to at least the following four criteria: high-quality documentation, validity, reliability, and replicability.[3]

High-quality documentation

'Record and report the process by which the data are generated' (King et al. 1994: 23), the first guideline proposed by these authors, in our case refers to aspects of selection and documentation. Identifying party manifestos, the first step in such an analysis, is not as trivial as it seems to be at first sight and has therefore to be done carefully as well as traceably. Unfortunately, there are examples where 'wrong' or at least doubtable documents were coded for example in the CMP (for Denmark see Hansen 2008; for Germany see Proksch and Slapin 2009; Gemenis 2012). Researchers therefore need to make their decisions explicit. Whenever no 'real' election manifesto exists or is available for researchers, it does make sense to resort to substitutes such as basic programs (see below) or perhaps even speeches by the top

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[3] King et al.'s further guideline – 'collect data on as many of its observable implications as possible' (1994: 24) – is not applicable in our context.

candidate. However, such substitutes should be specified properly as their content might deviate from actual manifestos and bias comparisons (Gemenis 2012).[4]

It might also be useful to include the original text in the data set finally produced so that other researchers can easily understand the way this text was transformed into specific codes. As every content analysis has to reduce the amount of information provided by the original source, such a transparent procedure facilitates the understanding and therefore the proper use of data for other purposes. Thanks to major developments in the computer processing of text documents, this service to the scientific community is nowadays much easier to provide than in the 1980s and 1990s when the CMP collected their first documents.

Validity

Maximizing *validity*, King et al.'s second guideline, has consequences amongst others for the building of the coding scheme. Being as close as possible to the parties' thematic statements and using therefore a high number of categories not only has several practical advantages for comparative purposes (see the challenges of *connectivity* discussed below) but also increases the validity of measurement in itself. Such a focus on validity might also be regarded as a reason for choosing hand-coding instead of computerized methods.

Automated methods for the estimation of policy positions from political text have rapidly developed in the past years (Laver et al. 2003; Slapin and Proksch 2008). Yet, an in-depth content analysis still requires human coders who are able to understand the content of the sentences to be coded. This is especially important when researchers go beyond left–right analyses and aim at estimating the parties' positions in very specific policy domains which is important for comparing the parties' positions with other data (see below). The strategy proposed by Pappi and Seher (2009) who manually divide the manifestos into policy-specific sections and afterwards automatically analyse these parts with the Wordfish algorithm (see also Slapin and Proksch 2008: 712) is not feasible for all manifestos because sometimes they are not organized according to policy areas (but rather, e.g., by party ideas cross-cutting such areas). A further relevant aspect of party manifestos, the identification and recording of election pledges (Costello and Thomson 2008), requires manual coding even more as no

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[4] The CMP dataset includes a variable that specifies the type of document coded. This variable is called 'manifesto document type' (progtype) and distinguishes nine categories. 85.6 percent of the cases are categorized as 'regular programme'. With respect to several Austrian documents, however, we know that this information is not correctly recorded.

algorithm yet developed is able to distinguish between 'cheap talk' and genuine promises whose actual implementation might be monitored by researchers (or voters).

As a matter of fact computerized text coding techniques are rapidly improving and already provide notable results when it comes to estimating issue saliencies in political texts based on word frequencies and co-occurrences (Pennings 2011). However, they still do not fulfil the purposes of an in-depth *relational* content analysis. Such analysis not only transforms highly diverse text units (such as paragraphs, sentences, or single words) into simplifying codes but aims at connecting specific types of information included in the text. This latter aspect is important when researchers try to examine the policy statements of specific actors or relations between various actors. Even though the party authoring the manifesto is most of the time also the 'actor' who informs about her policy proposals, there are incidents where also candidates and their specific programmatic goals are mentioned in this type of text. And there are also examples where competitors, either other parties or the government, are attacked in the manifestos.

Consequently, such a type of content analysis has to be done by human coders. These 'competent' readers are able to derive the meaning of text from its context, and to translate it into valid data. Notwithstanding promising research in the development of computerized methods (e.g. Van Attefeldt et al. 2008; Wueest et al. 2011), at present the balance seems tipped towards manual coding, in particular when the task of the coding is complex. The manual coding of texts such as manifestos – we think – clearly enhances the quality of data collection, especially when the focus is not limited to questions of issue saliency. However, such an approach might conflict with the third criterion mentioned by King et al. (1994): reliability.

Reliability

Human coders are, of course, prone to producing unreliable results (e.g. Mikhaylov et al. 2012). Reliability is thus a major challenge for any manual content analysis. Although no such effort will ever reach machine-like perfection, there are some measures that can be taken in order to achieve good results, including the use of a strict set of objective rules for unitizing and coding and to provide for multiple and independent unitizing and coding. Following these guidelines, of course, makes a manual content analysis a costly enterprise. And costs increase roughly in proportion to the amount of coded text. In contrast, computerized coding systems

can be applied to huge quantities of texts without much additional costs once the initial investment has been made (e.g. Pennings 2011).

Given the several challenges of reliability a strict system of rules for unitizing the text is therefore the first fundamental imperative. As party manifestos are quite long texts – in Austria, their average length is about 10,000 words in the 1990s and 2000s (Dolezal et al. 2012b) – it is neither possible nor feasible to define the chapters or even the entire manifesto as unit of coding.[5] Researchers have therefore to split the text into such units. The most straightforward unit in all kind of texts certainly is the natural sentence. However, when referring to sentences as units the analysis heavily depends on the style of the author(s) and especially longer sentences where various issues are mentioned raise severe problems for coding. In addition, it is not always easy to define a sentence even in written texts because in contemporary manifestos parties very often use bullet points to improve the text's readability.

So far, researchers of party manifestos have found very different solutions for defining the units of their content analysis: The CMP does not use natural sentences but refers to 'quasi-sentences' as its coding unit (Budge et al. 2001: 217-218). Such a 'quasi-sentence' is defined as an argument that is 'the verbal expression of one political idea or issue' (Budge et al. 2001: 217). Laver and Garry (2000: 624) already questioned the reliability of this approach. This problem has also been recognized by Wüst and Schmitt (2007: 29 FN 5) who use this approach in the Euromanifesto project. Its relevance has recently been demonstrated by Däubler et al. (2012). Apart from problems of reliability, the CMP's unitizing procedure also tends to depend on the available issue-categories because a change of argument might rather be recognized whenever another category might be used for a chain of words in the text. The more categories available, the more units of observation such a system thus produces.

Laver and Garry (2000), by contrast, propose a totally different approach. They define as their unit a 'word strings with an average length of ten words' (2000: 624). Unfortunately, these authors neither explain the reason for this number of words nor the remark on 'average'. Anyway, their approach certainly solves all problems related to reliability but the validity of these units is highly questionable. We think that researchers who try to derive data from texts should not abandon every link to grammar and syntax. After all, these elements are fundamentals of language and provide for the meaning of texts. This is also the major problem for all computerized systems of manifesto coding because they are mostly based on single, sometimes lemmatized words as units.

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[5] The judgemental coding proposed by Harmel et al. (1995), however, is based on such a concept.

Not only the unitizing procedure, also the actual coding leads to several challenges for the reliability of the analysis. With respect to the issue categories, decisions on their number as well as arranging for their discriminatory power are important tasks. Using specific instead of abstract issue-categories should increase reliability as coders will find it easier to select the correct (i.e. same) categories when they do not have to think too long about their meaning and application. A limited number of categories, however, increases reliability thanks to matters of sheer chance.

Replicability

Replicability, the last guideline mentioned by King et al. (1994) is closely linked to the first, especially to the aspect of documentation, and apparently is a major advantage of all types of content analyses. Expert surveys – or mass and elite surveys – are time-bound and therefore difficult to conduct for the past, even though such examinations have been conducted (Ray 1999).

Apart from these four rather general guidelines, a new method of manifesto coding has to meet challenges that are related to more specific as well as contextual problems. We discuss these tasks under three headlines: 'theoretical neutrality', 'connectivity', and 'parsimony'.

Theoretical neutrality

A new method of analysing party manifestos should produce data that might be used by researchers and research questions coming from different *theoretical backgrounds*. It is, for example, not at all clear whether parties indeed 'talk past each other' and avoid any direct confrontation as saliency theory famously postulates (e.g. Budge and Farlie 1983). The CMP, by contrast, deliberately follows this specific theoretical way and complicates – sometimes forecloses – any research following a more 'positional' or 'confrontational' logic of party competition. Because of technical reasons, a kind of 'saliency approach' is also the basis of all existing computerized systems of coding that base their analyses on relative word frequencies.

While political scientists who analyse various aspects of party competition and democratic elections constantly revert to CMP data, few of them – we assume – are faithful followers of saliency theory. It is therefore necessary to develop a system of content analysis that is not as closely linked to a specific theoretical approach and also enables researchers to differentiate

between parties' positions and the saliency they put on issues. Extracting positions (primarily) from saliency measures is possible – but only under the assumption that saliency theory is right (Laver and Garry 2000: 622). Recent research by the authors of this paper casts severe doubt on this presumption (Dolezal et al. 2012a).

Connectivity

The data produced by the content analysis of party manifestos should also allow direct comparison with other data sources: either to check aspects of validity or for genuine, substantive research questions. Comparisons over time lead to additional challenges of connectivity as the meaning of (fixed) categories might substantially change.

Connectivity: external validity

Any new method tries to demonstrate its distinct qualities. As a first step, it has to show that its results have face validity. The typical approach is, perhaps ironically, to demonstrate that the new results roughly correspond to outcomes obtained by other methodological approaches that are widely accepted by the research community. With respect to the measurement of party positions these methods are surveys amongst experts, party elites, or voters, the examination of legislative roll-call votes, and the analysis of political texts such as manifestos or speeches, either by human coders or with the help of computerized algorithms (Laver 2001).

Connectivity: substantial comparisons with other types of data

More important, however, is the comparison with other data in the context of an integrated election study. Such a research effort aims at directly comparing the parties' programmatic offer as expressed in the manifestos with other party communications (such as press releases and advertising materials), and, even more important, with the other core elements in elections: the attitudes of voters and the media reports on the (thematic) content of a campaign.

For all these comparisons, either to cross-validate the data or for substantive comparisons, it is primarily necessary to analyse the party programmatic supply on a fine-grade level, i.e. at a level of abstraction that roughly corresponds to the level of abstraction in the original

document. Priority, therefore, is always given to the measurement of various policy-positions, not to left–right estimates. And such kind of data also better serves the interests of the research community, as it allows more flexibility in any kind of re-analysis (Laver and Garry 2000: 622).

Considering voting behaviour, to begin with substantive comparisons in the context of a national election study, it is still an open question whether voters think – and subsequently decide on – rather in policy dimensions or with respect to specific issues. It is therefore necessary to record the parties' programmatic offer in a way that allows for comparing it with voters' attitudes and leaves the question of the right level of aggregation open for the analysis. But also for pragmatic reasons the measurement of policy proposals by parties is important because voter surveys, with the single exception of the left–right dimension, voter surveys do not ask about abstract dimensions but about specific policy choices. Analysing the attitudes of parliamentary candidates and linking them to the 'authoritative' programmatic offer by their parties published in the manifestos needs similar operations. Also the news media are of critical importance in contemporary campaigns and provide most of the information voters acquire on the parties' proposals during the campaign. The media, of course, does not report on the necessarily abstract ideological dimensions underlying party competition but most of the time on specific issues that are relevant for their readers.

The CMP categories, for example, have a rather limited connectivity potential, as they are very broad. Given Europe's greying populations, to provide an example, the future regulation of retirement is an important element of contemporary debates on the welfare state and a major campaign issue. An improved system of categories should distinguish various parts of this discussion whereas the CMP puts all aspects of this debate in the extremely broad categories of 'welfare state expansion' and 'welfare state limitation' (per 504 and per 505).[6]

A fine-grade level of measurement is also necessary for any real positional perspective because it requires not only to derive a party's campaign messages from its manifesto but also to relate these to the statements of other parties as precisely as possible. Looking carefully enough at party positions reveals that a general agreement about the direction public policy should take in a specific area often combines with very distinct proposals. For instance, agreement on expanding the welfare state does not rule out conflicts over spending priorities and, conversely, universal acceptance of the need to trim welfare expenditure does not

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[6] In addition, these categories force coders and users of the data alike to judge from context whether the goal of maintaining the current level of the welfare state (neither expand nor cut-back) is in the spirit of expansion or limitation.

preclude intense party conflict over which specific programs should be shrunk or even abandoned. Such conflicts can be highly consequential for the outcome of elections and consequently should be covered by analyses of party competition. Again, it is not only a conflict about 'welfare state expansion' or 'limitation' but a conflict about the *specifics* of such moves.

Connectivity: comparisons over time

An institutionalized national election study ought to cover each general election. From there, two potentially conflicting goals of connectivity emerge: First, to provide the best possible analysis of each election in its own right and, second, at the same time to lay the foundations for the analysis of long-term developments in the country observed but also for international comparisons. The first goal requires the greatest amount of specificity to the election under study, the second a greater degree of abstraction.

With respect to temporal comparisons an adequate level of specificity is required to account for the change of the issue landscape and campaign agenda. Especially in a long-time perspective, issue-categories have to reflect the sometimes fundamental changes in the context of election campaigns and politics in general. The CMP category 'underprivileged minority groups' (per 705), for example, includes a wide spectrum. In the 2000s it covers, amongst others, positive statements towards same-sex marriage expressed by left-wing parties. In the post-war period, by contrast, this category strongly referred to support for 'displaced persons', e.g. ethnic Germans expelled from Eastern Europe supported by right-wing parties (Linhart and Shikano 2009: 313). Again it is, first, a low level of aggregation in the measurement process that averts such problems. The second consequence is the need of a flexible system of categories. The CMP's fixed system of categories facilitates comparisons over time and between countries, but by now is certainly out-dated (Benoit and Laver 2007: 130).[7] Several 'new' issues of party competition, especially immigration, are not well covered. Highly salient issues in the 2000s such as the debate on the role of Islam are not recorded in their own right but merged into existing broad categories. Laver and Garry (2000), by contrast, proposed a hierarchical system of categories with four levels that might also be adapted 'to suit particular local or temporal circumstances' (2000: 623). With such a

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[7] In addition, it seems that not all country teams actually used each category of this system. Budge et al. (2001: 222-228) report various deviations.

system, the authors suggest, it is possible to both include new issues – if necessary – and make comparisons across time and space.

Parsimony

Using a fine-graded system of many categories leads finally to an organizational challenge during the coding process. As the system of coding should be open to different theoretical backgrounds it is necessary to distinguish at least between the expression of support and opposition. Given its theoretical basis, saliency theory, the CMP actually should not consider this aspect at all. Nevertheless, there are several positive as well as negative categories in the system so that coders are facing a mix of single (e.g. per501 Environmental Protection) and twin-categories (e.g. per504 Welfare State Expansion, per505 Welfare State Limitation). The Euromanifesto project, by contrast, developed twin-categories for (almost) all European issues to facilitate calculating parties' positions. Laver and Garry (2000) also want to distinguish between parties' positions and therefore had to *triple* their list of categories to record positive, negative, and even neutral statements (see also the 'recommendations' by Lowe et al. (2011: 149)). Such a strategy, however, leads to an enormous number of categories and does not facilitate the coding process. A relational coding system that includes a separate variable recording whether a party supports or opposes some policy might therefore be the superior solution.

AUTNES Manifesto Coding

This section presents our attempt to establish a coding scheme that meets the desired high standards of documentation, validity, reliability, and replicability and which provides for connectivity with other data sources. For that purpose we use a relational, kernel-sentence based method of content analysis as originally developed by Kleinnijenhuis and his collaborators for the analysis of media content (e.g. Kleinnijenhuis and Pennings 2001). Based on the adaptions made by Kriesi et al. (2008) we have further developed this approach according to the special character of party manifestos and the requirements of a national election study. Furthermore, we have conceived similar schemes for other kinds of texts such as press releases or statements by leading candidates as reported in newspaper articles.

After referring briefly to the details of the document selection and documentation, we turn to describing the unitization and the coding procedure in further detail. Finally, we concentrate on building policy scales out of the issues coded. We show how our new method of coding deals with the general requirements established by King et al. (1994) and demonstrate the advantages our coding scheme provides compared to the other ones employed in the analysis of party documents.

Document selection

Prior to the actual coding process we have to identify the documents that provide the basis for our later analysis. In our dataset we include all manifestos of Austrian political parties that are represented in the Austrian parliament (the Nationalrat) at the time of the election and/or afterwards. As we assume that parties remaining just below the electoral system's threshold of four per cent of the votes still influence party competition, we also include the manifestos of non-parliamentary parties that won a minimum of two per cent of the votes in the relevant election.

However, as manifestos are not the only documents with programmatic statements issued by parties we have to be careful identifying the appropriate document. In the case of Austria, it is important to distinguish election manifestos from basic programs (*Grundsatzprogramme*) and action programs (*Aktionsprogramme*, *Spezialprogramme*). Here the most evident criteria are their degree of specificity and comprehensiveness, and the timing and regularity of their publication.

In their basic programs parties give a summary of their core ideology. Here they usually expatiate upon their idea of man and society, but typically do not commit themselves to specific policy proposals. Beyond that, basic programs are rather long-lived documents; the Austrian Social Democratic Party, for instance, to date has issued six such documents since its foundation in 1874 (Ucakar 2006, 333). Action programs, in contrast, are usually limited to a certain policy segment such as inflation, disability, or animal welfare. They typically include very detailed policy measures.

Election manifestos take an intermediate position between basic and action programs when it comes to specificity. Most of them are more comprehensive than action programs but potentially they are about as extensive in scope as basic programs. Manifestos are issued

several weeks or months prior to every election and therefore are documents published periodically and more frequently than basic programs.

Through extensive archival research we were able to identify all election manifestos between 1945 and 2008.[8] Sometimes the selection of the appropriate document was not trivial as parties do not always designate a particular document their 'manifesto' but in some cases may have no, in other cases several documents that fulfil some of the criteria. So we faced some challenges especially with respect to newly founded parties: Sometimes these parties issued documents that in form and specificity deviated from what more established parties published as their 'manifesto'. However, finally it was possible for all parties to identify a document fulfilling the criteria of a manifesto. The only exception with this regard is the Green party: In 1990 the party issued its first basic programme but beyond that did not publish a manifesto. Thus instead of a genuine 'manifesto' for the 1990 election we fell back to a document that shares characteristic traits of a basic programme, especially with respect to the party explaining their idea of an ideal society. As party officials identified this document as the party's election manifesto, we treated that document as a manifesto – despite its unusual characteristics.

Documentation

With technical possibilities vastly improving in the last decades, new options emerge with regard to documentation: The AUTNES approach makes use of the greatly enhanced possibilities of making text machine-readable and storing it electronically which is why the dataset includes not only the final codes but also the unitized statements (see below) as well as the original manifesto text. Thus it is possible to trace back the entire coding process. This transparency and comprehensiveness of the dataset enables scholars to reconstruct every single coding decision without going back to the original data source themselves. Finally, the process of documentation also entails the publication of the extensive coding instructions (amounting to about 100 pages in the German original).

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[8] In a surprisingly large number of cases, these documents were not identical with those identified by previous research, especially with regard to the early post-war decades.

Unitizing

At the beginning of each text coding it is necessary to define the unit of analysis. To obtain valid measures of the parties' intentions we prefer a unitization that takes the texts' syntactic structures into account rather than a purely numeric criterion like the one Laver and Garry (2000) propose. However, although we agree with the idea of the CMP and Kleinnijenhuis and Pennings (2001, 168) that the unit of analysis should consist of only one single issue, we seek to establish a method of unitization that is independent from the later coded issues. With the CMP's derivation of 'quasi-sentences' being criticized as to some extent arbitrary (Däubler et al. 2011) it is necessary to establish some theoretically based, fixed rules to secure reliable as well as valid unitizing. Here we draw on Noam Chomsky's (1965, 1957) idea of a phrase structure model: According to his theory texts can be unitized into the smallest possible but nevertheless complete grammatical sentences – the so-called 'kernel sentences'.

Chomsky distinguishes between noun phrases and verbal phrases: A noun phrase consists of a noun (or pronoun) and of possible additions related to that noun, e.g. articles, adjectives, or relative clauses. A verbal phrase includes a verb (and possible proverbs) and a second noun phrase. Following Chomsky's model, the smallest possible grammatical sentence – the so-called 'kernel sentence' – consists of one noun phrase and one verbal phrase (Chomsky 1957, 46), for instance, 'We will cut taxes'. As a general rule, the AUTNES unitizing approach generates one unit of analysis (called 'statement') per verbal phrase.

However, not all grammatical sentences are as short as a kernel sentence. Indeed, most include more components. A grammatical sentence may also consist of more than one kernel sentence. Chomsky offers a set of rules that help to deconstruct even longer sentences into kernel sentences – relative clauses, for instance, are inseparably connected with the noun phrase they refer to and do therefore not constitute a separate kernel sentence, whereas a second object would do. Thus a grammatical sentence like 'Party X that received an overall majority of the vote in the last election now wants to cut taxes' still consists of only one kernel sentence (as above: 'Party X […] wants to cut taxes') whereas 'Party X wants to cut taxes and pensions', consisting of a noun phrase (Party X) and two verbal phrases (cut taxes, cut pensions), would be split into two units of analysis ('statements'):

Party X wants to cut taxes.

Party X wants to cut pensions.

Chomsky's idea of structural grammar constitutes one of the 'classic' linguistic theories (Huck and Goldsmith 1995). As his phrase structure model is not only valid for manifestos, apart from including other countries in the analysis it is also possible to apply this unitizing strategy to any other kind of texts such as media reports, speeches, or transcribed TV debates. Thus it provides a foundation for comparing over different sorts of political texts, time, and countries.

After an intense process of training AUTNES coders unitize the grammatical sentences in the manifestos into kernel sentences. These kernel-sentences – termed 'statements' – constitute the units of analysis. With one statement including only one issue we expect to obtain valid data, as the strict rules derived from Chomsky's syntax grammar make sure that the units of analysis are independent from the later coded issues. Furthermore the fixed rules of unitizing should lead to high inter-coder reliability. To test this, each manifesto is unitized twice. Table 1 shows the reliability scores of the unitizing procedure for the Austrian manifestos from 2002 to 2008:

Table 1   Inter-coder reliability of the unitizing procedure

Party	2002	2006*	2008
Social Democratic Party (SPÖ)	0.84	0.89	0.91
People's Party (ÖVP)	0.84	0.92	0.88
Freedom Party (FPÖ)	0.84	0.91	0.90
Greens	0.89	0.85	0.90
Alliance Future of Austria (BZÖ)	-	0.93	0.86
Liberal Forum (LIF)	0.77	-	0.91

*Note: Figures are Krippendorff's Alphas for the number of statements extracted from each sentence by two independent coders; * data for 2006 based on random samples of 10 % taken from the manifesto text rather than the whole manifestos.*

The results display excellent overall agreement, with only one case closely missing the conventional benchmark of 0.8. In order to produce a single set of statements that represent the starting point for further coding, inter-coder disagreements need to be resolved authoritatively by a judgement call among all researchers in the team according to the stated unitizing rules.

Relating actors to issues

In a second step the statements derived from the original manifesto texts are coded. The AUTNES coding scheme distinguishes between three different types of statements, depending on their content: (1) The actors' position towards an issue (*actor–issue statements*), (2) the relationship between actors (*actor–actor statements*), and (3) statements describing the external circumstances in a neutral and objective way (*reality statements*).

In all cases the actor – what Kleinnijenhuis and Pennings term the 'subject' – positions herself with respect to an object that can either be a policy issue or another actor. In both cases subject and object are linked with a numerical value that indicates the direction of the relationship. This 'predicate' takes on the values -1, 0, or 1, with a positive value representing the approval of an issue position respectively a positive relationship towards another actor, while -1 stands for the rejection of an issue or the subject criticizing the object (Kleinnijenhuis and Pennings 2001, 169; Dolezal 2008, 68). Theoretically it is also possible that the actor talks in a rather neutral way about an issue or simply describes objective realities. In both cases the predicate takes on a value of zero. In order to distinguish between *neutral positions* (that are included in the later analysis of the parties' policy position) and *reality statements* (that only contribute to the issues' saliency), we code an indicator variable ('reality statement').

The differentiation between the different types of statements offers a number of advantages when it comes to data analysis: Scholars interested in the parties' positions towards an issue resort to the first type of statements, the *actor–issue statements*. Here the numerical value indicates the parties' relation towards the coded issue and provides the basis for calculating policy positions.

On the other hand, the dataset also provides an analytical basis for estimating the issues' saliencies for each party as well as in the overall campaign: As an issue is coded not only for the first type of statements but also (whenever observable) for *actor–actor statements* as well as for all *reality statements*, researchers may revert to all three types of statements from which they derive the categories' relative frequencies.

Actor–actor statements are recorded whenever an actor talks about another. These data provide additional value when it comes to an analysis of party competition: On the basis of such statements researchers can calculate the relative frequency by which parties mention their competitors or their own candidates as well as about the positive (praise) or negative

(attack, criticism) relationship between these actors. Moreover, we record the issue that the subject actor refers to in his attack or praise of another actor.

Thus in the first place the AUTNES manifesto coding provides scholars the same type of information as the CMP manifesto coding, but then extends considerably beyond that. Due to the relational method of content analysis it separates the issue coding from the actor's directional position. Hence AUTNES coding is not bound to saliency theory of party competition and therefore offers researchers the basis for a much wider range of analyses. In contrast to the CMP the AUTNES approach does not rule out the possibility that parties directly confront each other on each issue.

Categorizing issues

When it comes to coding, establishing a list of issues certainly is the most challenging part: It is required to be comprehensive and needs to capture the parties' very specific statements as well as commonplaces. Moreover, to provide for a longitudinal perspective a coding scheme has to be open to issues coming up in the future – for example future EU treaties. On the other hand, however, manual coding requires a parsimonious list of issues that is manageable for human coders. So when establishing an issue list we were first and foremost faced with the trade-off between comprehensiveness and manageability.

In order to fulfil the task of comprehensiveness we created a list of issues consisting of over 650 different issues that include broad labels such as 'economic growth' as well as very specific ones, for instance, 'VAT' or 'mandatory labelling of GMOs'. Thus it is possible to capture the parties' positions at about the same level of specificity at which they are expressed by the parties themselves and to trace back the scaled issue position's context later on. Also, the loss of information that is inherent in any content analysis, is mitigated by using more specific issues.

On the other hand these different levels of specificity not only back the goal of comprehensiveness but also support the idea of practicability: The wording of the individual issues is close to the general linguistic usage, e.g. 'unemployment' or 'tuition fees' instead of 'labour market' or 'education'. So coders spotting a keyword in the coded statement can carry out a targeted search within the issue list which in most cases leads to the appropriate coding category. Consequently, despite a rather substantial list of issues the AUTNES coding remains manageable for human coders.

Such a procedure partly releases coders from assigning specific issues to broader categories which accelerates the coding and also enhances its reliability. The regrouping of issues into broader categories is subsequently done by experienced researchers who used their 'collective wisdom' and constructed a system of categories based on theory that can be used in several analyses. The decisions that lead to the individual broader issue categories are documented carefully. Researchers thus can either adopt these categories or adapt the scheme to their individual research purposes. While any coding scheme allows such adaptation, ours comes with the huge advantage that such changes would not require starting all over again with the coding.

In a relational method of content analysis as it is applied here, the parties' policy positions are recorded by the predicate variable and the issues' saliency.[9] Thus the wording of most of the issue labels in the coding scheme is not only similar to general usage of language but it is also kept non-directional – e.g. 'immigration' instead of 'pro-immigration' and 'anti-immigration'. In contrast to other coding systems we therefore do not have to double (positive vs. negative statements) or even triple (positive, negative and neutral statements) our categories when it comes to parties adopting different positions on an issue that has the potential to be equally salient to all of them.

With regard to the jurisdiction of the European Union we include several issues concerning EU treaties and policies such as 'Common Foreign and Security Policy' in our list. However, it is possible that with regard to specific policy areas there is one party that calls for enlarged EU competencies while a second one wants to maintain it under the nation-states' jurisdiction. Here, although both claims concern one and the same issue, it is critical for the analyst's ability to distinguish between the parties' intended difference in European integration policy. As we want to keep the issue list as short as possible and thus intend to avoid doubling a relevant percentage of the issues, we created a dummy variable by which coders differentiate between requests upon the EU's and the nation states' competencies.

Our coding scheme is structured into three hierarchically nested levels, which we name *issue categories* (level 1), *issue sub-categories* (level 2), and *issues* (level 3). Coders are trained to allocate each statement into one of the more than 650 issues on level 3. As human coders

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[9] Note that we incur some loss of information here since all policy statements are simplified to a trichotomy of positive, neutral, or negative. The difference between demanding a two- and a four-percent-cut in VAT, for instance, is lost. A perfect positional representation of party policy would take such information into account. However, this would also require complete, extremely precise, and quantifiable information from all relevant parties about a vast array of very specific issues. While most manifestos are typically rich in detail, they do not provide such an all-encompassing picture of party policy.

cannot be expected to memorize all 650 categories, these fall into one of the 99 issue sub-categories which again belong to one of the 15 level-1-categories. This hierarchically structured coding scheme enables coders to locate the statement in one of the 15 issue categories first and then feeling their way forward to the sub-categories where they should find the most appropriate coding category.

Coders are allowed to come up with new issues by simply adding them to the list when coding the manifestos.[10] When creating a new issue, coders should also suggest the appropriate issue category and sub-category. Later the AUTNES researchers collectively decide on a definite inclusion of the new issue in the existing list. Thus our system of issue categories always matches the texts to be coded. As a consequence, it is flexible enough to adequately represent future contents of party competition or, when applied to old documents, contents that have withered away long ago. It is thus suitable for longitudinal analyses and for being applied to other types of text. To be sure, the benefit of flexibility comes at a cost in terms of consistency over time. Yet, as the alternative would be to stick with a given scheme even when new and highly salient issues arise, this trade-off is worth making. Also, it should be noted that newly created issues thus far represent only a tiny fraction of the coded material (typically below one percent).

As for the unitizing, for the manifesto coding we rely on a number of human coders that after an intense training process are able to accomplish this task. To provide not only valid but also reliable results, our coding is conducted by two coders each of whom works independently and codes the entire manifesto. Table 2 presents the average reliability scores across parties per year. It is obvious that coder reliability increases as we move from the very specific issue items (Level 3) to the broad policy areas on Level 1. In other words, coders may sometimes disagree as to whether a statement should be coded, for instance, under 'trade unions' or 'collective bargaining', but agree about the superordinate categories (e.g. 'employees' on Level 2 and 'economy' on Level 1). Applying Krippendorff's benchmark of 0.8, it can be concluded that our initial coding results (i.e. before checking and resolving inter-coder differences) are highly reliable already at the intermediate level of our hierarchical issue coding scheme. Here, using issue categories which are close to the language of the coded texts is important, as it is to have simple text units from the unitizing process. Also, we work with experienced coders over an extended period of time.

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[10] However, this is only a last resort in case a statement could not be validly coded into one of the existing categories.

Table 2   **Inter-coder reliability at three levels of the coding scheme**

Year	Level 1 (15 categories)		Level 2 (90 categories)		Level 3 (650+ categories)	
	Mean	Range	Mean	Range	Mean	Range
2002 (n=5)	0.85	0.81–0.90	0.80	0.77–0.83	0.69	0.64–0.72
2006 (n=5)	0.88	0.81–1.00	0.84	0.77–1.00	0.69	0.63–0.74
2008 (n=6)	0.86	0.85–0.89	0.80	0.77–0.82	0.68	0.65–0.74

Note: figures are Krippendorff's Alphas for two independent coders. The levels refer to our system of categories. The actual coding is done at level 3 (see the main text).

In order to produce the final data set, the two sets of codes are merged into an authoritative version with the full AUTNES manifesto research team making the final decision on cases where the coders disagree.

Additional variables

Apart from coding actors and issues the AUTNES manifesto data includes several additional variables that enable an even deeper analysis of party competition: the parties' record references, their justifications for their policy positions, the actors' characteristics, and policy pledges. However, as these variables are additions to the basic manifesto coding, we provide just a short outline here but will not come back to these extra variables in subsequent sections of the paper.

Given the importance of retrospective voting (see e.g. Fiorina 1981), the 'record' variable distinguishes between retrospective and prospective statements. Moreover, the coded value indicates the level to which the parties' record relates: The national level, the international level (e.g. the European Union), or the Land level. A fourth category indicates the 'historic' record, e.g. a parties' reference to its achievements decades ago. The record variable is coded for subject and object actors. It is recorded for each party–issue relation (*actor–issue statements* as well as *actor–actor statements* containing an issue reference), which makes it possible to draw conclusions about the parties' strategic employment of their past performance or their opponents' failures.

Parties not only differ with regard to their policy positions and the emphasis they put on an issue, but also with respect to how they justify the issue positions they adopt. Hence for each issue the 'justification' variable records the arguments parties use to state a reason why they

position themselves the way they do. Here we distinguish between 10 different categories, including economy, welfare (expansion and retrenchment), environment, education, security, ethnic-national, religious, or universalistic. Thus we can distinguish parties not just with respect to their declared policy positions but also with regard to the arguments the actors use to justify their stances.

Voters base their decisions not only on pure policy positions but also draw on their perceptions of the competitors' public appearance (e.g. Miller and Shanks 1996; Lewis-Beck et al. 2008; Funk 1996). Here our dataset includes the so-called 'characteristics' variable: It is coded for each actor – subject as well as object actors – and indicates the specific characteristics ascribed to the coded individual or organisation, distinguishing between 'competence', 'management', 'character', and 'appearance'.[11] So from the 'characteristics' variable it is possible to draw conclusions on the parties' attempts to influence their own as well as their challengers' public images. Our dataset is the first one to include these new variables and therefore offers a great potential for addressing new research questions empirically.

Finally, the AUTNES scheme also records concrete and testable pledges, thus linking research on party competition to the party mandate literature (Costello and Thomson 2008; Royed 1996).

Connectivity with other data

An integrated election study such as AUTNES requires not only valid and reliable data but depends on the connectivity of the data produced. So it should not only be possible to analyse and to compare the manifestos across parties and time but to connect the data with other data gathered in the course of an election study and beyond.

As the unitizing follows a standardized procedure according to fixed grammatical rules, it is possible to adapt the method for the analysis of other written documents. Moreover, as Chomsky's phrase structure model rests on the idea of a universal grammar (Chomsky 1957), it is possible to apply the unitizing procedure to political texts written in other languages.

Our coding scheme relies on a relational method of content analysis that is not limited to manifestos but can be easily adapted to a variety of political documents including parties'

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[11] To be sure, actors' characteristics are far and few between in election manifestos. Yet, their inclusion is also due to the integrated framework of AUTNES.

press releases or party leaders' statements in the media. Moreover, the specificity of the scheme of issue categories allows for comparison with other data sources (e.g. voter or candidate surveys) at any level of aggregation.

Empirical results: cross-validation and comparisons

In order to validate our approach and demonstrate its ability to connect with other data sources this section presents the results from an analysis of the manifestos for the 2002, 2006, and 2008 parliamentary elections in Austria. We choose these three years to maximize comparability with other sources of data on party positions and issue saliencies. The analysis covers 16 manifestos issued by six parties – the Social Democratic Party (SPÖ), People's Party (ÖVP), Freedom Party (FPÖ), Greens, Liberal Forum (LIF), and Alliance for the Future of Austria (BZÖ) – in 2002, 2006, and 2008.[12]

While the aim of our approach to manifesto analysis is broader than to simply reproduce the saliency and position estimates that could be generated with less time- and resource-consuming methods, cross-validation is still necessary to assess the plausibility of our results. In order to get maximum information as to the validity of our data, we opt for a comparison with a wide range of external data sources.

What is more, we draw these external data from the four most common methodological approaches to the measurement of party policy positions: the analysis of manifesto content (by human coders and computer algorithms), surveys among experts and surveys of party elites. Also, we present data on different levels of aggregation: a general left–right scale, a two-dimensional mapping of the policy space, and a selection of very specific issue positions that allow for easy comparison with a wide range of other data sources (e.g. voter surveys or news media content). Yet, before we look at positional estimates, we first present a validation of the saliency measures derived from our manifesto analysis.

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[12] The BZÖ did not exist in 2002; the LIF did not run in 2006.

Issue saliencies

In order to validate our measurement of issue saliencies from election manifestos, the AUTNES data are merged into 15 policy areas and compared to a plausible equivalent constructed from aggregating each CMP category to one of these areas (see Table 3).

Table 3: Issue saliencies

| AUTNES policy area	Matched CMP categories
Constitutional issues	202, 203, 204, 301, 302, 303
Defense	104, 105
Education	502, 506, 507
Environment	416, 501
Europe	108, 110
Foreign policy	101, 102, 106, 107, 109
Infrastructure	411
Labour vs. capital	402, 701, 702, 704
Multiculturalism	601, 602, 607, 608, 705
Protest	304, 305
Regulation	401, 403, 404, 406, 407, 409, 412, 413
Security	605
Social values	201, 603, 604, 606, 706
Taxes & services	410, 414, 503, 504, 505
Urban-rural	703

Note: The category 408 ('Economic goals') has been omitted from the analysis, since it cannot be clearly allocated to one AUTNES category. As it averages to only 0.77 per cent of all quasi-sentences across all cases, its impact on the results is negligible. The categories 103 ('Anti-Imperialism'), 405 ('Protectionism: Negative'), and 415 ('Marxist Analysis') are not present in the Austrian manifestos between 2002 and 2008.

To be sure, the comparison is necessarily rough given that not all CMP categories will fit perfectly into exactly one AUTNES policy area.[13] Yet, the correlation of the percentages of AUTNES statements and CMP quasi-sentences across the 15 policy areas in 14 manifestos[14] is quite remarkable at r=0.82 (N=210). Figure 1 depicts this relationship.

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[13] Specifically, there are several ways to allocate the CMP's economic categories within the AUTNES scheme, e.g. 409 ('Keynesian Demand Management') would reasonably fit into 'Taxes & services' as well as 'Regulation'.

[14] The number of manifestos drops to 14 since the CMP data set does not include the Liberal Forum's manifestos for the years 2002 and 2008.

Figure 1: Issue saliencies across 14 manifestos and 15 policy areas
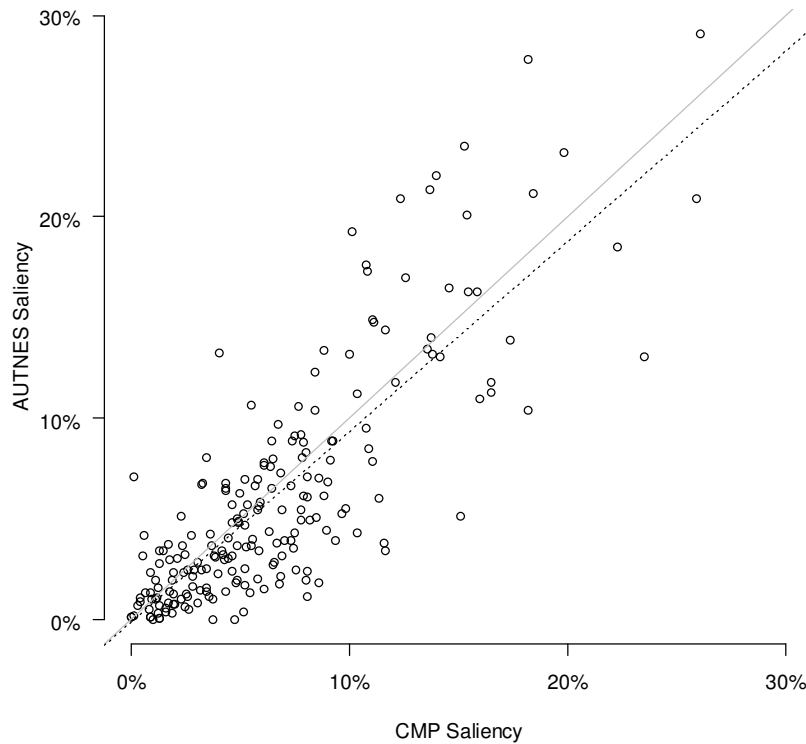

Note: Grey line indicates perfect proportionality, dotted line denotes regression line.

The general left–right scale

Deriving policy positions from the coding of single statements requires some method of aggregation. The AUTNES approach is straightforward. For the general left–right scale, for instance, we identify all predicate-issue-relations in our coding scheme that are 'left' (e.g. support for the expansion of the welfare state, stricter regulation of markets, more immigration, or equal rights for minorities) or 'right' (e.g. support for the privatization of state enterprises, tax breaks for corporations, greater police authority, or traditional family values). Clearly, the specifics of the operationalization of complex concepts such as political 'left' and 'right' will always allow for plausible alternatives; the AUTNES manifesto data provide the basis for that. Its flexibility coming from more than 650 smallest units as the building blocks for policy scales allows for the construction of alternative left–right scales (or, indeed, any other scale) that better suit alternative research purposes or theoretical concepts.[15]

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[15] The left–right scale presented here is designed to accommodate a broad range of policies from the following level 1 issue categories: taxes & services, labour vs. capital, regulation, social values, multiculturalism, security, education, and environment.

Figure 2: General left–right scale
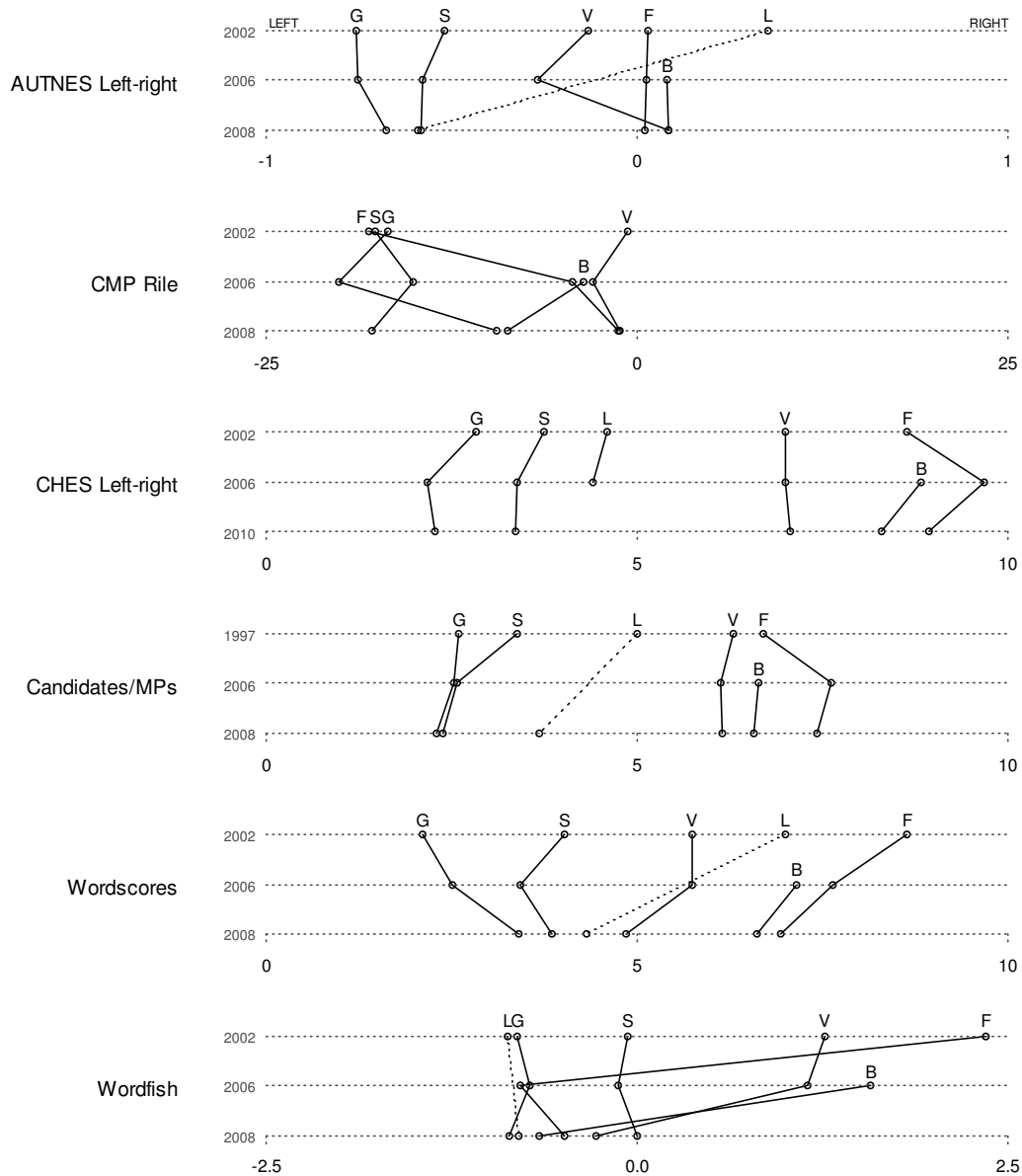
Note: CMP data taken from manifesto-project.wzb.eu; Chapel Hill expert survey (CHES) data from Hooghe et al. (2010); 1997 MP data taken from Müller et al. (2001); other data taken from AUTNES sources.

Once the decision of which issue categories to use for the left–right scale has been settled, one multiplies the predicate for each left statement by -1, and then averages the predicate values across all relevant (i.e. 'left' or 'right') actor-issue-statements.[16] The result is a value between -1 and 1. These values represent the left and right extremes of the scale, respectively. Figure 2 depicts the party placements along the general left–right scale from a variety of sources.[17] The

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[16] Note that this mode of aggregation, mathematically equivalent to (R–L)/(R+L), differs from the standard CMP procedure that applies the formula (R–L)/N. We thus follow the suggestions made by Kim and Fording (1998).
[17] The CMP RILE-scale has a theoretical range from -100 to 100. Empirically, however, most values are confined to a much smaller interval.

AUTNES-manifesto data show a relatively stable party landscape with an ordinal ranking of Greens-SPÖ-ÖVP-FPÖ-BZÖ[18] from left to right – a result that appears quite plausible, not only for those acquainted with Austrian politics but also when compared with other sources of party positional data.

Strikingly, the Liberal Forum appears as a right-wing party in 2002 but ends up in the left half of the scale in 2008. This clearly corresponds to an attitudinal shift in the left–right self-placements of the party's MPs and candidates between the late 1990s and 2008. Yet, it also needs to be taken into account that the LIF devoted 42 per cent of its 2002 manifesto to economic and 12 per cent to cultural issues, whereas both issue areas take up 20 percent of the party's manifesto in 2008. Given that liberalism typically combines pro-market economic stances with libertarian cultural views, a good part of the party's positional shift between 2002 and 2008 can be explained by a change in issue emphasis.

The AUTNES manifesto data correlate with these other sources at 0.68 (CMP, N=14), 0.80 (CHES, N=15), 0.86 (Candidates/MPs, N=16), 0.89 (Wordscores, N=16), and 0.28 (Wordfish, N=16), respectively. Interestingly, the AUTNES data thus show the least degree of agreement with the Wordfish and the CMP scores, even though all three are derived from the same documents.[19] However, the comparison across data sources leads us to believe that the stability in the AUTNES manifesto estimates provides a more accurate representation of the party landscape than the CMP data. To anyone acquainted with Austrian politics it appears implausible that the FPÖ is reported as the most left-wing party in 2002 (as the CMP data suggest). Similarly, the CMP data awkwardly position the Greens and the BZÖ (an FPÖ split-off) at almost the same location in 2008.

Two-dimensional policy spaces

While the left–right continuum may be a useful tool for voters and parties in their everyday communication (Fuchs and Klingemann 1990), in many cases it clearly represents an over-simplification of the space in which parties compete.

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[18] To be sure, most experts would place the FPÖ slightly to the right of the BZÖ.
[19] This correlation coefficient does not alter when excluding 'neutral' quasi-sentences from the calculation of the CMP's RILE scores.

Figure 3: Two-dimensional policy spaces
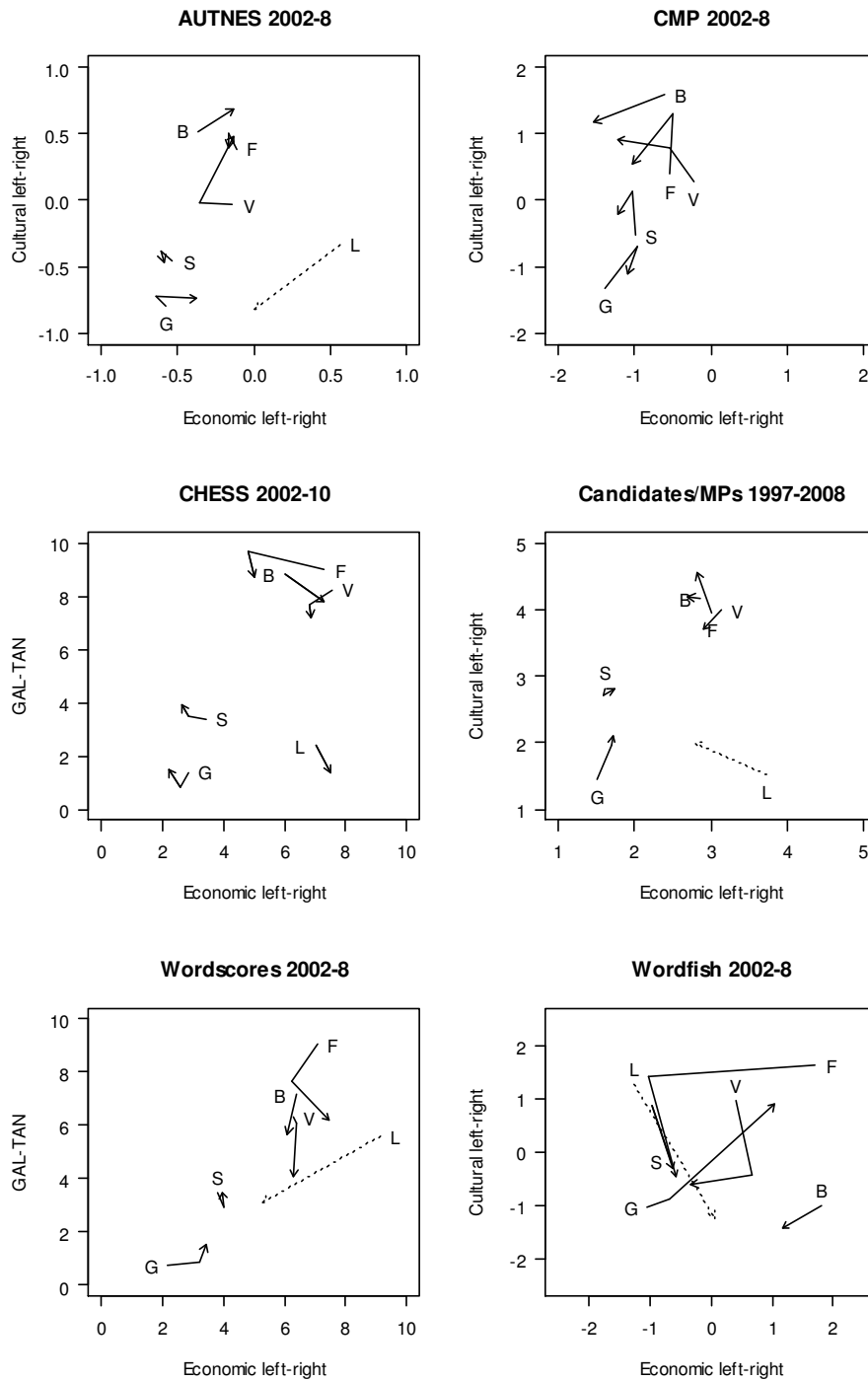
Note: Two-dimensional CMP scores derived according to the scaling procedure suggested by Linhart and Shikano (2009); question items in elite surveys capture attitudes towards market regulation, income equality, welfare spending, integration of migrants, same-sex unions, and punishment of criminals. CMP data taken from manifesto-project.wzb.eu; Chapel Hill expert survey (CHES) data from Hooghe et al. (2010); 1997 MP data taken from Müller et al. (2001); other data taken from AUTNES sources.

For many West-European party systems, there is indeed good evidence that there are at least two dimensions that structure the policy space, one pertaining to economic, the other to cultural questions (Kriesi et al. 2006, 2008). The flexibility of the AUTNES data makes it

easy to construct such scales representing individual policy dimensions, one representing an economic, the other a cultural left–right one. Figure 3 provides a comparison of two-dimensional spaces between 2002 and 2008. The lines track the movements of the parties in the policy space through 2008.

Again, there is considerable agreement between the different approaches. The Greens and the Social Democrats consistently end up in the bottom left corner, thus occupying the left end on both dimensions. The Liberal Forum clearly comes out at the more liberal end, both economically and culturally. The other three parties are placed right of center on both dimensions, though their exact placement varies quite a bit across methods, especially along the economic axis. This is reflected in somewhat weaker correlations between the AUTNES economic scales and the other data sources: a mere 0.32 for the adapted CMP scores, 0.72 for the expert survey estimates, 0.87 for the elite surveys, and 0.84 and 0.04 for the Wordscores and Wordfish estimates.

In contrast, the cultural scales correlate highly (values between 0.81 and 0.95, except for Wordfish: 0.07). While there thus is some disagreement as to the 'correct' party placements we can still conclude that the two-dimensional AUTNES estimates are reasonably valid, albeit that there is greater consensus as to the placement of parties along the cultural dimension than there is agreement regarding economic policy. The lower correlations for the economic dimension may also be due to the fact that the variation along all economic scales is consistently lower across data sources than on the cultural scales while measurement error should be similar in size.

For all three policy scales (general, economic, and cultural left–right), the AUTNES estimates outperform the CMP scores in terms of correlations with elite and expert surveys. To be sure, expert survey data are far from perfect (Budge 2000), as they are often based on only a handful of responses for small countries such as Austria, and are generally not suitable for all purposes (e.g. they cannot be used to explain government formation if experts in their responses take parties' coalition behaviour into account). Yet, compared to manifestos they are less prone to be biased by cheap talk and the use of policy rhetoric as a strategic device. To find the AUTNES manifesto estimates in high agreement with expert survey data thus gives particular credibility to the estimates produced.

More specific policy scales

Spatial representations of policy are theoretically possible at almost any level of abstraction. Typically, however, party placements are presented as aggregate measurements, comprising – as in the case of the AUTNES manifesto data – observations from a large number of lower-level categories for each estimate. While such practice may serve some research purposes well, it constitutes a very crude approach in other circumstances.

Figure 4: Criminal punishment (soft vs. harsh), AUTNES data
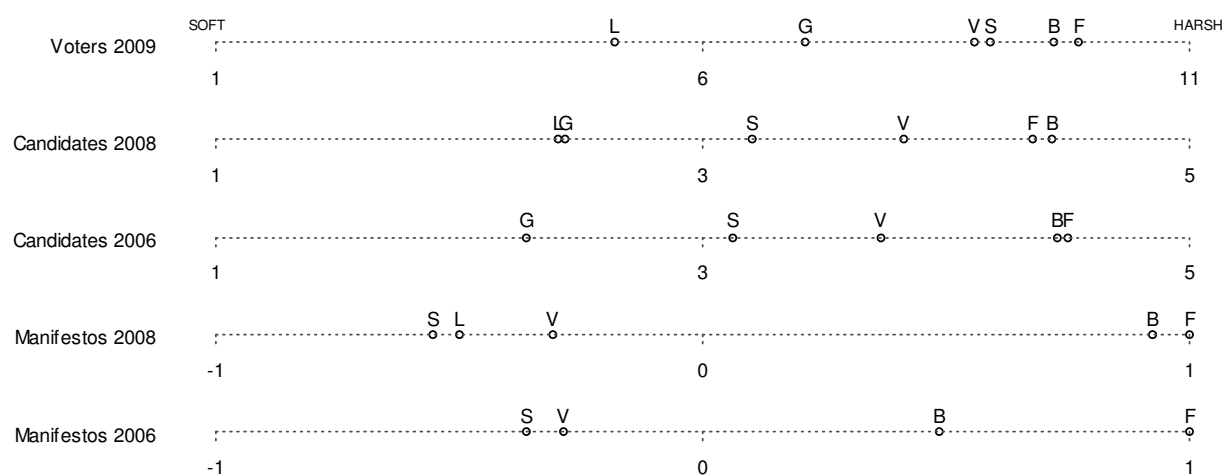
Note: The Greens made no statement about criminal punishment in their 2006 and 2008 manifestos.
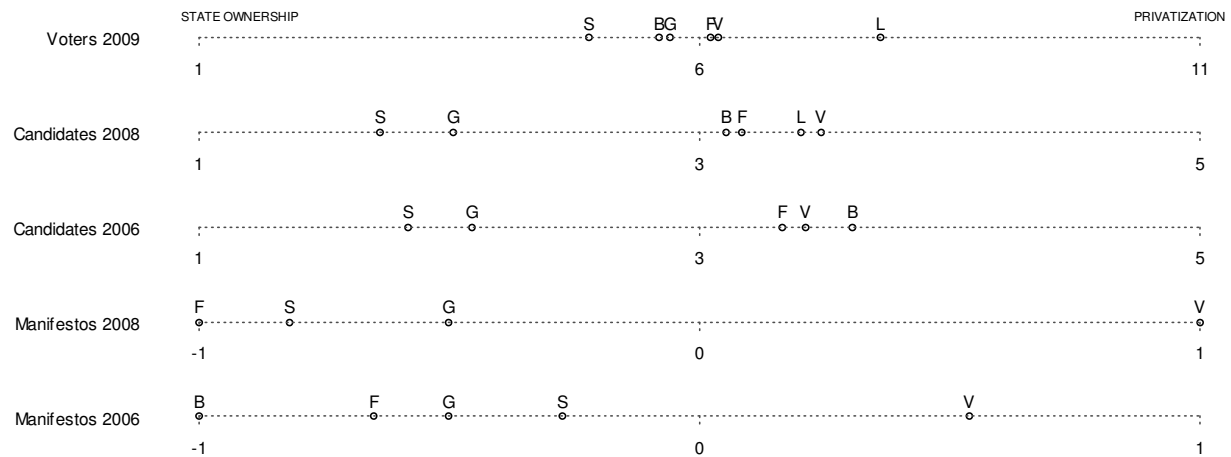
Assume, for instance, that a researcher wants to compare party positions on very specific issues to question items in a voter or elite survey. The fine-grained nature of the AUTNES coding procedures easily allows for the construction of policy scales at such a low level of abstraction.

To provide an example, Figure 4 presents data from several AUTNES sources on attitudes towards criminal punishment, where the manifesto estimates refer to all statements about issues such as the duration of prison sentences, the merits of preventive custody, or extrajudicial settlements. The voter and candidate surveys reflect agreement or disagreement with the statement that criminal offenders should face harsher punishment. The manifesto data display a divide between the major parties (SPÖ, ÖVP) taking a moderate to soft position and the populist right (FPÖ, BZÖ) advocating tough measures against criminal offenders.

Figure 5 provides another example: party positions on the issue of state-ownership of corporations vs. privatization. Remarkably, the manifesto data show the populist right-wing

parties (BZÖ and FPÖ) join the Greens and the Social Democrats on the left end of the scale, whereas their candidates exhibit a center-right stance and voters gravitate towards the center.

Figure 5: Ownership of corporations (state vs. private), AUTNES data

	STATE OWNERSHIP		PRIVATIZATION
Voters 2009		S BG FV L	
	1	6	11
Candidates 2008	S G	B F L V	
	1	3	5
Candidates 2006	S G	F V B	
	1	3	5
Manifestos 2008	F S G		V
	-1	0	1
Manifestos 2006	B F G S	V	
	-1	0	1

Note: The Liberal Forum and the BZÖ made no statements about state ownership in their 2008 manifestos.

While it is obvious that party and voter placements are not identical across sources, the ordinal rankings of the parties are, with the exceptions noted above, broadly comparable. Also, one needs to take into account that the uncertainty associated with position estimates rises as the number of issue-related statements in a manifesto decreases (Benoit et al. 2009). Yet, while the trade-off between higher specificity and lower uncertainty must always be acknowledged, the AUTNES scheme allows researchers to choose virtually any point along this continuum.

Conclusion

In this paper we have presented our approach to the analysis of political parties' manifestos in their electoral context. In so doing, we have aimed at realizing two goals. First, our aim was to conceptualize manifesto analysis in a way that advances the empirical study of interactions in the nexus of parties, mass media, and voters. Second, our task was to find one way of how to avoid the problems in extant manifesto research that the contemporary debate on political text analysis has identified. Working from the challenges King et al. (1994) have stated for researchers who aim at good social science data, we have shown how our approach guarantees high-quality documentation, validity, reliability, and replicability. Responding to one more

specific challenge to manifesto research we have also shown how we ensure the theoretical neutrality of our data. Serving the goal of making our data most useful for the understanding of electoral democracy we have also put much emphasis to provide for the data's connectivity (i.e. providing opportunities to link the manifesto data precisely to other data, be it party placements derived from other sources or research strategies, other party communications, voter and elite opinions, and media reports, and the time-consistency of coding categories). Finally, we argued that coming to grips with these many challenges does not necessarily lead to an incomprehensible coding system.

Our cross-validations of party placements derived from AUTNES manifesto data with the main alternatives have revealed enough communalities to take the data as largely valid. The remaining differences can partly be attributed to differences in the real world phenomena studied and thus are not particularly relevant here. Put simply, party positions derived from party manifestos are the parties' manifesto positions and party positions derived from party elite opinions are party self-placements based on elite opinions. At the same time different concepts exist of what constitutes a 'party position' (Ray 2007). While some of the data sources may better express one definition of 'party position', other data may be more adequate to reveal another. With regard to the differences that have occurred with respect to other manifesto-based party placements, our results appear superior if checked for plausibility before the background of qualitative accounts of party competition.

Of course, our method of content analysis requires considerable resources compared to other methods. Therefore, sceptics may question whether the gains in precision justify the effort. We think it does. One the one hand better measured variables should lead to better results when employed in statistical analyses. On the other hand our approach provides greatly enhanced opportunities to investigate novel research questions on many core topics of political science including elections, parties, coalitions, and government policies.

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