Contents lists available at ScienceDirect

## **Electoral Studies**

journal homepage: www.elsevier.com/locate/electstud

# Measuring party positions and issue salience from media coverage: Discussing and cross-validating new indicators

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#### ARTICLE INFO

Article history: Received 7 July 2009 Received in revised form 1 December 2010 Accepted 1 December 2010

Keywords: Political party Media coverage Expert surveys Comparative manifesto project Convergent validity European integration

#### ABSTRACT

Recent studies have started to use media data to measure party positions and issue salience. The aim of this article is to compare and cross-validate this alternative approach with the more commonly used party manifestos, expert judgments and mass surveys. To this purpose, we present two methods to generate indicators of party positions and issue salience from media coverage: the core sentence approach and political claims analysis. Our cross-validation shows that with regard to party positions, indicators derived from the media converge with traditionally used measurements from party manifestos, mass surveys and expert judgments, but that salience indicators measure different underlying constructs. We conclude with a discussion of specific research questions for which media data offer potential advantages over more established methods.

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Electoral Studies

### 1. Introduction

Over the past twenty-five years, methodological research on the measurement of political parties' policy positions has been continually growing. This scholarly interest in developing new methodologies to locate political parties in policy and/or ideological spaces is motivated by the need to operationalize a range of new and fairly sophisticated theoretical models of political competition (Laver, 2001: 6). Some of these models are also concerned with issue salience, that is the relative importance of particular issues to some parties. The underlying idea is that party competition is not mainly a direct confrontation of opposing positions on the same issues, but that parties compete by emphasizing those issues on which they hold comparative advantages (e.g., Budge and Farlie, 1983). There is a wide variety of methods to generate data on party positions and issue salience, but one can draw a basic distinction between survey data and document-driven data (Keman, 2007: 77). Among the former, expert judgments are the typical example, among the latter, human coding of party manifestos is the dominant approach. Both have become standard techniques to estimate party positions and issue salience.

Despite the well-accepted conception in the literature that the mass media constitute the most important arena for public debates on politically relevant issues in present-day Western democracies (e.g., Bennett et al., 2004; Ferree et al., 2002), the media are still an underused data source in the study field of party politics. While media data have long been a primary data source in various other research areas over the past two decades (e.g., Earl et al., 2004; Ferree et al., 2002; Koopmans et al., 2005; Koopmans, 2007; Kriesi et al., 1995; Trenz, 2005; De Vreese, 2003), they have only recently been used to measure party positions and/or issue salience (Kriesi, 2007; Kriesi et al., 2008, 2010; Statham et al., 2010).

With regard to the literature on European integration, Mair (2006: 162) has lately compellingly argued that instead of 'crude but easily accessible data' provided by expert



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<sup>0261-3794/\$ –</sup> see front matter  $\circledcirc$  2010 Elsevier Ltd. All rights reserved. doi:10.1016/j.electstud.2010.12.001

judgments and party manifestos, there is need for 'a much more systematic, inductive, and largely bottom-up comparison of political discussions at the national level [...]'. It seems that data derived from media coverage are particularly well suited to do exactly this. In addition, they respond to a concern raised by Netjes and Binnema (2007: 42, 48) who ask for the cross-validation of traditional salience measures based on expert surveys and party manifestos with 'a 'harder' measurement of salience, utilizing content analysis of national and EP election campaigns in the printed media'.

Against this background, and following the lead of various scholars who have already cross-validated traditional approaches that measure party positions and issue salience from party manifestos, expert and mass surveys (e.g., Benoit and Laver, 2006, 2007; Marks et al., 2007; Netjes and Binnema, 2007; Ray, 2007), the aim of this article is to determine whether content coding of media coverage might be a valid alternative for the estimation of party positions and issue salience. Our aim is not to promote a new approach, but to discuss its key characteristics in comparison with manifesto and expert data and to investigate whether or not they measure the same underlying constructs. This is also of interest regarding the sometimes-evoked bias of media data and the question to what extent information that is reported in the media is distorted by journalists.

To this purpose, we concentrate on the issue of European integration for two reasons. The first more practical reason is that previous studies have focused on European integration (Marks et al., 2007; Netjes and Binnema, 2007; Ray, 2007), and this gives us the opportunity to put our empirical findings into perspective. The second more theoretical reason is that a growing literature is concerned with how national parties adapt to European integration (e.g., Marks and Steenbergen, 2004), and it is therefore important to think about the characteristics and comparative advantages of different indicators measuring party positions and issue salience in this particular policy field.

We proceed as follows. We start with a comparison of the main characteristics of data derived from media coverage, party manifestos and expert surveys. Next, we present two different approaches to the coding of media coverage, the core sentence approach and political claims analysis, and explain how they allow us to create indicators for party positions and issue salience. Then, we cross-validate these new indicators with more traditional ones to see whether or not they measure the same underlying constructs. In the concluding section, we offer a more analytical perspective and discuss possible research questions for which media data may provide advantages over the traditionally used expert judgments and party manifestos.

Before we start, we need to make clear what we *do not* address in this paper. We are mainly interested in the characteristics of the data sources themselves, not in the way data were collected or coded. For example, a source of contestation is that the coding of party manifestos relies on a priori fixed, thematic categories, which might become inappropriate over time. Yet, this is a problem related to a coding decision, but does not concern party manifestos as a data source. In fact, party manifestos could be recoded with a different coding scheme and recent advances

towards computer-assisted coding prove that this and other problems can be alleviated (e.g., Laver et al., 2003; Pennings and Keman, 2002).

Likewise, we ignore specific reliability problems because they are also more directly linked to the way the data are collected. Recent advances in computational content analysis have provided new ways for estimating party positions; most prominent are computer programs and scaling algorithms such as Wordscore (Laver et al., 2003) or Wordfish (Slapin and Proksch, 2008). In this respect, an important question is to what extent automatic-coding is superior to hand-coding in terms of efficiency but inferior in terms of validity, as humans probably better understand media messages. All these aspects are crucial and need to be addressed (and important work has already been done on these topics). For lack of space we however limit ourselves to the comparison of data sources. This is an important first step, as media data have so far never been systematically compared with other data sources that are used to measure policy positions and issue salience.

#### 2. Media data in comparison

In this section, we highlight the key characteristics of media data in comparison to party manifestos and expert surveys (see also Benoit and Laver, 2006: ch.3, Marks et al., 2007: 26-7).<sup>2</sup> As shown by Table 1, while all three data sources share some characteristics, each has its specificities. Most basically, the three sources produce different types of data. In contrast to expert judgments, data from media coverage and party manifestos can be considered 'objective' in the sense that they are based on written, publicly available documents and therefore allow for competing and replicable measurement. Yet, whereas manifestos mirror self-declared positions and issue emphases, defined by political parties themselves, media data provide information on party positions and issue salience in public debates, as transmitted by the media. In contrast to manifestos, political parties cannot fully control the content of mass-mediated public debates. On the one hand, the media intervene in the selection of political information and shape the public perception of party positions and issue salience. On the other hand, the salience of issues in the media is also determined by the agenda-setting strategies of other political actors and by exogenous events such as economic crises or natural catastrophes.

Second, regarding the *time scale*, it is possible to establish long time series with party manifestos and media coverage because both are document-based and can be analyzed retrospectively. For experts, in contrast, it is difficult to assess party positions and issue salience in the past, but some expert surveys have been replicated and provide estimates for subsequent years (e.g., Ray, 1999; Marks et al., 2007). As a consequence, all three data sources offer the possibility to track changes over time. Given that party manifestos are published at the beginning of an election campaign, they can

<sup>&</sup>lt;sup>2</sup> We do not discuss mass surveys in detail here, as they are of clearly minor importance in the literature and share almost all of the characteristics of expert surveys.

Table 1

	Media coverage	Party Manifestos	Expert surveys
Type of data	- Document-driven; mass-mediated	- Document-driven; self-declared	- Subjective; reputational
Time scale	- Data can be collected retrospectively;	- Data can be collected retrospectively;	- Difficult to collect data retrospectively;
	possible to establish long time series	data available as long time series	but some time series exist
	- Can trace short-term changes	- Can trace changes over a	- Data available for different points in
	(e.g., during election campaigns)	series of elections	time, but rather static
Presentation of party	- Party as composed of factions	- Party as a unitary actor, no information	- Party as composed of factions,
	and individuals, information	on intra-party dissent	information on intra-party dissent
	on intra-party dissent		(but not from individuals)
Costs	<ul> <li>Very time-consuming/</li> </ul>	- Somewhat time-consuming/	- Little time-consuming/
	personnel-intensive	personnel-intensive	personnel-intensive
Data coding	- Flexible coding of issues, but	<ul> <li>Flexible coding of issues, but</li> </ul>	- Much flexibility, data on any issue
	constrained to	constrained to what	can be gathered
	what appears in the media	appears in party programs	- Direct quantification on
	- Data aggregation necessary to	<ul> <li>Data aggregation necessary to</li> </ul>	structured scales
	generate indicators	generate indicators	
Separation of preferences	- Information on both preferences	<ul> <li>Information on party preferences</li> </ul>	- Information on both preferences
and behavior	and behavior; limited use	only; causal analysis possible	and behavior, not suitable for
	for causal analysis		causal analysis

Characteristics of data from media coverage, party manifestos and expert surveys.

trace changes over a series of elections, but they are not able to capture the dynamics of an election campaign. Therefore, they cannot measure short-term changes in issue positions or salience, and might miss important topics that come up in the course of or between election campaigns. Media coverage, in contrast, can be used to gather information over both shorter and longer periods of time (during and between election campaigns) as they provide information for each day on which a newspaper is published.

Third, the three data sources differ with respect to the way political parties are presented. Party manifestos are official, authoritative statements strategically designed to put a party in a positive light, meaning that they generally do not touch on sensitive issues. As a consequence, manifestos present political parties as coherent unities, and do not provide information on intra-party dissent. Expert and media data, in contrast, see political parties as organizations composed of factions and individuals, and therefore offer information on intra-party heterogeneity. Yet, while some expert surveys measure the degree of intra-party dissent, they generally offer no information on deviant (groups of) actors. Media data, in contrast, provide information on the party as such as well as on deviant groups or factions, and can even account for divergent positions of individual party members. Hence, not only are intra-party divisions made publicly visible, but the responsible actors can also be easily identified. Based on news value theory (e.g., Galtung and Holmboe Ruge, 1965), it might even be argued that the media are particularly interested in covering intra-party heterogeneity as conflict increases the newsworthiness of a message.

Fourth, while media coverage offers finer-grained measures with respect to temporal variations and internal dissent, this information comes with high *costs*. In fact, data collection and coding is much more time-consuming and personnel-intensive than in the other two approaches. To make valid and reliable statements about party positions and issue salience, a huge number of media items have to be coded. Media content cannot always be taken as reflecting the general opinion of a party – precisely because the media mirror intra-party controversies. This insecurity

can only be overcome with a large number of observations. This problem is aggravated by the need to code different media at a time. Newspapers, for instance, generally have a distinctive ideological orientation embodied in their editorial line, which might affect the selection of political information (e.g., Page, 1996). Therefore, it is advisable to account for several newspapers with different editorial profiles, and to code either a left-wing and a right-wing newspaper, or a qualitative newspaper and a tabloid. In this respect, empirical studies show that while the media accurately reflect political actors' positions in their coverage, the amount of coverage granted to different issues and actors varies depending on the type of media as well as on their editorial line (e.g., Hagen, 1993; Koopmans and Statham, 1999). This means that indicators of party positions derived from different media should be relatively similar, while indicators of issue salience are more likely to vary across different media.

Fifth, differences between the three data sources appear in relation to *coding*. All three sources offer much flexibility in the coding of issues, but expert surveys can gather information about any topic, even the ones that do not appear in media coverage or party manifestos. Technical issues, for instance, are unlikely to get reported by the media and internally disputed issues are typically not mentioned in party manifestos. In addition, expert surveys are a convenient source for direct quantification on structured scales. While experts can answer a simple question on whether a party is rather for or against the European integration process, positions on such general issues can hardly be found in the media or in party manifestos. These data sources rather contain positions on sub-issues such as monetary policy or EU enlargement, which have to be aggregated by the researcher into a more general indicator of party positions towards the European integration process.

A sixth and final point concerns the *separation of intentions and behavior* of political parties. Manifestos appear before national elections and convey strategic party declarations and preferences, as distinct from their actions. Manifestos therefore allow a clear separation of intentions/ declarations and actions, and can be used to evaluate the causal link between a party's intentions during the election campaign, and its behavior after the elections. Media data only partially allow for such a differentiation since both party intentions and party actions get reported in the media. Declared preferences and actual behavior are supposedly even less separated in expert surveys. In fact, expert judgments most probably rely on diverse sources of information and simultaneously account for simple rhetoric and actual behavior (e.g., Budge, 2000, see however Steenbergen and Marks, 2007 for a reply), making these data inappropriate for causal analysis (Marks et al., 2007).

The main characteristics of media data can be summarized as follows: On the one hand, they offer finer-grained measures with respect to temporal variations and internal dissent, and allow the analysis of how parties are presented to a larger audience in mass-mediated public debates. On the other hand, the collection of media data is more timeconsuming, the generation of indicators is more complicated than for expert data and, compared to manifesto data, media data only partly allow for a differentiation of party intentions and party actions. Since the three types of data are collected at different moments of the political process and based on different sources, one might wonder whether or not their respective indicators measure the same dimensions of party positions and issue salience.

#### 3. Approaches to the coding of media coverage

We briefly present two different approaches to the coding of media coverage: the core sentence approach (CSA) and political claims analysis (PCA) (see Kleinnijenhuis et al., 1997 for CSA and Koopmans and Statham, 1999 for PCA). Both use newspapers to generate indicators of party positions and issue salience and can be characterized as 'relational content analysis' (Kleinnijenhuis and Pennings, 2001: 163). Another commonality of these two approaches is that their unit of analysis is not the article but elements within articles, namely core sentences or political claims. Having two kinds of media data at our disposition, we will be in a better position to generalize our arguments and to make sure that our findings do not depend on specific coding methods.

The basic idea of CSA comes in the notion that the content of every written document can be described as a network of relationships between objects. To analyze party positions, for example, every relationship between 'political objects' (i.e., between a political actor and a political issue) that appears in the text is coded. Each sentence is reduced to its most basic structure (the so-called 'core sentence'), indicating only its subject (political actor) and its object (issue), as well as the direction of the relationship between the two. In substantive terms, such a core sentence represents an actor's opinion on an issue (see Appendix for more details and examples).

PCA has been developed out of the deficiency that protest event analysis is too 'protest-centric' and does not account for more routine and conventional action forms (Koopmans and Statham, 1999: 204–5). As a consequence, PCA is no longer exclusively focused on protest activities and social movements, but includes all instances of claimsmaking irrespective of the action form and type of actor. Especially with regard to positions, PCA shares many ideas of CSA while using a different vocabulary: 'claimant' instead of 'subject'; 'issue of claim' instead of 'object'. The specific vocabulary however indicates one crucial difference between the two methods. PCA is not simply interested in positions, but mainly in claims. Instances of claims-making must be the result of purposive strategic actions of the claimant and refer to an ongoing or concluded physical or verbal action in the public sphere (see Appendix for more details).

#### 4. Data and operationalization

Our media data based on CSA stem from the comparative research project 'National Political Change in a Globalizing World' (Kriesi et al., 2008).<sup>3</sup> This project studies party competition in the context of national election campaigns in six Western European countries (Austria, France, Germany, the Netherlands, Switzerland, and the United Kingdom) and covers, in each country, three campaigns from the 1990s and early 2000s, and one from the mid-1970s (for an overview, see Dolezal, 2008: 57). The research team content analyzed all articles (except for commentaries) related to the electoral contest or to politics in general for the two months prior to the four elections in one quality paper and one tabloid for each country.<sup>4</sup> The headlines, the lead and the first paragraph of the selected articles were coded sentence by sentence from a sample of issues in case of quality papers and from all issues in case of tabloids. Actors were coded according to their party membership, and represent a total of 36 different parties (for a list of parties per country, see Dolezal, 2008: 69–70). Issues were captured with a fine-grained, open-ended coding scheme and later aggregated into twelve broader issue categories, one of which is European integration. The direction of a relationship between actors and issues was quantified on a scale ranging from +1 to -1 (with three intermediary positions), and the *position* of a political party on Europe is therefore computed by averaging all core sentences involving this party and the issue of European integration. Issue salience is given by the frequency with which a given political party takes a position on European integration, relative to the total of its statements.

The comparative research project 'The Transformation of Political Mobilization and Communication in European Public Spheres' provides us with *media data based on PCA* (Koopmans and Statham, 2002).<sup>5</sup> In this project, political claims pertaining to agriculture, monetary politics, immigration, troops deployment, retirement and pensions,

<sup>&</sup>lt;sup>3</sup> This project was financed by the German Research Foundation (SFB 536 – Project 5C) and by the Swiss National Science Foundation (project no. 1214–68010.02).

<sup>&</sup>lt;sup>4</sup> The following newspapers were selected: *Die Presse* and *Kronenzeitung* in Austria; *The Times* and the *Sun* in the UK; *Le Monde* and *Le Parisien* in France; *Süddeutsche Zeitung* and *Bild-Zeitung* in Germany; *NRC Handelsblad* and *Algemeen Dagblad* in the Netherlands; *Neue Zürcher Zeitung* and *Blick* in Switzerland.

<sup>&</sup>lt;sup>5</sup> This project was financed by the European Commission in the context of its 5th framework program (HPSE-CT2001-00046). The Federal Office for Education and Research funded the Swiss part of this study (BBW 00. 0455). More information is available at http://europub.wzb.eu.

education, and European integration were analyzed in four newspapers – where applicable two quality papers, one regional paper, and one tabloid - in seven Western European countries (France, Germany, Italy, the Netherlands, Spain, Switzerland, and the United Kingdom) for the years 1990, 1995, 2000–2002.<sup>6</sup> These data are not tied to national election campaigns, but refer to political contestation in general. Based on a sampling scheme, articles in the international, national and economic sections of each newspaper were retrieved and coded in full length.<sup>7</sup> From this large dataset, we extracted all political claims by actors with a party affiliation on topics related to European integration. Overall, representatives from 60 different political parties are included in this dataset. Positions were coded on a scale ranging from +1 to -1, and we obtained our indicator of party positions by calculating an average for each party for the years 1995, and 2000-2002 respectively. However, we refrained from computing an indicator of issue salience for two reasons. First, and contrary to CSA. PCA codes each political claim only once. In other words, positions that repeatedly appear in one (or several) article (s) (in the same or two consecutive issues) are not duplicated, which tends to underestimate issue salience compared to other approaches. Second, political claims were coded with a closed coding scheme, and while some issue categories such as agriculture were narrowly defined, European integration was a very broad issue category. As a result. European integration was the most salient issue for (almost) all parties in all seven countries. While such an indicator can be validly used to compare the relative salience of an issue for different parties in the dataset, it cannot be used in comparison with other data sources.

We contrast party positions and issue salience derived from the media to measurements obtained from the more commonly used party manifestos, expert and mass surveys. Due to space limits, we only briefly present our operationalizations and refer to previous studies for more extensive information on the respective datasets. The European manifesto dataset (Budge et al., 2001; Klingemann et al., 2006) contains two EU related categories, with favorable and negative mentions to the EU, the general integration process, and specific EU policies. Following McDonald and Mendes (2001: 94), we retain a ratio measure and operationalize party positions as the percentage of positive statements relative to the total of positive and negative mentions of European integration. Given that the manifesto approach is based on saliency theory, all data entries are percentages (standardized by the total number of quasisentences in a given manifesto), and we obtain our indicator of *salience* by summing up the pro- and anti-EU scores (see Netjes and Binnema, 2007: 41).

To measure party positions and issue salience from *expert surveys*, we rely on data collected by Ray (1999) for the year 1996 and by the Chapel Hill group for the year 2002.<sup>8</sup> In both surveys, *party positions* are derived from experts' evaluation of the overall orientation of the party leadership towards European integration on a seven-point scale (ranging from 1 'strongly opposed' to 7 'strongly in favor'). *Issue salience*, for its part, is captured by a question asking experts about the relative importance of European integration in the party's public stance in the year of the surveys (5-point scale, ranging from 1 'no importance, never mentioned by the party' to 5 'the most important issue for the party').

To deduce party positions and issue salience from *mass surveys*, we rely on the European Election Studies (EES) from the years 1994 and 1999 (van der Eijk et al., 2002). To get a measurement of *party positions*, we resort to a question asking respondents to place the views of a list of political parties on a scale ranging from 1 'European unification has already gone too far' to 10 'European unification should be pushed further'. To tap *issue salience*, we rely on a question asking respondents to evaluate, on a four-point scale and for a list of parties, the importance of European integration as compared to other important topics in their home country.

As mentioned, our media data are available for fewer countries than the other data sources. To make the datasets comparable, we removed Switzerland from our analyses as it is not included in the expert and EES surveys. Given the small sample of countries we augmented the number of observations by focusing on two periods of time that were covered by all datasets: the mid-1990s and the beginning of the new century (see Table 2).

Another difficulty concerns the number of parties: in order to cross-validate indicators of party positions and issue salience, we have to make sure that composition effects do not distort our results. For this reason, we only include parties in our analyses that are part of all datasets. Table 3a lists all 31 parties that are included in cross-validations of CSA indicators, whereas Table 3b displays the 45 parties for the respective analyses with PCA indicators.

#### 5. Cross-validating indicators from media coverage

In order to test whether media data measure the same underlying constructs as manifesto, expert and mass survey data, we cross-validate our indicators. Generally speaking, 'validity is concerned with whether a variable measures what it is supposed to measure' (Bollen, 1989: 194). Like others before us (e.g., Marks et al., 2007; Netjes and Binnema, 2007; Ray, 2007), we assess indicators of party position and issue salience in terms of their *convergent validity*, which concerns the comparison of alternative measures of the same concept (Ray, 2007: 12). Valid measures of the same underlying construct are empirically associated and are therefore similar and 'converge'. Two

<sup>&</sup>lt;sup>6</sup> The following newspapers were chosen: Le Monde, Le Figaro, Ouest France, L'Humanité in France; Süddeutsche Zeitung, Frankfurter Allgemeine Zeitung, Leipziger Volkszeitung, Bild-Zeitung in Germany; La Repubblica, II Corriere della Sera, Il Mattino, La Nazione in Italy; De Volkskrant, Algemeen Dagblad, Leeuwarder Courant, De Telegraaf in the Netherlands; El Pais, Abc, La Vanguardia, El Mundo in Spain; Neue Zürcher Zeitung, Journal de Genève/ Le Temps, Blick, Le Matin in Switzerland; The Guardian, The Times, The Scotsman, The Sun in the United Kingdom.

<sup>&</sup>lt;sup>7</sup> For more information on sampling schemes and coding rules, see Koopmans (2002).

<sup>&</sup>lt;sup>8</sup> These datasets are available from http://www.unc.edu/%7egwmarks.

Table 2	
Time periods for each	country and dataset.

Dataset	Countries	Period 1	Period 2
CSA, <sup>a</sup> Manifestos	Austria	1999	2002
	France	1995	2002
	Germany	1998	2002
	Italy	1996	2001
	Netherlands	1998	2002
	Spain	1996	2000
	United Kingdom	1997	2001
PCA <sup>b</sup>	All countries	1995	2000-2002
EES	All countries	1994	1999
Experts	All countries	1996	2002

Abbreviations: Core Sentence Approach (CSA), European Election Studies (EES), Political Claims Analysis (PCA).

<sup>a</sup> Italy and Spain have not been included in the CSA dataset.

<sup>b</sup> Austria has not been included in the PCA dataset.

common instruments to assess convergent validity are correlation tests and exploratory factor analysis. While correlation tests enable us to observe whether indicators converge or not, factor analysis allows us in addition to discriminate among different underlying dimensions, and to show which dimension an indicator belongs to and how strongly it correlates with the respective dimension.

As there is no general standard to judge whether two indicators are closely related or not, comparisons with other, similar tests are the best way to assess our findings. We therefore consistently compare the results of our validity tests with those from Marks et al. (2007), Ray (2007), and Netjes and Binnema (2007). Of course, these comparisons have to be taken with a grain of salt: These studies partly use different countries and include additional indicators. Thus, we cannot exclude that different results between our and other studies are at least partly due to composition effects. Nonetheless, given the fact that we followed previous analyses as closely as possible, comparisons are useful as they allow us to put our findings in a broader perspective.

#### Table 3a

Parties included for comparison with CSA Indicators.

Countries	Period 1	Period 2
Austria	FPÖ, GA, SPÖ	FPÖ, GA, ÖVP, SPÖ
France	FN, PS, RPR, UDF	FN, PS, UDF, Verts
Germany	CDU, FDP	CDU, FDP, SPD
Netherlands	D'66, GL, PvdA, VVD	CDA, D'66, GL
United Kingdom	Labour, Tories	Labour, Tories

Abbreviations: Austria: FPÖ (Freedom Party of Austria), GA (The Green Alternative), ÖVP (Austrian People's Party), SPÖ (Social Democratic Party of Austria); France: FN (National Front), PCF (French Communist Party), PS (Socialist Party), RPR (Rally for the Republic), UDF (Union for French Democracy), Verts (The Greens); Netherlands: CDA (Christian Democratic Appeal), D'66 (Democrats 66), GL (GreenLeft), PvdA (Labour Party), SP (Socialist Party), VVD (People's Party for Freedom and Democracy); Germany: CDU (Christian Democratic Union), CSU (Christian Social Union), FDP (Free Democratic Party), Grüne (Alliance90/The Greens), PDS (Party of Democratic Socialism), SPD (Social Democratic Party of Germany); Italy: AN (National Alliance), FI (Forward Italy), LN (Northern League), PCI (Party of Italian Communists), RC (Communist Refounded Party); Spain: CiU (Convergence and Union), IU (United Left), PP (Popular Party), PSOE (Spanish Socialist Workers' Party); United Kingdom: Labour (Labour), LDP (Liberal Democratic Party), SNP (Scottish National Party), Tories (Conservatives), UKIP (UK Independence Party).

Tabl	e 3b
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Parties included for comparison with PCA-Indicators.

Countries	Period 1	Period 2
France	PS, RPR, UDF	PCF, PS, UDF, Verts
Germany	CDU, FDP, Grüne,	CDU, CSU, FDP, Grüne,
	PDS, SPD	PDS, SPD
Italy	FI	AN, FI, LN, PCI, RC
Netherlands	D'66, PvdA, VVD	CDA, D'66, GL, PvdA,
		SP, VVD
Spain	PP	CiU, IU, PP, PSOE
United Kingdom	Labour, Tories	Labour, LDP, SNP, Tories,
		UKIP

Notes: For abbreviations and full names of parties see Table 3a.

#### 5.1. Party positions

We begin with the cross-validation of indicators of party positions. Table 4 reports the correlations between the indicators from the various data sources: results for political parties included in the CSA dataset are shown on the lefthand side, and findings for political parties in the PCA dataset on the right-hand side. All coefficients are positive and highly significant. On average the indicators correlate at the level of respectively 0.639 and 0.601. This is clearly above the average coefficient of 0.531 in Ray's (2007: 19) convergent validity test. His analysis displays the highest correlations between the two perceptual measures of expert and mass surveys and between manifesto and expert data. In our analysis, we find the highest correlation between manifesto and expert data, too. In addition, and most importantly for our purposes, media indicators strongly converge with traditional measurements: CSA data are highly correlated with expert judgments, and PCA data with party manifestos.

As most indicators correlate at a high level and the strength of correlations does not depend on specific indicators, we can assume that there is no strong method effect. Moreover, we do not observe any important differences between the two media datasets. The indicators from different data sources seem to have a common structure and reflect the same underlying dimension. Our factor analysis confirms this assumption. Table 5 shows the rotated factor loadings of a principal components factor analysis based on the same indicators as in Table 4.

All indicators display very high coefficients that are similar to those in previous studies that applied the same method (Marks et al., 2007: 26; Ray, 2007: 20). The resulting factors explain respectively 74 and 70 per cent of the variance among these indicators, while 61 per cent of the variance is explained in Ray's (2007: 20) and between 67 and 73 per cent in Marks' et al. (2007: 26) factor analyses. In both factor analyses we get the highest factor loadings for manifesto data, followed by expert, media and EES data.

These results suggest that the media do not distort party positions. If we filter out editorials and journalists' own arguments and only look at the positions and claims that are reported–as has been done in both the CSA and PCA studies– there is no specific media bias. This finding confirms earlier results from the social movement literature, where content analysis of the press has a long tradition and where various studies concluded that press reports are generally accurate (Earl et al., 2004; Rucht and Neidhardt, 1998).

CSA cases		PCA cases					
	EES	Experts	CSA		EES	Experts	PCA
Experts	0.541*** (31)			Experts	0.643*** (45)		
CSA	0.401* (31)	0.714*** (31)		PCA	0.478*** (45)	0.592*** (45)	
Manifesto	0.654*** (31)	0.878*** (31)	0.648*** (31)	Manifesto	0.521*** (45)	0.650*** (45)	0.722*** (45)

Levels of significance: \**p* < 0.05, \*\**p* < 0.01, \*\*\**p* < 0.001 Abbreviations: Core Sentence Approach (CSA), European Election Studies (EES), Political Claims Analysis (PCA).

#### 5.2. Issue salience

We now test the convergent validity of different indicators of issue salience. Given that issue salience cannot reliably be measured with PCA data (see above), we concentrate on the cases included in the CSA dataset, and compare indicators from CSA, party manifestos, expert judgments and mass surveys.

Starting again with a correlation analysis, Table 6 shows that the coefficients are generally very low and statistically not significant. Compared to the different indicators of party positions, it clearly appears that salience indicators are much less correlated. The only exception concerns the correlation between salience measures from expert and manifesto data (see also Netjes and Binnema, 2007: 45).

To further assess whether these different measures really correspond to different underlying salience dimensions, we again conduct a principal components factor analysis (Table 7). The analysis shows that the salience indicators from expert, manifesto and EES data all load on the first component, which has an Eigenvalue of 1.757 and explains 44 per cent of the total variance. This component strongly resembles the findings of Netjes and Binnema (2007: 46), although the loading of the EES indicator is somewhat higher in their analysis. Most interestingly, however, is the fact that our salience indicator from media coverage loads on a second component. This confirms our first impression that the salience indicator from media data does not share a common structure with the other three measures, but captures a different dimension of issue salience. In other words, the convergent validity of the measurement of issue salience from media coverage is strongly put into question. This finding suggests two possible interpretations. On the one hand, it is possible that political parties stress different issues in their manifestos,

Tabl	e 5
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Convergent validity of	positions II:	factor analysis
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CSA cases		PCA cases		
	Factor 1		Factor 1	
Manifesto	0.939	Manifesto	0.869	
Expert	0.928	Expert	0.864	
CSA	0.807	PCA	0.836	
EES	0.741	EES	0.779	
Eigenvalue	2.942	Eigenvalue	2.807	
Explained Variance	74%	Explained Variance	70%	
N	31	N	45	

Notes: principal component analysis, varimax rotation Abbreviations: Core Sentence Approach (CSA), European Election Studies (EES), Political Claims Analysis (PCA). which are defined well ahead of Election Day, than during the final weeks of the election campaign. This can be explained by the dynamics of election campaigns that are not under the complete control of individual parties. On the other hand, it could be that the media use their leeway during the selection process of political information and put different weight on various issues than the parties themselves. This interpretation fits well into the abovementioned finding in the literature that the amount of media coverage dedicated to different issues and actors can vary depending on the type of media and the editorial line, whereas the reported issue positions of various political parties are generally very similar across different media (e.g., Hagen, 1993; Koopmans and Statham, 1999).

#### 6. Discussion

The aim of this article was to compare the emerging approach of content coding of media coverage with more traditional approaches to study party positions and issue salience. Regarding party positions, our cross-validations provide evidence for convergent validity for the indicators derived from different data sources. With respect to issue salience, however, we found that indicators from media data cannot be used interchangeably with indicators from party manifestos, mass and expert surveys, as they seem to measure different constructs. These findings suggest that there might be a media bias with regard to the *selection of topics*, but not regarding the *accuracy of content* that is reported.

Having established how media data relate to more traditional data, the next and more interesting question is in which situation media data are likely to be more appropriate than manifesto or expert data. We agree with Volkens (2007: 118) that the various approaches are complementary rather than opposed to each other. In our view, it strongly depends on the specific research question whether or not one particular method is preferable to the others for the measurement of party positions and issue salience.

Table 6
Convergent validity of issue salience I: correlations (N in parentheses).

CSA cases			
	EES	Experts	CSA
Experts	0.087 (31)		
CSA	-0.061 (31)	0.188 (31)	
Manifesto	0.352 (31)	0.622*** (31)	-0.071 (31)

Levels of significance: \*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.01 Abbreviations: Core Sentence Approach (CSA), European Election Studies (EES).

 Table 7

 Convergent validity of issue salience II: factor analysis.

CSA cases				
	Factor 1	Factor 2		
Manifesto	0.891	-0.195		
EES	0.463	-0.544		
CSA	0.150	0.845		
Experts	0.849	0.285		
Eigenvalue	1.757	1.125		
Explained Variance	44%	28%		
N	31			

Notes: principal component analysis, varimax rotation Abbreviations: Core Sentence Approach (CSA), European Election Studies (EES).

First of all, it can be argued that media data offer some advantages when the aim is to analyze how parties compete with each other. During election campaigns, the salience of a particular issue for a given party is likely to be heavily shaped by the agenda-setting strategies of other parties, the dynamics of public debates or by unexpected events such as a financial crisis or a natural catastrophe. Given that media data are sensitive to contemporaneous salience and short-term evolutions (see Netjes and Binnema, 2007: 42), they might be the most appropriate data source to explore such questions. By means of media data we are for example able to measure changes of positions or issue salience from one month to the other during an election campaign and to account for unexpected events and agenda-setting strategies of the media and of other parties.

Second, it can be assumed that *party-voter linkages* are best studied with media data. It is fair to assume that few people actually read party manifestos and that most know less about parties than experts (Kriesi et al., 2008: 66-67). Instead, it is likely that the way most individuals perceive political parties' positions and issue emphases is heavily shaped by what they read in the media. Yet, our correlation analyses (Tables 4 and 6) have shown that mass survey indicators are closer related to manifesto and expert indicators than to measures from the media. However, this comparison might be flawed because mass perceptions based on EES data do not refer to an electoral context. We therefore replicated our analyses with data from national election surveys that have been collected during the same election periods as CSA and manifesto data (results not shown here). But even then, public perceptions as measured by national surveys correlated at a higher level with manifesto than with media data. This finding suggests that most people tend to perceive a party's long-term strategy rather than short-term positions and issue emphases. The same seems to be true for experts: for both the salience and the position indicators, expert data correlates at a higher level with manifesto than with media data (see Tables 4 and 6). Thus, if most available indicators reflect long-term strategies of political parties, it is even more important to have alternative data that reflect the short-term dynamics of public debates.

Third, we contend that *party positions on sub-issues* and *intra-party dissent* can best be captured by media data. To be sure, some selected expert studies – such as the Chapel

Hill expert surveys that we used in this article – also offer data on sub-issues and intra-party dissent. However, as experts are asked to locate parties on sub-issues that are pre-defined by the researcher, they might miss important aspects of party competition. With media data, in contrast, party positions on sub-issues are assessed in an inductive way, as they emerge in the public debate. To examine such questions, therefore, the enormous and time-consuming coding effort may be justified by more detailed and balanced research findings. Some studies have already (at least partly) shown that diverging voices within a party and over sub-issues exist. For instance, analyzing party families in six Western European countries, Helbling et al. (2010) observe that the extremist parties at the right and the left generally strongly oppose the European integration process while the established Social democrats and conservative parties take a rather ambivalent position and are internally divided. Since European integration consists of economic, political and cultural projects, it has been argued and empirically shown that parties take diverging positions on these dimensions (see Marks, 2004: 241-343; Hooghe et al., 2004; Helbling et al., 2010).

In a next step, we would like to explore these and other research questions in order to gain further insights into the strengths and weaknesses of media data. Even though none of the various data sources that we have discussed in this article has a monopoly of truth, researchers should aim at specifying for which particular research questions some indicators are more appropriate than others.

# Appendix: Examples of core sentences and political claims

Here we like to give some illustrative examples of how core sentences and political claims look like on the basis of the following sentence: 'Party X supports the European Constitution but opposes EU accession of Turkey'. This grammatical sentence consists of two core sentences. While the subject is the same in both sentences, its object and direction change (see Table A1). It appears that a core sentence is always embedded in a grammatical sentence and that a grammatical sentence might consist of several core sentences. The basic structure of a political claim is very similar to a core sentence. However, since PCA is not simply interested in positions, but mainly in claims, simple attributions of attitudes or opinions are not coded. Accordingly our example of core sentences does not qualify as claim-making. It must become clear that the claimant has intentionally undertaken an action. Such intentions or actions are mostly indicated by verbs such as 'stated', 'demanded', 'criticized' etc. (Koopmans et al., 2005: 258). Accordingly, if we replace the verb in our example, the sentence would be coded: 'Party X decided to support the European Constitution but to oppose EU accession of Turkey'. Contrary to the logic of CSA, this grammatical sentence does not consist of two claims but of one claim with two issues (see Table A2). Depending on the specific research question, this claim might constitute one observation (with regard to the appearance of actors, for example) or two observations (with regard to an actor's positions).

## Table A1

Examples of core sentences.

Core sentence	Subject	Direction	Object
1	Party X	+1	European Constitution
2	Party X	-1	EU accession of Turkey

#### Table A2

Example of a political claim.

Claim	Claimant	Issue 1 (Direction)	Issue 2 (Direction)
1	Party X	European Constitution (+1)	EU accession of Turkey (-1)

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