

ONLINE APPENDIX

Analyzing Manifestos in their Electoral Context: A New Approach Applied to Austria, 2002–2008 (Research Note)

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1. Unitizing Procedure

The AUTNES unitizing process bases on Chomsky's (1957; 1965) idea of a phrase structure model. According to Chomsky, a grammatical sentence consists of one or more so-called kernel sentences, i.e. the shortest possible but nevertheless complete grammatical sentence.

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 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.¹

Unitizing: Examples

Chomsky's theory provides the basis for the grammatical rules along which the AUTNES coders unitize the manifesto's sentences into statements. The following examples are derived from the Austrian parties' election manifestos in 2006 and 2008:

Example 1: Austrian People's Party (ÖVP) 2006

Sie [Anm.: die ÖVP] setzt sich dafür ein, dass Österreichs erfolgreiche Wirtschaft, die verlässliche soziale Sicherheit, die guten Bildungs- und Ausbildungschancen, gesunde Lebensmittel und eine intakte Natur auch für die Zukunft gesichert sind. (ÖVP 2006: 2)

Translation:

The Austrian People's Party (ÖVP) commits itself to securing for the future the success of Austria's economy, a reliable welfare regime, opportunities in learning and education, healthy food products and a healthy environment. (ÖVP 2006: 2)

¹ For further details see Müller et al. (2012).

This sentence contains seven nominal phrases (as underlined: the party's name and each of the six policy proposals). Therefore from this sentence we derive six verbal phrases and consequently six kernel sentences:²

The ÖVP commits itself to securing for the future the success of Austria's economy.

The ÖVP commits itself to securing for the future a reliable welfare regime.

The ÖVP commits itself to securing for the future opportunities in learning.

The ÖVP commits itself to securing for the future opportunities in education.

The ÖVP commits itself to securing for the future healthy food products.

The ÖVP commits itself to securing for the future a healthy environment.

In order to facilitate coding, we now bring these kernel sentences into a standardized format – our statements. In doing so, we further reduce the content of information to its core, in the present example the party's issue position:

Statement 1: ÖVP for success of Austria's economy

Statement 2: ÖVP for a reliable welfare regime

Statement 3: ÖVP for opportunities in learning

Statement 4: ÖVP for opportunities in education

Statement 5: ÖVP for healthy food products

Statement 6: ÖVP for a healthy environment

Since all of these statements only include an actor and the actor's issue position, these statements belong to the type of so-called *actor–issue statements*.

Example 2: Green Party 2008

Der Umwelt geht es dank SPÖ und ÖVP nicht gut in Österreich. (Greens 2008: 7)

Translation:

Thanks to SPÖ [the Social Democrats] and ÖVP [the Austrian People's Party] the Austrian environment is not in a good condition. (Greens 2008: 7)

² Please note that although it includes the noun 'future', the phrase 'for the future' is regarded as a specification of the People's Party's plans. Therefore it does not constitute an individual kernel sentence.

Here we have three noun phrases with the nouns SPÖ, ÖVP, and the Austrian environment respectively.³ Following Chomsky's phrase structure model, we would obtain the following kernel sentences:

Thanks to SPÖ the Austrian environment is not in a good condition.

Thanks to ÖVP the Austrian environment is not in a good condition.

These kernel sentences would indicate a negative position of SPÖ and ÖVP towards the Austrian environment. Yet these parties do not position themselves but are blamed for the allegedly poor state of the Austrian environment by the manifesto's author, the Green party. When adding the sentence's source, we would obtain the following sentences:

The Green party states that thanks to SPÖ the Austrian environment is not in a good condition.

The Green party states that thanks to ÖVP the Austrian environment is not in a good condition.

From these we derive the following standardized statements that include the actor criticizing – in our example the Green party –, the criticized actors (in our example the SPÖ and the ÖVP) and the issue causing critique (here 'environment is not in a good condition', i.e. a lack of environmental protection).

Statement 1: The Green party criticizes the SPÖ concerning protection of the environment.

Statement 2: The Green party criticizes the ÖVP concerning protection of the environment.

Each of these statements include two actors – a subject and an object actor – and therefore belong to the group of *actor–actor statements*. As the object actors are criticized with regard to a certain issue – protection of the environment – they are part of the sub-group of *actor–actor–issue statements*.

³ Again 'in a good condition' also includes a substantive. Yet it is an attribute of 'the environment' and therefore does not contribute to the number of statements.

Example 3: Freedom Party of Austria (FPÖ) 2008

Es gibt in Österreich mehr als 400.000 Personen, die Angehörige oder nahe Bekannte zu Hause pflegen. (FPÖ 2008: 9)

Translation:

In Austria, there are over 400,000 people who care for their relatives or close acquaintances at home. (FPÖ 2008: 9)

Here we have three nominal phrases: ‘400,000 people’, ‘their relatives’, and ‘close acquaintances’. Consequently, we obtain two kernel sentences:⁴

400,000 people in Austria care for their relatives at home.

400,000 people in Austria care for close acquaintances at home.

Although it is not mentioned explicitly, as in the second example there is another actor present here: The FPÖ as the manifesto’s author. When adding this information, we obtain the following sentences:

The FPÖ states that 400,000 people in Austria care for their relatives at home.

The FPÖ states that 400,000 people in Austria care for close acquaintances at home.

Here the FPÖ does not praise or criticize another actor but refers to statistics concerning home care. In the sentence there is no indication whether the party regards this number as desirable or rather problematic. Therefore it is regarded as a simple report of facts (irrespective of the number’s actual correctness) but not as the party’s issue position. As a consequence, our standardized statements read:

Statement 1: FPÖ: 400,000 people in Austria care for their relatives.

Statement 2: FPÖ: 400,000 people in Austria care for close acquaintances.

As these statements neither indicate an issue position nor praise or criticism for another actor, they belong to the group of *reality statements*.

⁴ Please note that here again ‘in Austria’ and ‘at home’ are only specifications and therefore – despite including the nouns ‘Austria’ and ‘home’ – do not lead to any more noun phrases and consequently not to any more kernel sentences.

2. Issue Categories

The following Table A1 shows our full system of issue categories structured into three hierarchical levels. Level 1 (e.g. ‘10000 economy’) is always set in bold. All other codes in the first column refer to level 2 (e.g. ‘10100 economy (gen.)’) while the codes in the third column are the level 3 categories (e.g. ‘10101 economic policy (general)’). As explained in the main text, the actual coding is done only with level 3 codes.

The column ‘scales’ informs on the inclusion of level 3 issues into the scales used in the main article: These scales are an economic left–right scale (‘L-R (eco)’), and a cultural left–right scale (‘L-R (cult)’); together they build the general left–right scale. Furthermore we show an issue-specific scale concerning positions towards criminal punishment (‘Pun’). The last column (Direction) refers to the allocation of issues to the left (-1) or right pole (1) on the scales.

Table A1: Coding scheme and scales

Level 1	Level 3	Scale(s)	Direction
10000 economy			
10100 economy (gen.)	10101 economic policy (general)		
	10102 economic growth		
	10103 structural reform (general)	L-R (eco)	1
	10104 balance in foreign trade / balance of payments		
	10105 combatting inflation / price increase; maintaining purchasing power / price stability	L-R (eco)	
	10106 interest rate	L-R (eco)	
10200 job market/unemployment	10201 unemployment (general)	L-R (eco)	1
	10202 unemployment: youth	L-R (eco)	1
	10203 unemployment: women	L-R (eco)	1
	10204 unemployment: elderly employees	L-R (eco)	1
	10205 unemployment: disabled / chronically ill	L-R (eco)	1
	10206 right to work	L-R (eco)	-1
	10207 active employment policy	L-R (eco)	-1
10300 market/liberalisation/deregulation	10301 capitalism / market economy / entrepreneurs / property (general)	L-R (eco)	1
	10302 social market economy	L-R (eco)	-1
	10303 eco-social market economy (Austrian term)	L-R (eco)	-1
	10304 role of the state in the economy (general)	L-R (eco)	-1
	10305 government control of prices (general)	L-R (eco)	-1
	10306 economic stimulus plan / public investment	L-R (eco)	-1
	10307 (re-)nationalisation	L-R (eco)	-1

	10308	(re-)nationalisation of banks (specific)	L-R (eco)	-1
	10309	privatisation / liberalisation / deregulation (general)	L-R (eco)	1
	10310	privatisation / liberalisation / deregulation: rail traffic	L-R (eco)	1
	10311	privatisation / liberalisation / deregulation: air transport (incl. Austrian Airlines (AUA))	L-R (eco)	1
	10312	privatisation / liberalisation / deregulation: telecommunication / mail services	L-R (eco)	1
	10313	privatisation / liberalisation / deregulation: water supply	L-R (eco)	1
	10314	privatisation / liberalisation / deregulation: power supply	L-R (eco)	1
	10315	liberalisation / competition in health care sector	L-R (eco)	1
	10316	liberalisation of shopping hours (general)	L-R (eco)	1
	10317	liberalisation of shopping hours (except sunday)	L-R (eco)	1
	10318	liberalisation of industrial code	L-R (eco)	1
	10319	competition / combatting cartels, monopolies, price agreements	L-R (eco)	1
10400	globalisation	10401	globalisation / reduction of tariffs / open world market	1
		10402	fair world trading system	-1
		10403	national competitiveness	1
		10404	protection of domestic markets / protectionism	-1
		10405	foreign investment by Austrian companies	1
		10406	Tobin tax / taxation of international monetary transactions	-1
10500	financial sector/banks	10502	national government bailout fund / bad bank	-1
		10503	liberalisation international capital movements	1
		10505	combatting world economic crisis / banking crisis	-1
		10506	high salaries / executive bonuses	1
		10507	speculation / financial transactions / stock exchange	1
		10508	taxation of profits from financial speculation / stocks	-1
		10509	Basel II directive	-1
		10510	bank tax	-1
		10511	supervision of financial markets	-1
10600	economy: businesses	10601	promotion / measures for companies (general)	1
		10602	promotion / measures for small and medium sized companies (specific)	1
		10603	support for individual companies (bail out etc.)	1
		10604	private domestic investment / venture capital	1
		10605	support for tourism	1
		10606	support for self-employment / start-up enterprises (general)	1
		10607	new self-employed (specific) (Austrian term)	1
		10608	penalty tax on high commercial profits (specific)	-1
		10609	supervision of companies (social dumping etc.)	-1

10700	economy: employees	10610	high salaries / compensations for managers (private sector)	L-R (eco)	1
		10701	employment protection (general)	L-R (eco)	-1
		10702	strict labor regulation / against flexible working environment	L-R (eco)	-1
		10703	marginal / part-time employment (people)	L-R (eco)	-1
		10704	marginal / part-time employment (labor contract)	L-R (eco)	1
		10705	'black labor' / illicit work / illegal employment	L-R (cult)	-1
		10706	(strong) protection from dismissals	L-R (eco)	-1
		10707	short-time work (Austrian term)	L-R (eco)	-1
		10708	collective labor contract	L-R (eco)	-1
		10709	salaries / wages / earnings	L-R (eco)	-1
		10710	minimum wage	L-R (eco)	-1
		10711	'combined wages' (Austrian term) / subsidized wages	L-R (eco)	1
		10712	mandatory dismissal pay	L-R (eco)	-1
		10713	trade unions	L-R (eco)	-1
		10714	codetermination / workers' participation / employee participation	L-R (eco)	-1
		10715	strike	L-R (eco)	-1
		10716	levelling of legal status of workers and employees	L-R (eco)	-1
		10717	working hours	L-R (eco)	1
		10718	flexible working hours (general)	L-R (eco)	1
		10719	flexible working hours (except sunday)	L-R (eco)	1
		10720	paid vacation	L-R (eco)	-1
		10721	safety and health in the workplace (noise / chemicals etc.)	L-R (eco)	-1
		10722	employees as shareholders in their company	L-R (eco)	1
		10723	competition clauses in work contracts	L-R (eco)	1
10800	consumers/habitation	10724	commuters	L-R (eco)	-1
		10801	consumer protection (general)	L-R (eco)	-1
		10803	government control of gas prices / public access to government gas stations (specific)	L-R (eco)	-1
		10804	car drivers		
		10805	rent/housing costs (general)	L-R (eco)	-1
		10806	government control of rents / protection of tenants	L-R (eco)	-1
		10807	public housing / social housing	L-R (eco)	-1
		10808	subsidies for private housing	L-R (eco)	-1
		10809	amnesty for private debtors	L-R (eco)	-1
		10810	quality of food / nutrition / diet	L-R (eco)	-1
10900	agriculture	10901	farming / agriculture / farmers (general)		
		10902	agricultural subsidies / direct payments (general)		
		10903	support for small and medium farms		
		10904	support for mountain farmers		
		10905	disclosure of agricultural subsidies	L-R (eco)	1
		10906	organic farming		
		10907	genetically-modified organisms (GMOs) / genetic engineering in agriculture		
		10908	mandatory labeling of GMOs		
		10909	industrial farming		
		10910	biofuels		
		10911	pesticides / colony collapse disorder		

(bees)					
11000	welfare state				
11100	welfare state (gen.)	11101	living standard / quality of life in Austria (general)		
		11102	living standard / quality of life in rural Austria		
		11103	social policy / welfare state (general)	L-R (eco)	-1
		11104	social justice / equality / equal opportunities (general)	L-R (eco)	-1
		11105	redistribution (specific)	L-R (eco)	-1
		11106	against principle of indiscriminate all-round distribution (welfare state measures)	L-R (eco)	1
		11107	basic income	L-R (eco)	-1
		11108	choice / individual responsibility / effort (general)	L-R (eco)	1
		11109	social security contributions / ancillary labor costs (general)	L-R (eco)	-1
		11110	social security contributions / ancillary labor costs (employers)	L-R (eco)	-1
		11111	social security contributions / ancillary labor costs (employees)	L-R (eco)	-1
		11112	benefit fraud (general / Austrian natives)	L-R (eco)	-1
		11113	poverty (general)	L-R (eco)	1
		11114	payments to the poor / social welfare benefits	L-R (eco)	-1
		11115	five-point plan (2008 campaign, SPOE)	L-R (eco)	-1
		11116	prohibition of begging	L-R (eco)	1
		11117	reform of/cut-backs in social insurance	L-R (eco)	1
11200	support of the unemployed	11201	support for unemployed / out-of-work benefits / unemployment pay	L-R (eco)	-1
		11202	extension of unemployment insurance	L-R (eco)	-1
		11203	improvement / acceleration of labor exchange / employment service	L-R (eco)	-1
		11204	privatisation of employment agencies	L-R (eco)	1
		11205	cuts in unemployment benefits in case of turning down job offers	L-R (eco)	1
		11206	mandatory community service for unemployed	L-R (eco)	1
11300	health system	11301	health care system (general)	L-R (eco)	-1
		11302	health care system reform (general)	L-R (eco)	
		11304	health care spending	L-R (eco)	-1
		11305	improve quality of health care	L-R (eco)	-1
		11306	merging of public health insurance agencies / economization of administration		
		11307	services for the health-insured	L-R (eco)	-1
		11308	patient contributions / ambulance fees / prescription fees	L-R (eco)	1
		11309	health insurance contribution	L-R (eco)	-1
		11310	(in part) financing by state / taxes / budget / subsidies (health care)	L-R (eco)	-1
		11311	private health insurance	L-R (eco)	1
		11312	'two-class' health care	L-R (eco)	1
		11313	supervision / quality control in the public health sector	L-R (eco)	-1
		11314	service-orientation in the public health sector (e.g. opening times, waiting times)	L-R (eco)	-1

11400	health: rights/duties of individuals	11401	individual patients' rights (e.g. patient's provision)	L-R (cult)	-1
		11402	collective patients' rights (e.g. co-determination in health insurance companies)		
		11403	prevention / personal responsibility / healthy way of living (general)	L-R (eco)	1
		11404	non-smoker protection / smoking bans	L-R (cult)	1
		11405	organ donations		
		11406	sick pay	L-R (eco)	-1
11500	nursing & care/disabled persons	11501	geriatric care (general)	L-R (eco)	-1
		11502	care allowance (Austrian term)	L-R (eco)	-1
		11503	constraints on care allowances / contribution by relatives	L-R (eco)	1
		11504	extension of geriatric care (retirement homes)	L-R (eco)	-1
		11505	private / home care (e.g. financial support)	L-R (eco)	-1
		11506	private / home care by illegal immigrants	L-R (cult)	-1
		11507	legal guardianship / incapacitation	L-R (cult)	1
		11508	integration / support for disabled	L-R (eco)	-1
		11509	care: financing by taxes / privatization gains	L-R (eco)	-1
		11510	care: financing by social contributions / care insurance	L-R (eco)	-1
		11511	hospice / terminal care / palliative medicine	L-R (cult)	1
11600	pension	11601	pensioners / elderly people (general)	L-R (eco)	-1
		11602	pension reform (general)	L-R (eco)	1
		11603	uniform pension scheme	L-R (eco)	-1
		11604	raise of retirement age / longer working life	L-R (eco)	1
		11605	partial retirement	L-R (eco)	-1
		11606	early retirement	L-R (eco)	-1
		11607	early retirement plan (Austrian term)	L-R (eco)	-1
		11608	pension increase (general)	L-R (eco)	-1
		11609	pension increase: small pensions / widows	L-R (eco)	-1
		11610	pension financing: insurance contributions	L-R (eco)	-1
		11611	pension financing: budget / taxes	L-R (eco)	-1
		11612	taxation of pensions	L-R (eco)	1
		11613	company pension / private pension (via employer)	L-R (eco)	1
		11614	private pension	L-R (eco)	1
		11615	crediting periods of child/geriatric care for pensions / pension for mothers	L-R (cult)	1
		11616	pension scheme: pay-as-you-go scheme / intergenerational contract	L-R (eco)	-1
		11617	pension scheme: three-pillar model	L-R (eco)	1
11700	family/children/adolescents	11701	families (social group / general)	L-R (cult)	1
		11702	support for families / family allowance	L-R (eco)	-1
		11704	salary for mothers (Austrian term)	L-R (cult)	1
		11705	tax deduction for families with children	L-R (cult)	1
		11706	child care benefit / maternity pay / maternity leave (general)	L-R (eco)	-1
		11707	income-related child care benefit / maternity pay (specific)	L-R (cult)	-1
		11708	limits for additional income on parental leave/ child care payments	L-R (cult)	1

		(specific)		
		11709	paternity leave (specific)	L-R (cult) -1
		11710	support for single parents (e.g. higher child care benefit)	L-R (cult) -1
		11711	right to part-time work for parents	L-R (cult) -1
		11712	children's rights in constitution	L-R (cult) -1
		11713	youth protection	L-R (cult) 1
		11714	youth protection (regulation at federal level, specific)	
		11716	children / youth (general)	L-R (eco) -1
11900	government aid in case of natural disasters/catastrophes	11901	government removal of war relics	L-R (eco) -1
		11902	government aid in case of natural disasters / flood protection	L-R (eco) -1
		11903	voluntary services / civil society	
		11951	doping	L-R (cult) -1
11950	sports/leisure	11952	amateur sports (masses)	L-R (eco) -1
		11953	professional sports (elites)	
		11954	clubs / associations / recreational facilities / leisure facilities	
12000	budget			
12100	budget, government debt	12101	financial policy (general)	L-R (eco)
		12102	budget deficit	L-R (eco) -1
		12103	public debt	L-R (eco) -1
		12104	public expenditure quota	L-R (eco) -1
		12105	strong currency (schilling!)	L-R (eco)
		12106	cuts in government expenditures	L-R (eco) 1
		12107	transfer of national bank profits to federal budget	L-R (eco) -1
		12108	outsourced company debts/holdings (OEBB, OEIAG, ASFINAG, ...)	L-R (eco) -1
12200	taxes general	12201	tax policy (general)	L-R (eco)
		12202	tax reform (general)	L-R (eco) 1
		12203	simplification of the tax code	L-R (eco) 1
		12204	tax reduction/ decrease of tax and contribution ratio (general)	L-R (eco) 1
		12205	tax increase (general)	L-R (eco) -1
12300	taxes for individuals	12301	value added tax / VAT (general)	L-R (eco) -1
		12302	value added tax / VAT (specific products)	L-R (eco) -1
		12303	income tax	L-R (eco) -1
		12305	tax exemption for small incomes	L-R (eco) 1
		12306	tax cut for small and medium incomes	L-R (eco) 1
		12307	tax cut for high incomes	L-R (eco) 1
		12308	tax increase for high incomes	L-R (eco) -1
		12309	progressive income tax	L-R (eco) -1
		12310	flat tax	L-R (eco) 1
		12311	taxation of vacation / christmas bonus (Austrian term)	L-R (eco) -1
		12312	taxation of overtime work, night-, sunday-, holiday shifts	L-R (eco) -1
		12313	capital gains tax / taxation of interest earnings	L-R (eco) -1
		12315	wealth tax	L-R (eco) -1
		12316	tax deductibility of domestic services (gardener, babysitter, ...)	L-R (eco) 1
		12317	land tax / property tax	L-R (eco) -1
		12318	inheritance tax	L-R (eco) -1
		12319	accessions tax / gift tax	L-R (eco) -1
		12320	church tax (Austrian term)	L-R (cult) 1
		12321	petroleum tax	

		12322	tax deductibility of charitable donations	L-R (eco)	1
12400	taxes for businesses	12401	business tax (general)	L-R (eco)	-1
		12402	business tax: cut	L-R (eco)	1
		12403	business tax: increase	L-R (eco)	-1
		12404	tax relief for small and medium businesses	L-R (eco)	1
		12405	corporate tax	L-R (eco)	-1
		12406	industrial tax / license tax	L-R (eco)	-1
		12407	sales tax	L-R (eco)	-1
		12408	standardized business tax	L-R (eco)	1
13000 education and culture					
13100	education general	13101	education / education policy (general)		
		13102	equal opportunities in education		
		13103	support for achievement and performance in education policy		
		13104	training of teachers and pedagogues (kindergarten, school)		
		13105	payment of teachers and pedagogues (kindergarten, school)		
		13106	civic education		
13200	kindergarten	13201	kindergarten / child care / day care		
		13202	child care / day care for toddlers (nurseries, day care...)	L-R (cult)	-1
		13203	extended opening times for kindergarten, nurseries, day care	L-R (cult)	-1
		13204	cost-free kindergarten		
		13205	compulsory pre-school year	L-R (cult)	-1
		13206	extension of domestic child care / childminders / nannies	L-R (cult)	1
		13207	education in kindergarten / early learning		
13300	school	13301	schools / school infrastructure (general)		
		13302	students / schoolchildren (social group)		
		13303	school autonomy		
		13304	comprehensive school for 10- to 14-year-olds		
		13305	after school care		
		13306	all-day school		
		13307	cost-free textbooks		
		13308	financial support for students / pupils / schoolchildren		
		13309	school fees		
		13310	private schools		
		13311	reduction of maximum number of students per class / small classes		
		13312	small schools / schools in rural areas / village schools		
		13313	centralized A-levels / central high school diploma		
		13314	grades / staying back a grade		
		13315	foreign languages / natural sciences / economics (as subjects in school)		
		13316	private lessons (to keep up in school)		
		13317	support for individual students/pupils		
		13318	teachers (social group)		
13400	university and college	13401	universities / technical colleges / higher education (general)		
		13402	science / development / innovation / research		

		13403	copyright / patents	L-R (eco)	1
		13404	university/college students (social group)		
		13405	researchers / scientists (social group)		
		13406	private universities		
		13407	admission tests / restriction of free university admission		
		13408	university fees / tuition fees / enrollment fees		
		13409	financial support for university students / grants / scholarships		
		13410	tuition fees for foreign students	L-R (cult)	1
		13411	restricted university admission for foreigners / quota	L-R (cult)	1
		13412	autonomy of universities		
		13413	democracy in universities		
		13414	practically oriented curricula / adaption of curricula to needs of businesses		
		13415	studying abroad		
13500	vocational training	13501	apprenticeship / vocational training / dual education (general)		
		13502	apprentices (social group)		
		13503	government financing of vocational training / support for apprentices		
		13504	free A-levels/high school diploma for apprentices		
13600	adult vocational training/education and occupation	13601	adult education / adult education centers / adult evening classes		
		13602	further education / qualification / on-the-job training / sabbatical		
		13603	trainee / intern / student apprentice (social group)	L-R (eco)	1
		13604	career counseling / vocational counseling		
13700	culture	13701	arts / culture (general)		
		13702	freedom of the arts	L-R (cult)	-1
		13703	government financing of arts and culture		
		13704	private financing/sponsoring of arts and culture		
		13705	transparency in government financing of arts and culture		
14000	security				
14100	fight against crime (gen.)	14101	crime (general)	L-R (cult)	-1
		14102	organised crime	L-R (cult)	-1
		14103	'mafia clause' (§278a StGB) (Austrian term)	L-R (cult)	1
		14104	juvenile delinquency	L-R (cult)	-1
		14105	violation/abuse by police	L-R (cult)	1
		14106	police (general)	L-R (cult)	1
		14107	cyber crime	L-R (cult)	-1
14200	criminal prosecution	14201	structural police reform / merging of police and gendarmerie		
		14202	government expenditure for police (money, staff)	L-R (cult)	1
		14203	police powers	L-R (cult)	1
		14204	international police cooperation	L-R (cult)	1
		14206	intelligence service powers	L-R (cult)	1
		14207	supervision of intelligence services	L-R (cult)	-1
		14208	data protection/privacy	L-R (cult)	-1
14300	degree of	14301	more severe punishment (general)	L-R (cult), Pun	1

punishment/punishment					
		14302	more severe punishment of juvenile delinquents	L-R (cult), Pun	1
		14303	more severe punishment of child abuse / sexual crimes / rape	L-R (cult), Pun	1
		14304	more severe punishment of property crimes	L-R (cult), Pun	1
		14305	more severe punishment of assault and battery	L-R (cult), Pun	1
		14306	death penalty	L-R (cult), Pun	1
		14307	mild penalties (restorative justice, amnesty)	L-R (cult), Pun	-1
		14308	improving conditions of imprisonment	L-R (cult)	-1
		14309	victim protection	L-R (cult)	1
		14310	compensation for crime victims (financial)	L-R (cult)	1
		14311	victims law	L-R (cult)	1
		14312	domestic violence	L-R (cult)	-1
		14313	help / conseling in case of domestic violence (women's refuge etc.)	L-R (cult)	-1
14400	prevention of crime	14401	crime prevention (general)	L-R (cult), Pun	-1
		14402	crime prevention through education / welfare	L-R (cult), Pun	-1
		14403	video surveillance / CCTV	L-R (cult), Pun	1
		14404	preventive custody / protective internment / paroles	L-R (cult), Pun	1
		14405	resocialisation / social reintegration	L-R (cult), Pun	-1
		14406	drug liberalisation	L-R (cult)	-1
		14407	help for drug addicts	L-R (cult)	-1
		14408	private gun ownership	L-R (cult)	1
		14409	private crime prevention (vigilant groups / neighborhood watch)	L-R (cult)	1
		14410	commercial crime prevention (guard service / security firms)	L-R (cult)	1
14500	economic crime	14501	white-collar crime / business crime (general)	L-R (cult)	-1
		14502	banking secrecy	L-R (cult)	-1
		14503	tax evasion / trusts / foundations	L-R (eco)	1
14600	terrorism	14601	terrorism (general)	L-R (cult)	-1
		14602	torture	L-R (cult)	1
		14603	cyber terrorism (specific)	L-R (cult)	-1
15000 army					
15100	army: general and domestic missions	15101	Austrian Armed Forces / national defence / army (general)		
		15102	Austrian Armed Forces / national defence / army (budget)		
		15103	armament Austrian Armed Forces (interceptor planes / arms)		
		15104	infrastructure / manning level Austrian Armed Forces (barracks etc.)		
		15105	Austrian Armed Forces: border protection / border security deployment	L-R (cult)	1
		15106	domestic employment of Austrian Armed Forces: police function	L-R (cult)	1
		15107	Austrian Armed Forces: disaster control / civil protection		
		15108	re-negotiation of Eurofighter interceptor planes contract		
15200	army: reformation/structural change	15201	compulsory military service / conscription		

		15202	shortening of compulsory military service		
		15203	militia		
		15204	professional army/voluntary military service		
		15205	conscripts (social group)		
		15206	examination of 'conscience' reasons for denying military service		
		15207	alternative civilian service (general)		
		15208	persons performing alternative civilian service (social group)	L-R (eco)	-1
		15209	women in the Austrian Armed Forces	L-R (cult)	-1
		15210	alternative civilian service for women (voluntary)	L-R (cult)	-1
		15211	reform of Austrian Armed Forces (general)		
15300	army: foreign countries	15301	Austrian Armed Forces: foreign assignment / un-assignment		
		15302	arms exports (general)		
		15303	supervision of arms exports		
		15304	disarmament / ban on certain arms (NBC-weapons, mines)		
16000	foreign policy				
16100	international cooperation	16101	international cooperation / international law (general)		
		16102	UN / Reform of UN / UN subdivisions (WHO, UNIDO, UNICEF etc.)		
		16103	WTO / GATT / IMF / World Bank / G7 / G8 / G20	L-R (eco)	1
		16104	OSCE / CSCE		
		16105	Council of Europe		
		16106	NATO (general)		
		16107	Austrian accession to NATO		
		16108	neutrality		
		16109	foreign aid / development cooperation		
16200	bilateral relations	16201	protection of South Tyrol	L-R (cult)	1
		16202	relationship with individual countries		
		16203	recognition of former Yugoslavian states		
16300	war and peace	16301	war (general)		
		16302	sanctions against individual countries		
17000	europe				
17100	EU: general	17101	European integration (general)		
		17102	federal / strong EU / extension of powers		
		17103	Europe of nations		
		17104	subsidiarity principle in the EU		
		17105	'core Europe' / Europe of different speeds		
		17106	EU centralism		
		17107	repatriation of EU powers		
		17108	Austrian EU-accession		
		17109	Austrian EU-membership		
		17110	Austrian influence in the EU		
		17111	influence of small / medium-sized member states in the EU		
		17112	EU-sanctions against Austria (year		

		2000)
17200	EU: treaties/steps of integration/Euro	17201 European constitution (general)
		17202 EU Reform Treaty / Lisbon Treaty (general)
		17203 Nice Treaty (general)
		17204 Amsterdam Treaty (general)
		17205 Maastricht Treaty (general)
		17206 European Economic Area (EEA)
		17207 Single European Act (general)
		17208 European Atomic Energy Community (EAEC) (general)
		17209 Euro (ECU)
		17210 stability pact (strict) / strong currency (euro)
		17212 financial aid in national debt crisis (ESM; Greece, PIGS states)
17300	EU: enlargement	17301 EU enlargement (general)
		17302 EU northern enlargement
		17303 EU eastern enlargement I
		17304 EU eastern enlargement II (Bulgaria & Romania)
		17305 EU-accession Balkan states
		17306 EU-accession Hungary
		17307 EU-accession Poland
		17308 EU-accession Czech Republic
		17309 EU-accession Slovakia
		17310 EU-accession Romania
		17311 EU-accession Bulgaria
		17312 EU-accession Croatia
		17313 EU-accession Serbia
		17314 EU-accession Bosnia and Herzegovina
		17315 EU-accession Turkey
		17316 EU-accession Iceland
		17317 EU-accession Israel
17400	EU: participation/democracy	17401 democracy / participation in the EU
		17402 increased powers for EU parliament
		17403 direct election of European commission
		17404 national referendum on EU treaties / enlargements (general)
		17405 national referendum on EU-accession of Turkey
		17406 EU-wide referendum on EU-treaties / enlargements (general)
		17407 EU-wide referendum on EU-accession of Turkey
17500	EU: policies	17501 EU budget (general)
		17502 Austrian net contribution to EU
		17503 EU: subsidies / regional policy (except agriculture)
		17504 Common Agricultural Policy (CAP) / subsidies
		17505 EU: transition period for access to the labor market
		17506 EU-services directive / Bolkestein directive
		17507 social Europe
		17508 EU: cooperation justice / domestic policy / home affairs
		17509 Schengen / Frontex
		17510 European police
		17511 European warrant

		17512	EU: quotas for refugees / immigrants / asylum-seekers		
		17513	EU: common standards for refugees / asylum-seekers		
		17514	list of safe third countries		
		17515	Common Foreign and Security Policy (CFSP) (general)		
		17516	mutual defense of EU member states (specific)		
		17517	Bologna process / European Higher Education Area / BA-MA-system		
		17519	internal European market (policies; not EEA)		
18000	infrastructure				
18100	road traffic	18101	development of roads / transport infrastructure		
		18102	highway extensions (general)		
		18103	private financing of road construction / public-private partnerships	L-R (eco)	1
		18104	HGV-toll / toll for trucks		
		18105	road charge / road pricing		
		18106	policing of road traffic / punishment for traffic offense	L-R (cult)	1
		18107	cyclists / pedestrians		
18200	rail traffic	18201	extension of railroad network (general)		
		18202	extension of railroad network (specific projects)		
		18203	public transport		
18300	air traffic/shipping	18301	development of airports / air travel (general)		
		18304	taxation of aviation fuel / kerosine		
		18305	development of water routes		
18400	energy supply	18401	energy supply / power supply / energy policy (general)		
		18403	energy independence		
		18404	energy costs		
		18405	energy saving		
		18406	renewable energy (general)		
		18407	hydropower		
		18408	nuclear energy		
		18409	energy from fossile fuels		
18500	telecommunication	18501	telecommunications infrastructure		
18600	infrastructure (gen.)	18601	infrastructure (general)		
		18602	urban and regional planning / spatial development		
		18603	waste management / waste tourism / waste incineration		
		18604	traffic / mobility (general)		
19000	society				
19100	gender equality	19101	gender equality	L-R (cult)	-1
		19102	social protection of women	L-R (cult)	-1
		19103	protection against sexual harrassment	L-R (cult)	1
		19105	reconciliation of work and family life (general)	L-R (cult)	-1
		19106	equal payment for men and women	L-R (cult)	-1
		19107	support for women in the job/education (general)	L-R (cult)	-1
		19108	preferential hiring of women with	L-R (cult)	-1

		equal skills (specific)		
		19109 quota for women in the public sector	L-R (cult)	-1
		19110 quota for women in the private sector	L-R (cult)	-1
		19111 harmonisation of retirement ages of men and women	L-R (cult)	1
		19113 gender mainstreaming / gender budgeting	L-R (cult)	-1
19200	partnership and sexual orientation	19201 traditional marriage	L-R (cult)	1
		19202 equal treatment of traditional marriage and cohabitation / patchwork families	L-R (cult)	-1
		19203 adoption rights for unmarried couples	L-R (cult)	-1
		19204 simplification of the divorce law	L-R (cult)	-1
		19205 alimony for divorced/kids/government maintenance payment advances	L-R (cult)	-1
		19206 rights for divorced fathers	L-R (cult)	1
		19207 lowering the age of consent	L-R (cult)	-1
		19209 support/equal rights for homosexuals	L-R (cult)	-1
		19210 same-sex marriage	L-R (cult)	-1
		19211 civil unions/civil partnerships (homosexuals)	L-R (cult)	-1
		19212 adoption rights for homosexual couples	L-R (cult)	-1
19300	abortion and bioetic questions	19301 abortion (general)	L-R (cult)	-1
		19302 legal abortion within time limit	L-R (cult)	-1
		19303 legal abortion based on medical, social, or ethical reasons	L-R (cult)	1
		19304 abortion counseling	L-R (cult)	1
		19305 late-term abortion	L-R (cult)	-1
		19306 baby hatch / anonymous births	L-R (cult)	1
		19307 gene therapy / stem cell research	L-R (cult)	-1
		19308 biological patent/gene patent	L-R (cult)	-1
		19309 euthanasia / assisted suicide	L-R (cult)	-1
19400	religion	19401 religion / religious beliefs / church (general)	L-R (cult)	1
		19402 separation of church and state (general)	L-R (cult)	-1
		19403 Christian symbols in public buildings / schools	L-R (cult)	1
		19404 Christian religious education in state schools	L-R (cult)	1
		19405 legal recognition of new religions / churches / sects	L-R (cult)	-1
		19406 ethics lessons in school (alternative)	L-R (cult)	-1
19500	censorship	19501 censorship / restrictions of freedom of speech (general)	L-R (cult)	1
		19502 pornography	L-R (cult)	-1
		19503 shooter-games / glorification of violence	L-R (cult)	-1
		19504 gambling / betting / lottery	L-R (cult)	-1
		19505 ban on advertising for ethical reasons (pornography, violence)	L-R (cult)	1
		19506 ban on advertising for health reasons (cigarettes, alcohol)	L-R (cult)	1
		19507 prostitution	L-R (cult)	-1
19600	Nazi era/right-wing extremism	19601 support / compensation for victims of the Nazi regime	L-R (cult)	-1
		19602 support / compensation for displaced persons / members of the German Wehrmacht	L-R (cult)	1
		19603 right-wing extremism / neo-Nazis	L-R (cult)	1
		19604 antisemitism	L-R (cult)	1

		19605	Austrofascism/corporative state/Dollfuss regime	L-R (cult)	1
19700	autochthonous minorities	19701	protection of autochthonous minorities (Slovenians in Carinthia, Croats in Burgenland, Sinti and Romanies, ...)	L-R (cult)	-1
		19702	multi-language town signs (autochthonous minorities) (Austrian term)	L-R (cult)	-1
		19703	multi-language school lessons / cultural funding (autochthonous minorities)	L-R (cult)	-1
19800	civil rights/human rights/constitutional rights	19801	civil rights / human rights / basic rights	L-R (cult)	-1
19900	media	19901	press freedom / critical public	L-R (cult)	-1
		19902	government subsidies for the press	L-R (cult)	-1
		19904	ORF (Austrian broadcasting corporation): structural reform / reform decision-making bodies		
		19905	ORF (Austrian broadcasting corporation): fees / charges	L-R (eco)	-1
		19906	ORF (Austrian broadcasting corporation): advertising in program	L-R (eco)	1
		19907	ORF (Austrian broadcasting corporation): influence of political parties		
		19908	private TV/radio stations	L-R (eco)	1
		19909	media diversity / media landscape	L-R (cult)	-1
		19910	tabloids / Kronen Zeitung	L-R (cult)	1
		19911	public service broadcasting / Austrian public broadcaster (ORF)	L-R (eco)	-1
19950	patriotism/nationalism/homeland	19951	patriotism / nationalism / home country	L-R (cult)	1
		19953	Austrian cultural identity / Leitkultur	L-R (cult)	1
		19954	national anthem	L-R (cult)	1
20000 environment protection					
20100	environmentalism (gen.)	20101	environmental protection/sustainability/conservation (general)		
		20102	stricter environmental regulations		
		20103	ministry of the environment / department of the environment		
		20104	conservation areas / national parks		
20200	measures against environmental burden	20201	gas price		
		20202	eco-tax / green tax		
		20203	deposit systems / recycling / waste avoidance / waste separation		
		20204	restriction of transit / local bans on truck driving		
		20205	protection from noise pollution		
		20206	environmental impact assessment		
20300	climate	20301	climate protection (general) / Kyoto Protocol		
		20302	emissions trading		
		20303	air pollution / particulate matter / fine dust		
20400	animal protection	20401	animal protection (general)		
		20402	national animal protection law (specific)		
		20403	livestock transport / battery cages / use of hormones in animal breeding		
		20404	animal experiments		

21000	reform of institutions			
21100	political system/governmental system	21101	institutional reform / constitutional reform (general)	
		21102	parliamentary system	
		21103	presidential system	
		21104	abolition/reduction of political institutions (President, Bundesrat)	
		21105	entrusting Federal Chancellor with power to give directives to ministers	
		21106	social partnership / corporatism / compulsory membership in chambers	L-R (eco) -1
		21107	third republic (FPOE concept 1990s) (Austrian term)	
		21108	reference to another land	
		21109	reference to another country	
		21110	democracy / participation (general)	
		21111	democracy / participation (specific groups)	
		21112	performance / efficiency in politics	
		21113	reform of chambers (Chamber of Labor, Austrian Economic Chambers, etc.)	
21200	behaviour of politicians/corruption/scandals	21201	political culture / sense of decency in politics / modest behavior of politicians	
		21203	pay rise for politicians	
		21204	public disclosure of side jobs / income of politicians	
		21205	abuse of power by parties (general)	
		21206	patronage / proportional division of spoils	
		21207	legal party funding (e.g. public and donations)	
		21208	illegal party funding / corruption	
		21209	investigation of specific scandals and affairs (incl. Parliamentary committees)	
		21210	funding of political advertising by parliamentary party groups/ministries/state-owned enterprises	
21300	federalism	21301	federalism	
		21302	powers of the Laender	
		21303	merging of Laender/regional authorities	
		21304	reform of fiscal equalisation scheme	
		21305	taxing powers for the Laender	
		21306	federal supervision over Laender / municipalities	
21400	administration - public service	21401	public service / civil servants (general)	
		21402	economisation of the public service / reduction civil servants	L-R (eco) 1
		21403	reform / economisation / modernisation of the administration / reduction of bureaucracy	L-R (eco) 1
		21404	duty of disclosure/transparency in administration	L-R (cult) -1
		21405	privileges for civil servants	
		21406	service law for teachers	
21500	reform of parliament	21501	parliamentary reform (general)	
		21503	parliamentary minority rights: control / oversight / investigation	

			committees		
		21504	deselection of the president of parliament		
21600	reform of political parties	21601	intra-party democracy / primaries		
		21603	public funding of parties		
		21604	public disclosure/restriction of campaign expenditures		
		21605	women in politics	L-R (cult)	-1
21700	reform of voting rights	21701	personalisation of electoral system		
		21702	majoritarian electoral system		
		21703	proportional electoral system		
		21704	voting at 16		
		21705	easier voting for Austrian expats		
		21706	postal vote / absentee ballot		
		21707	election period		
		21708	department of electoral affairs: ballot decision in favour of FPOE		
21800	direct democracy	21801	direct democracy (general)		
		21802	people's initiative (draft legislation introduced with support of 1% of the electorate)		
		21803	referendum (binding)		
		21804	referendum (non-binding)		
		21805	referendum after a successful petition		
21900	judicial system	21901	judicial reform (general)		
		21902	directive authority of Minister of Justice over prosecutors		
		21903	Supreme Administrative Court / Constitutional Court		
		21904	equal access to courts (reducing fees etc.)		
		21905	acceleration of legal procedures		
		21906	amicable arrangement	L-R (cult)	-1
		21907	rule of law		
		21908	judicial independence (general)		
22000 immigration					
22100	immigration general	22101	immigration / immigrants / foreigners (general)	L-R (cult)	-1
		22102	restriction of number of foreigners	L-R (cult)	1
		22103	criteria for immigration (Green Card, credit system, skilled labor, ...)	L-R (cult)	1
		22104	residence permit for partners and children of immigrants	L-R (cult)	-1
22200	asylum/refugees	22201	asylum / admission of refugees	L-R (cult)	-1
		22202	admission of economic refugees	L-R (cult)	-1
		22203	asylum seekers centers / pre-deportation detention centers	L-R (cult)	-1
		22204	right to stay for asylum seekers	L-R (cult)	-1
		22206	supervision of asylum seekers / pre-deportation detention / notification requirement	L-R (cult)	1
		22207	asylum fraud	L-R (cult)	-1
		22208	asylum court	L-R (cult)	-1
		22209	acceleration / improvement of asylum procedure	L-R (cult)	-1
		22210	deportation of illegal immigrants / asylum seekers from third countries	L-R (cult)	1
		22211	work permit for asylum seekers	L-R (cult)	-1
22300	integration of foreigners	22301	integration of immigrants (general)	L-R (cult)	-1
		22302	integration of immigrants: support	L-R (cult)	-1
		22303	integration of immigrants:	L-R (cult)	1

			compulsion / constraints / forced adaption		
		22304	right to vote for immigrants (general)	L-R (cult)	-1
		22305	extend right to vote for EU-citizens		
		22306	right to vote for non-EU-citizens	L-R (cult)	-1
		22307	immigrants / second generation	L-R (cult)	-1
			immigrants as candidates / voters		
		22308	parallel society	L-R (cult)	-1
		22309	multiculturalism / dialogue / acceptance of differences / pluralism	L-R (cult)	-1
22400	citizenship	22401	jus soli (nationality by birthplace)	L-R (cult)	-1
		22402	jus sanguinis (nationality by descent)	L-R (cult)	1
		22403	dual nationality	L-R (cult)	-1
		22404	facilitation of naturalisation process	L-R (cult)	-1
		22405	naturalisation for specific individuals	L-R (cult)	-1
22500	Islam	22501	Islam / muslims (general)	L-R (cult)	-1
		22502	mosques / minarets / Islamic institutions (general)	L-R (cult)	-1
		22503	Islam in schools / in the Austrian Armed Forces	L-R (cult)	-1
		22504	headscarf / burqua / niqab	L-R (cult)	-1
		22505	forced marriage / genital mutilation / honor killing / cultural crimes	L-R (cult)	-1
		22506	ritual slaughter (halal / kosher butchering)	L-R (cult)	-1
		22507	Islamic terrorism / Islamism / fundamentalism / hatemongering	L-R (cult)	-1
22600	foreigners and crime	22601	alien crime	L-R (cult)	-1
		22602	deportation of alien criminals	L-R (cult)	1
		22603	deportation of relatives of alien criminals (collective punishment)	L-R (cult)	1
		22604	'criminal tourism' (Austrian term)	L-R (cult)	-1
		22605	human trafficking/people smugglers	L-R (cult)	-1
22700	foreigners and health and welfare system	22701	welfare benefits only for Austrian citizens	L-R (cult)	1
		22702	special welfare system for foreigners	L-R (cult)	1
		22703	benefit fraud by foreigners	L-R (cult)	-1
		22704	deportation of unemployed foreigners	L-R (cult)	1
22800	foreigners and school/education	22801	compulsory German language skills before school enrollment	L-R (cult)	1
		22802	fostering of German language acquisition (support)	L-R (cult)	-1
		22803	instruction in native language	L-R (cult)	-1
		22804	maximum share of foreigners per school class	L-R (cult)	1
		22805	segregation in schools (foreigners and Austrians)	L-R (cult)	1
22900	foreigners and job market	22901	priority for Austrian employees	L-R (cult)	1
		22902	temporary work permits (foreign workers / seasonal workers / fruit pickers)	L-R (cult)	1
		22903	illegal immigrant carers (specific)	L-R (cult)	-1
		22904	work permit for legal immigrants	L-R (cult)	-1
22950	(anti-)racism	22951	anti-racist initiatives (state, society)	L-R (cult)	-1
		22952	racism / xenophobia	L-R (cult)	1
23000 formation of government					
23100	preference of coalition/formation of government	23101	government formation / coalition composition (general)		
		23102	own party's government participation		
		23103	Grand Coalition (general)		
		23104	SPOE-OEVP coalition (SPOE as		

		chancellor party)
	23105	OEVP-SPOE coalition (OEVP as chancellor party)
	23106	SPOE-FPOE coalition
	23107	OEVP-FPOE coalition
	23108	SPOE-Greens coalition
	23109	OEVP-Greens coalition
	23110	OEVP-FPOE-BZOE coalition
	23111	SPOE-FPOE-BZOE coalition
	23112	coalition with the SPOE
	23113	coalition with the OEVP
	23114	coalition with the FPOE
	23115	coalition with the BZOE
	23116	coalition with the Greens
	23117	SPOE-Greens-LIF coalition
	23118	SPOE-LIF coalition
	23119	OEVP-BZOE coalition
	23120	SPOE-OEVP-Greens coalition
	23121	OEVP-FPOE-Team Stronach coalition
	23122	OEVP-Greens-Team Stronach coalition
	23123	FPOE-Team Stronach coalition
23200	special forms of government	23201 expert government
		23202 all-party government
		23203 minority government
		23204 single party government
		23205 three-party coalition government
24000	ideology	
24100	party ideology	24101 Social Democratic
		24102 Christian Democratic
		24103 conservative
		24104 political center
		24105 liberal
		24106 Freedom Party
		24107 right-wing / nationalist
		24108 green / alternative
		24109 communist / socialist / leftist
		24110 'third way'

3. Organization of Coding

Recruiting Coders

Readers who have first-hand experience with coding political text will particularly appreciate the reliability values our double-coding has returned. To achieve such high-degrees of inter-coder reliability we have made full use of the conventional recipes in conducting content analyses. First, we have selected our coders carefully. For instance, in one of our first recruitment drives, we screened more than 130 applicants for the recruitment of seven coders. The selection process was organized in two steps: First, all candidates handed in a written application. Those with good grades in relevant subjects (especially mathematics and languages) in their final school certificate and excellent success in their university studies (with special attention to Methods, Austrian and Comparative Politics) were then invited to take part in the second step, consisting of a written test and individual interviews. In the written test the applicants were tested on their grammatical skills as well as their knowledge on Austrian politics and their ability to grasp a text's content and to assign political measures to given topics.

The best applicants were finally recruited as coders. These were provided with a coding handbook for self-study before they were subjected to a thorough training stretching over several weeks. It included a couple of group sessions to discuss general questions as well as one-on-one meetings and individual feedback on test-coding from AUTNES researchers. Coders did not start with the actual coding until they had successfully completed the training process. Given the large amount of text to be coded in AUTNES the coders remain on their job and focused on this task for about two to three years.

Technical basics

As described in the paper, the AUTNES manifesto coding consists of two separate steps: unitizing and coding. Both steps are carried out in MS Excel. As manifestos are usually available in print or – in more recent years – in pdf format, initially the manifestos' texts are transformed into MS Word and subsequently in MS Excel format with each grammatical sentence occupying one row in the MS Excel sheet. During the process of unitizing, coders add as many rows as they derive statements from the grammatical sentence. Hence in the end

each unit, i.e. each individual statement, occupies one row in the MS Excel sheet.

Subsequently, these statements are coded. The coding is also carried out in MS Excel with an additional MS Visual Basic for Applications (VBA) coding form.

The coding takes place on the premise of AUTNES and coders are supervised by researchers. Coders are instructed not to discuss their coding with other coders. Double-coding is organized in a way to ensure rotating pairs of coders.

Coding actors

All actors – subject as well as object actors – are coded with two variables: One that indicates the actor's *organization* (usually the party, but in general this variable is open to all sorts of organizations) and – in case of an individual – a second variable that records the individual's *name*.

In our first example (see Appendix 1) there is only a subject actor, which in all six statements is the Austrian People's Party (ÖVP). Thus for all statements 'ÖVP' is coded as *organization* while – due to the absence of an individual – the *name* variable is left blank. If the actor were an individual, e.g. the former Austrian chancellor Wolfgang Schüssel, his *organization* would be 'ÖVP' (since he is a member of the People's Party) and his *name* would be coded in the standardized format of 'last name, first name', in this case 'Schüssel, Wolfgang'.

Coding issues

For each statement we record one issue. Here coders revert to a given list of over 650 individual issues (see above, Appendix 2). Our list of issues 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 (Müller et al. 2012: 15).

Allocating the issue observed in the statement on the issue list, coders face two possibilities: carrying out a full-text search or narrowing down the number of potential issues along the issue categories and sub-categories.

In some statements a specific term already indicates the suitable issue. In these cases coders may carry out a full-text search for the respective term in the list of issues. In most cases coders then find the correct issue and directly include it into their coding. In our first example

for instance the People's Party's claim for 'healthy food products' (statement 5) falls into that category: When carrying out a full-text search for the term 'food' (German: 'Lebensmittel'), in our issue list coders find one single issue – '10810 – quality of food / nutrition / diet' (see Coding Sheet – Screenshot 1 on the following page).

Coding Sheet – Screenshot 1

Issue-Kategorie

Zu codierende Aussage
ÖVP für gesunde Lebensmittel

Suchfunktionen

Suchtext: Lebensmittel

Filter

Issues (Level I):
Issues (Level II): ☒ IDs anzeigen

Issue (Level III)	Issue (Level II)	Issue (Level I)
10810 Lebensmittel/Ernährung/Lebensmittelqualität/Lebensmittelsicherheit	Konsumenten/Wohnen	Wirtschaft

1 (von 755) Issues angezeigt.

Ausgewählte Issue-Kategorie
10810 | Lebensmittel/Ernährung/Lebensmittelqualität/Lebensmittelsicherheit

☐ EU-Bezug

Neue Issue-Kategorie

ÖVP für Ausbau des Sozialnetzes

<keiner> <keine>

Statement („ÖVP for healthy food products“)

Search term
(„food“)

Search result: just one issue matches the search term. If coders are convinced this result represents the statement's content, they click on it

The selected issue appears here

If coders are convinced they picked the most appropriate category, they click here to import the category into the coding file. This decision is reversible throughout the coding process

However, not all issues can be identified so clearly. In some cases a full text search comes up with several results. In these cases coders decide which of these issues fits best. In our first example, when searching for the term ‘education’ (statement 4), coders end up with more than ten issue labels that include the word ‘education’. Here coders opt for the issue that represents the statement’s content best: When claiming for ‘opportunities in education’ the People’s Party does not specifically refer to ‘civic education’ (issue 13106), ‘higher education’ (issue 13401), ‘crime prevention through education’ (issue 14402), or ‘support for women in education’ (issue 19107), but ‘opportunities in education’ in general. Due to this non-specified claim, from all issues including the term ‘education’ coders would opt for ‘13101 – education / education policy (general)’.

Yet there are cases when a full-text search is not a useful option – e.g. when coders end up without any results (e.g. when searching for the term ‘regime’), a high number of results (e.g. with a search for ‘welfare’) or when none of the results obtained seems to suit the statement’s content (e.g. when searching for the term ‘products’). Here coders take advantage of the list’s hierarchical structure: Reading the statement ‘*Austrian People’s Party for success of Austria’s economy*’ (example 1, statement 1), they know that ‘success of Austria’s economy’ is most likely related to ‘economy’ (but not, for instance, ‘immigration’) – one of the list’s 15 level-1-categories. This ‘economy’ category comprises of nine sub-categories (level 2): ‘economy (general)’, ‘job market / unemployment’, ‘market / liberalization / deregulation’, ‘globalisation’, ‘financial sector / banks’, ‘economy: businesses’, ‘economy: employees’, ‘consumers / habitation’, and ‘agriculture’. Here the most likely sub-categories are either ‘economy (general)’ or ‘economy: businesses’. As the People’s Party wants the Austrian economy to be successful, but does not further specify what ‘success’ means or hints to certain measures leading to the aspired success, the first, more generalized of these sub-categories most likely is the most appropriate one: Here coders find the issue ‘10102 – economic growth’ which of all issues captures the statement’s content best (see Coding Sheet – Screenshot 2 on the following page).

Coding Sheet – Screenshot 2

Issue-Kategorie

Zu codierende Aussage
ÖVP für erfolgreiche Wirtschaft

Suchfunktionen
Suchtext: Suchen X
Nummer:

Filter
Issues (Level I): 10000 | Wirtschaft
Issues (Level II): 10100 | Wirtschaft (allgem.)

Issue-Kategorien

Issue (Level III)	Issue (Level II)	Issue (Level I)
10101 Wirtschaftspolitik (allgem.)	Wirtschaft	Wirtschaft
10102 Wirtschaftswachstum	Wirtschaft	Wirtschaft
10103 Strukturreform (allgem.)	Wirtschaft	Wirtschaft
10104 außenwirtschaftliches Gleichgewicht/ausgeglichene Zahlungsbilanz	Wirtschaft	Wirtschaft
10105 Bekämpfung Inflation/Teuerung; Sicherung Kaufkraft/Preisstabilität	Wirtschaft	Wirtschaft
10106 Zinsen	Wirtschaft	Wirtschaft

Ausgewählte Issue-Kategorie
10102 | Wirtschaftswachstum

Neue Issue-Kategorie vorschlagen
☐ Neue Issue-Kategorie

Filter 1: level 1 category "Economy"

Filter 2: subcategory (level 2) "Economy (general)"

All six issues on level 3 that belong to the selected category and sub-category on levels 1 and 2 are listed here. The issue "10102 – economic growth" is selected as the one that captures the statement's content best

The selected issue appears here

In case no issue captures the statement's content adequately, coders may come up with a new issue by clicking here

Coders import the selected issue into the coding file by clicking here; the decision is reversible throughout the coding process

Coders are allowed to come up with new issues by simply adding them to the list when coding the manifestos.⁵ When creating a new issue, coders should also suggest the appropriate issue category (level 1) and sub-category (level 2). When merging the two coding files into the final dataset, the AUTNES researchers check each new issue and decide collectively on a definite inclusion of the new issue in the existing list. If the new issue is accepted, it is adopted for all cases in which coders opted for that issue; beyond that, all cases with inter-coder disagreement are checked on whether the new issue would fit in there as well. As the new issue is to be included in the general list of issues, it is available for future coding. Thus our system of issue categories is flexible enough for longitudinal analyses of party competition (Müller et al. 2012: 16).

Linking subjects and objects: the predicate

Most issue labels are non-directional – e.g. ‘immigration’ rather than ‘pro-immigration’ and ‘anti-immigration’. In our relational method of content analysis, the party’s policy positions and relations to other actors are recorded by the predicate. This predicate is a numerical value that indicates a positive, negative, or neutral relationship between the subject and the object. Consequently, the predicate variable can have the following values:

1 = approval of an issue or praise of the object actor

0 = neutral issue position, neutral relation to the object actor, or reality statement

-1 = rejection of an issue or criticism of the object actor

The numerical value of zero is recorded in three different cases: A neutral issue position, a neutral relationship between the subject and the object actor, and for cases in which the subject describes ‘what is’ (*reality statement*). While an *actor–actor statement* can be clearly identified, it is not possible to distinguish between neutral *actor–issue relations* and *reality statements*, as both types include one subject actor and one issue that are both linked with a numerical value of zero. Therefore, in this case, a second dichotomous variable is coded that

⁵ However, this is only a last resort in case a statement could not be validly coded into one of the existing categories. Empirically this is done in less than 1 per cent of the cases.

distinguishes between neutral issue positions and *reality statements* (Müller et al. 2012: 17-18).

Note that for *actor–actor–issue statements* the predicate captures the relationship between the two actors, but does not indicate the subject’s issue position. Consequently, the *actor–actor–issue statements* are included in the issue saliency measure, but excluded from the analysis of the issue position in the subsequent analysis (Müller et al. 2012: 18). The same applies to *reality statements* that are included in the saliency measure but do not contribute to a subject’s issue position.

Coding: Application

Above (Appendix 1) we demonstrated how we derive our units of coding – the statements – from the individual grammatical sentence. Now we proceed to the second step and demonstrate how these statements are coded.

Example 1: ÖVP 2008

Grammatical sentence:

The Austrian People’s Party (ÖVP) commits itself to securing for the future the success of Austria’s economy, a reliable welfare regime, opportunities in learning and education, healthy food products and a healthy environment. (ÖVP 2006: 2)

Statement 1: ÖVP for success of Austria’s economy

Subject actor: *Organization*: Austrian People’s Party (‘ÖVP’); (*Name*: --)

Predicate: +1

Issue: 10102 Economic Growth

(Object Actor: --)

Statement 2: ÖVP for a reliable welfare regime

Subject actor: *Organization*: Austrian People’s Party (‘ÖVP’); (*Name*: --)

Predicate: +1

Issue: 11103 social policy / welfare state (general)
(Object Actor: --)

Statement 3: ÖVP for opportunities in learning

Subject actor: *Organization:* Austrian People's Party ('ÖVP'); (*Name:* --)
Predicate: +1
Issue: 13101 education / education policy (general)
(Object Actor: --)

Statement 4: ÖVP for opportunities in education

Subject actor: *Organization:* Austrian People's Party ('ÖVP'); (*Name:* --)
Predicate: +1
Issue: 13101 education / education policy (general)
(Object Actor: --)

Statement 5: ÖVP for healthy food products

Subject actor: *Organization:* Austrian People's Party ('ÖVP'); (*Name:* --)
Predicate: +1
Issue: 10810 quality of food / nutrition / diet
(Object Actor: --)

Statement 6: ÖVP for a healthy environment

Subject actor: *Organization:* Austrian People's Party ('ÖVP'); (*Name:* --)
Predicate: +1
Issue: 20101 environmental protection / sustainability / conservation (general)
(Object Actor: --)

Example 2: Greens 2008

Grammatical Sentence:

Thanks to SPÖ [the Social Democrats] and ÖVP [the Austrian People's Party] the Austrian environment is not well. (Greens 2008: 7).

Statement 1: The Green party criticizes the SPÖ concerning protection of the environment.

Subject actor: *Organization:* Greens; (*Name:* --)

Predicate: -1

Issue: 20101 environmental protection / sustainability / conservation (general)

Object actor: *Organization:* SPÖ; (*Name:* --)

Statement 2: The Green party criticizes the ÖVP concerning protection of the environment.

Subject actor: *Organization:* Greens; (*Name:* --)

Predicate: -1

Issue: 20101 environmental protection / sustainability / conservation (general)

Object actor: *Organization:* ÖVP; (*Name:* --)

Example 3: FPÖ 2008

In Austria, there are over 400,000 people who care for their relatives or close acquaintances at home.
(FPÖ 2008: 9)

Statement 1: FPÖ: 400,000 people in Austria care for their relatives.

Subject actor: *Organization:* FPÖ; (*Name:* --)

Predicate: 0

Predicate (specification): reality statement

Issue: 11505 private / home care (e.g. financial support)

(Object Actor: --)

Statement 2: FPÖ: 400,000 people in Austria care for close acquaintances.

Subject actor: *Organization:* FPÖ; (*Name:* --)

Predicate: 0

Predicate (specification): reality statement

Issue: 11505 private / home care (e.g. financial support)

(Object Actor: --)

4. Uncertainty Measures

Reliability scores as shown in Table 3 of the main article are one important aspect in the handling of measurement error. In recent years manifesto researchers have discussed additional aspects and also attempted to quantify the amount of uncertainty attached to point estimates from single-coded documents (Klingemann et al. 2006: 90; McDonald and Budge forthcoming; Meyer and Jenny 2013). The most prominent approach to measuring uncertainty is the stochastic model by Benoit et al. (2009). While the AUTNES scheme systematically uses double-coding and therefore opens up genuinely new possibilities in estimating measurement error, it is also perfectly compatible with existing approaches. Applying the Benoit et al. (2009) methodology to our 2008 left–right scores, we obtain confidence intervals that are similar to those of the CMP data. However, given that the empirical CMP estimates are very concentrated in the center of the theoretical scale, the AUTNES approach is much better able to differentiate between parties.

Figures A1 and A2 display the uncertainty estimates for the AUTNES and CMP scores calculated with the bootstrapping approach proposed by Benoit et al. (2009). For each manifesto, 1000 random draws with replacement were taken from the distribution of the coded issues. The 0.975 and 0.025 percentiles from these distributions were taken as the 95-percent confidence interval for the original estimates. For the AUTNES scores, all issue-predicate combinations were assumed to be distinct items.

Figure A1 Benoit et al. uncertainty measures applied to AUTNES 2008 scores

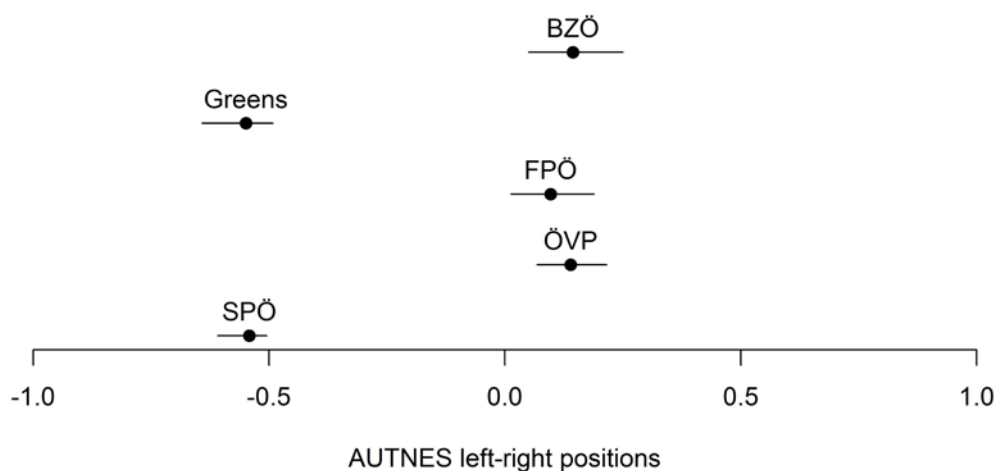
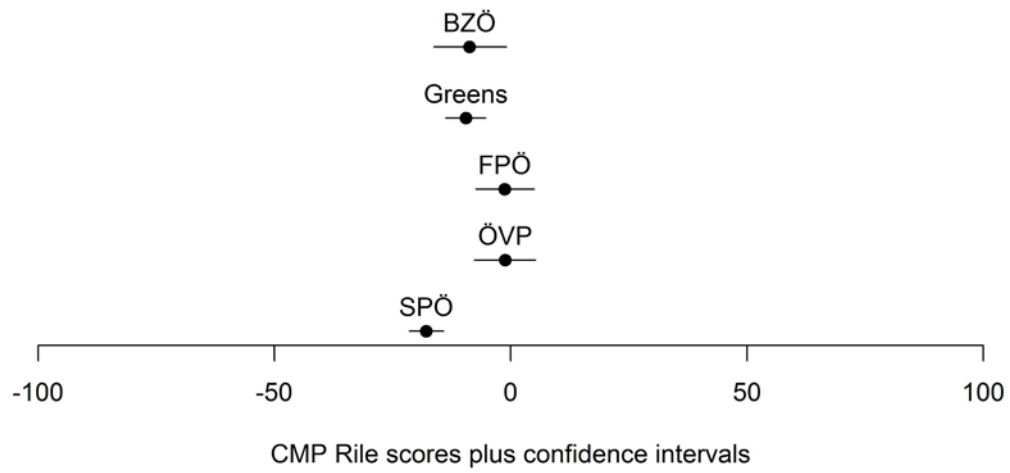


Figure A2 Benoit et al. uncertainty measures applied to CMP 2008 scores



5. Information Gain of the Unitization Procedure

The usefulness of our unitizing procedure combined with the fine-grained system of issue categories is demonstrated by the figures reported in Table A2. These figures show the share of sentences with different issues. For example, of all the 6,278 natural sentences coded in the 2002 manifestos, 65.5 percent contain statements with only one issue coded at Level 3. Two different Level 3-issue codes can be found in 24.4 percent of all natural sentences, and 10.1 percent even have statements with three or more different codes. At higher levels of aggregation, the respective numbers are naturally somewhat lower. The distributions are quite similar for the other two elections. Given that the number of single-statement sentences is over a third in all three years, the majority of multiple-statement sentences display variation in the issue codes at level 3. These numbers suggest that a substantial amount of policy detail would be lost if coding were to be done at the level of natural sentences. Also, compare these numbers to the CMP approach for which Däubler et al. (2012) report that 84 percent of all natural sentences are not split into quasi-sentences, and no less 92 percent of all natural sentences contain only one coding category.

Table A2 **Percentage of natural sentences with different codes at three levels**

Year		Level 3 (650+ categories)	Level 2 (88 categories)	Level 1 (15 categories)	Share of single- statement sentences	N
2002	One code	65.5	73.6	82.9		
	Two different codes	24.4	20.3	14.3	34.4	6,278
	Three or more different codes	10.1	6.0	2.8		
2006	One code	68.0	77.1	84.3		
	Two different codes	22.7	17.9	13.5	37.9	3,641
	Three or more different codes	9.4	4.9	2.2		
2008	One code	68.6	76.1	83.1		
	Two different codes	22.1	18.4	14.4	37.7	2,933
	Three or more different codes	9.3	5.5	2.5		
Total	One code	66.9	75.2	83.4		
	Two different codes	23.4	19.2	14.1	36.1	12,852
	Three or more different codes	9.7	5.6	2.5		

To be sure, the loss of information would most likely be tolerable if the purpose of the analysis was only to derive highly aggregated measures, such as left–right scores or issue salencies for very broad categories. The correlation between statement-based salencies and sentence-based salencies (using the modal level-3 issue for each sentence, or the first issue in

case of multiple modes) are above 0.97 for all three issue levels in all three election years (mean=0.988). This suggests that there are no systematic differences between the distribution of level-3 issues across statements and the distribution of modal level-3 issues across sentences. However, once researchers are interested in party preferences on more specific policy questions as they are likely in an electoral context, a unitizing scheme that allows for more detail to be picked up is clearly advantageous.

6. Coverage of Left–Right Scale

As explained in the main text, on average 55 per cent of the manifesto text is covered by our general left–right scale. Some lower scores can be explained by a high prevalence of statements featuring attacks on competitors (e.g. 20 percent of the statements of the Greens in 2008). Since the predicate in these statements captures the relation between two actors rather than between an actor and an issue, we discard them in the AUTNES left–right aggregation. Table A3 shows the coverage of the AUTNES left–right scale for each manifesto analysed.

Table A3 Coverage of the AUTNES general left–right scale

	SPÖ	ÖVP	FPÖ	Greens	BZÖ	LIF
2002	55.5	53.1	60.9	48.5		54.9
2006	55.2	49.1	59.3	49.1	62.1	
2008	50.2	67.4	63.2	41.9	64.8	38.9

Note: Entries are percentages of statements covered by the AUTNES left–right scale.

7. Reliability of Left–Right Scale

While our general left–right scale is not empirically derived, we can assess to some degree whether it is empirically meaningful by examining to what extent coders agree on whether an individual statement is coded as left, right, or other. Of course, during the coding process the coders are not aware of how statements are later classified into these categories. Yet, if the left–right scale is to be meaningful, there should be substantial agreement about the broad ideological thrust of a statement, even if there is disagreement as to the specific level-3-issue. Table A4 suggests that the AUTNES left–right scale is highly reliable, with most manifestos close to or above the 0.8 threshold. The average reliability score is 0.84 (standard deviation: 0.05).

Table A4: Reliability of AUTNES general left–right scale

	SPÖ	ÖVP	FPÖ	Greens	BZÖ	LIF
2002	0.87	0.86	0.85	0.80		0.81
2006	0.83	0.92	0.92	0.80	0.75	
2008	0.81	0.85	0.82	0.82	0.90	0.87

Note: Entries are Krippendorff's alphas (nominal scale) of two independent coders identifying a statement as 'left', 'right', or 'other'.

8. Calculation of Left–Right Scale

We prefer the $\frac{R-L}{R+L}$ aggregation method (Kim and Fording 1998) over the CMP's $\frac{R-L}{N}$, because it is independent of the number of statements made that have no relation to the left–right scale.

Consider a manifesto with 10 left statements, 30 right statements, and 20 other statements. The $\frac{R-L}{N}$ aggregation would yield a left–right score of 0.33. However, if the manifesto contained 40 other statements instead of 20, the party's position would be 0.25, without any changes in the left–right-relevant content of the manifesto. Using the $\frac{R-L}{R+L}$ formula, the estimate would be 0.5 in both cases. This suggests that dividing by the total number of statements introduces a centrist bias.

To be sure, there are other scaling methods, such as the log odds-based formula suggested by Lowe et al. (2011), or more sophisticated empirical approaches such as using item response models (Benoit and Däubler 2014) which we do not consider here.

9. Wordscores and Wordfish

Figures 1 and 2 in the main text include a comparison of left–right scores derived from several sources. Here, we explain how we conducted the computer-assisted content analyses using the two most widely used algorithms: Wordscores and Wordfish.

In preparing the manifesto texts for the automated analysis the following steps were taken: 1) All words were converted to lowercase; 2) stop words (common words in the German language such as articles, conjunctions, and prepositions) were removed; 3) German-language stemming was applied using the *JFreq* software (Lowe 2011b). All estimations were done using the implementation of Wordscores and Wordfish in the *austin* R package (Lowe 2011a).

Wordscores estimates the policy position of a manifesto based on word frequencies and scored reference texts. For the 16 documents in our sample, we used the SPÖ's, ÖVP's, FPÖ's, Greens', and LIF's 1999 manifestos as reference texts and assigned scores from the 1999 Chapel Hill expert survey (Steenbergen and Marks 2007). We used the 'lrgen' variable for estimating the general left–right dimension, and the 'lrecon' and 'galtan' for the economic and cultural left–right scales.

Wordfish estimates the policy position of a text without the need for scored reference texts by assuming that word frequencies follow a Poisson distribution. The one-dimensional left–right scores were estimated straightforwardly from the full texts. For the two-dimensional representation, manifesto texts have to be divided into economic and cultural sections.

Austrian party manifestos are typically organized into individual chapters that deal with one policy area. We used all chapters referring to economic policies (budget, taxes, growth, jobs, welfare, regulation, health, ...) for the first dimension, and allocated all text in chapters referring to cultural issues (gender equality, immigration & integration, crime, law and order, gay rights, civic rights, ...) to the second. The remaining sections were discarded.

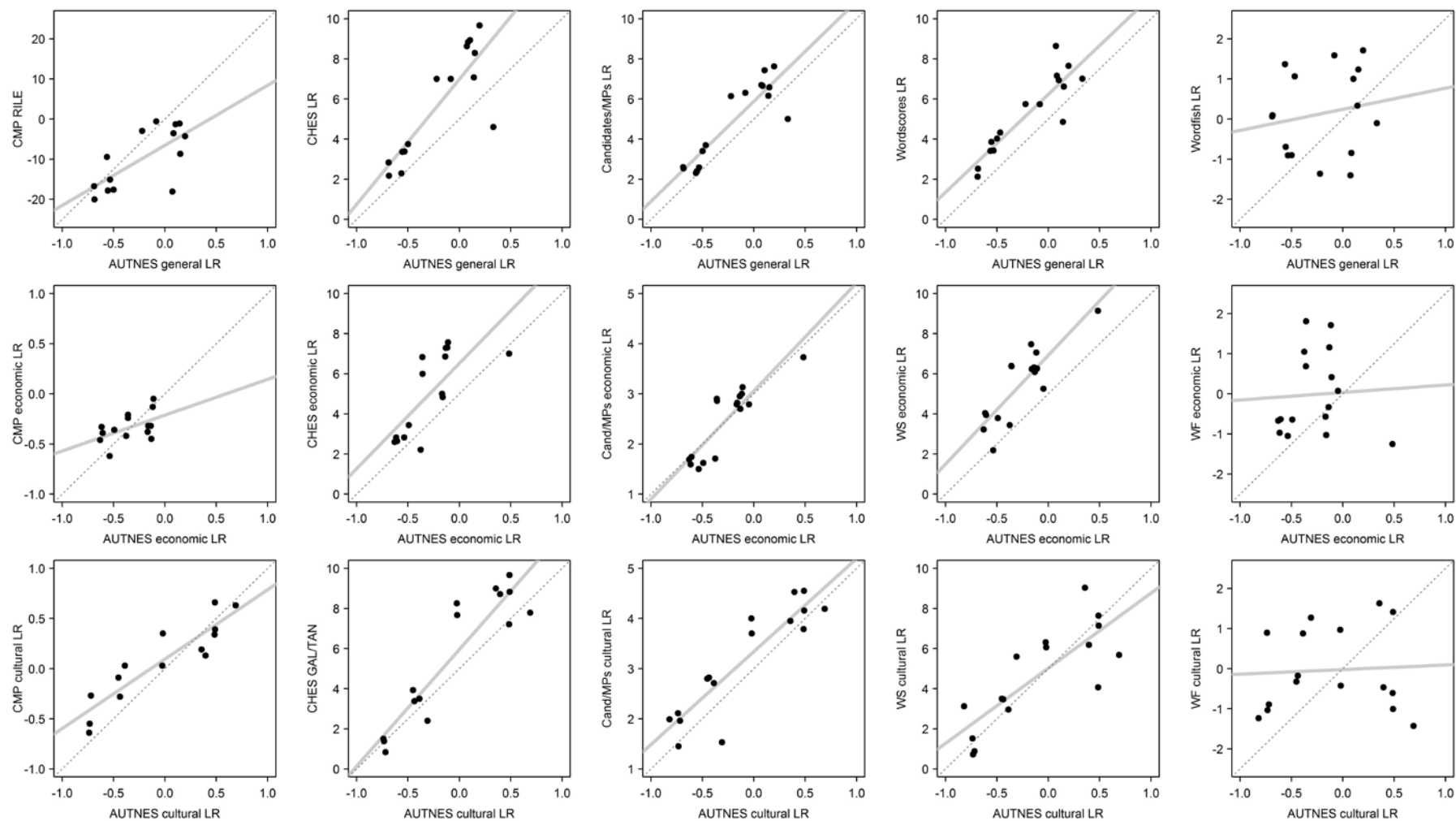
10. Correlations of AUTNES and Other Data

In the main text we compared our measures with those from other sources by correlating the various left–right positions. Here, we present more details, including estimates based on concordance correlation.

Figure A3 presents scatterplots for all three types of left–right estimates (general, economic, and cultural scales). The AUTNES estimates compare well to the expert survey data, the elite survey data and the Wordscores estimates. The results from the Wordfish algorithm are more difficult to reconcile with established measures of party positions (and conventional wisdom). The CMP scores diverge somewhat from the AUTNES estimates, especially for the economic left–right scale.

Closer examination of Figure A3 also reveals that the regression lines often run above the dashed lines. This indicates that the AUTNES estimates are biased to the left when compared to the survey-based measures (including the Wordscores estimates which are partly based on expert survey data), especially when it comes to the economic left–right scale. Survey items present respondents (experts or party elites) a pre-defined scale and thus invite them to consider the distribution of all parties relative to each other in the ideological space. They therefore elicit placements that are more symmetrical. Yet, the manually coded manifesto measures (AUTNES and CMP), which represent the distribution of left and right codes in the manifestos, agree that Austrian parties cluster in the left half of the economic scale. While we cannot settle the discussion about which party position measurement is the most valid, we can at least validate that party manifestos (in Austria) yield more left-wing scores than other measurements of party positions.

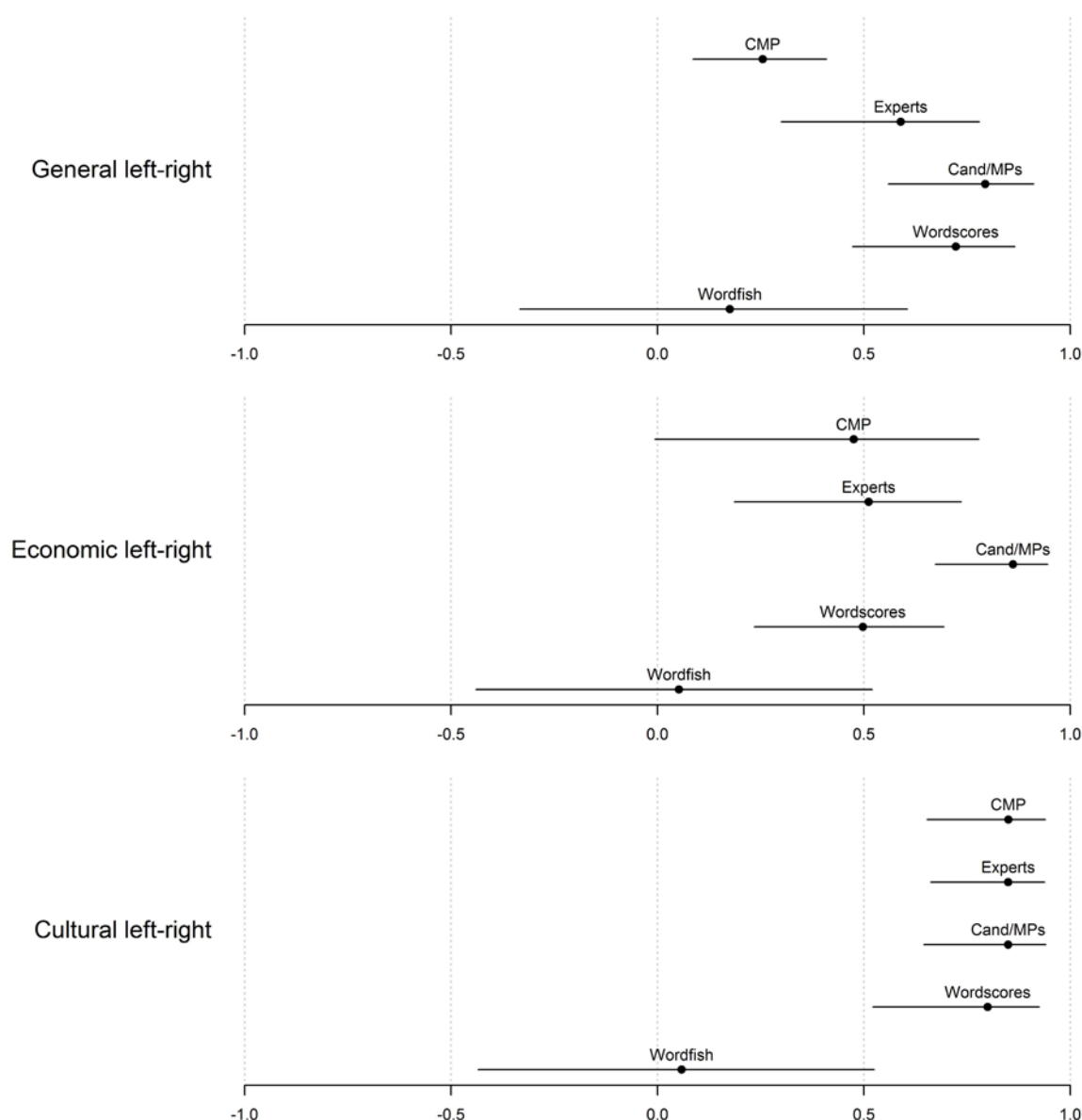
Figure A3: Scatterplots of general, economic, and cultural left–right positions



Note: Dashed lines indicate lines of perfect fit, solid lines indicate regression lines.

Since such systematic differences between different methods are not captured by conventional measures of correlation such as Pearson's r (see Gemenis 2012), we also present Lin's (1989) concordance correlation coefficient (CCC) for relationships between the AUTNES data and the other sources of party positions.

Figure A4: Concordance correlation coefficients (with 95 percent confidence intervals)



Note: All estimates have been rescaled to the range from -1 to 1, except for the Wordfish scores which come with no fixed scale but are standardized (mean=0, standard deviation=1). To ensure comparability, the Wordfish scores have been transformed to match the mean and standard deviation of the AUTNES estimates.

The figures confirm that agreement is highest for the cultural left–right scale, and that the Wordfish algorithm yields no valid measures for the 2002 to 2008 Austrian manifestos. For the general and the economic left–right scale, the results are mixed, although we are pleased to see the highest correlations with the candidate and elite survey data.

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