

Thomeczek, JP, Wurthmann, LC & Stecker C (Forthcoming): Studying Party-Voter Congruence in the European Elections 2024: Introducing a New Dataset on German Voter Positions from the VAA “Europartycheck”. *European Union Politics*

Abstract

We introduce a new dataset to study party-voter congruence in the European Elections 2024 in Germany. It contains party and voter positions on identical issues and scales collected using the Voting Advice Application (VAA) “Europartycheck”, with over 40,000 users, and party positions from the “GEPARTEE” expert survey. We present various steps to improve data quality. Besides data cleaning, we calculate weights to mitigate the selection bias in VAA usage and provide a VAA-quota sample ($n = 2,000$) that more closely resembles the German population. We provide example analyses for EU items, left-right self-placement, and party-voter congruence for various voter groups (including voters of smaller parties such as Volt). A rich set of socio-demographic and additional variables, including populism, institutional trust, propensity to vote (PTV), and Euroscepticism, provides researchers with an important complement to existing datasets.

Introduction

Voting Advice Applications (VAAs) match political preferences of voters with the positions of parties/candidates. After answering a series of policy-related questions, VAAs generate vote recommendations based on the degree of alignment with political actors (Garzia and Marschall, 2019).

VAAs also offer valuable data for political science. As users and parties answer identical questions on policy issues, they provide directly comparable positions. Some tools collect additional user information, generating insights into user characteristics and behaviour. We developed the data-rich VAA “Europartycheck” for the European Elections (EP) 2024 in Germany and collected over 40,000 responses, which can be linked to party positions from GEPARTEE. This article introduces the project as a dataset to study party-voter congruence for the European Election, where parties, including smaller parties not represented in the national parliament, have found their electoral niches. We offer survey weights and a quasi-representative quota sample to tackle the issue of representativeness, assess data quality by comparing the VAA dataset with the European Election Study (EES) and discuss its potential by providing analytical insights for typical application cases.

Datasets

The project combines two datasets: the party expert survey “GEPARTEE” and the dataset including user responses from the VAA “Europartycheck”. The data is publicly available (Thomeczek et al., 2024). Overall, party and user positions are available across 18 identical items covering cultural and economic issues, as well as topics related to the European Union (support for integration, enlargement, common foreign policy, cohesion policy, and further power transfers), and populism items (see Supplementary Material). Additionally, the VAA dataset collects information on various socio-demographics and political attitudes.

The items were inspired by various projects measuring party positions, namely the CHES (Jolly et al., 2022), POPPA (Meijers and Zaslove, 2020), and the Global Party Survey (Norris, 2020). We further developed items on the rights of LGB+ and trans* individuals. With an 11-point scale for all core items, we offer a more nuanced picture of party and user positions compared to other VAAs, which typically rely on 3- or 5-point scales (Van Camp et al., 2014).

The party-level GEPARTEE dataset

GEPARTEE includes assessments by 24 political scientists, who positioned up to 16 parties on 21 issues. Experts held at least a doctoral degree and were selected for their expertise on the German party system (e.g., demonstrated through their publications). The number of raters is comparable to the 2019 CHES, which included 21 experts for Germany (Jolly et al., 2022).

Besides the 2021 Bundestag parties, we also included the newly founded Bündnis Sahra Wagenknecht (BSW), the anti-Covid party dieBasis and seven parties that won seats in the 2019 EP elections (Free Voters (Freie Wähler), Die PARTEI, Tierschutzpartei, OEDP, Piratenpartei, Familienpartei, Volt). As suggested by the expert survey literature (Lindstädt et al., 2020), we calculate median positions for parties placed by at least five experts, which include BSW, dieBasis, Volt, and Free Voters (the expert-level dataset). The boxplots of expert placements by party are presented in the Supplementary Material.

The VAA dataset

The VAA core dataset contains user positions on 18 items (15 core items + 3 in the additional questionnaire), which were also asked in the expert survey (see Supplementary Material). As the aggregation to medians resulted in decimal scores, we offered users the same scale ranging from 1 to 11 in 0.5 steps (a screenshot of the tool can be found in the Supplementary Material). At the end of the tool, users received an overall match (across all items) and separate scores for the subdimensions (EU, economic, GAL-TAN). In addition, VAA users could rate issue saliency using 11-point scales (no effect on results).

Before answering the VAA items, users could provide information on age, education, gender, region, and recall for the 2021 Bundestag election. After inspecting the match scores with parties, users could answer additional questions, including vote intention (EP/national), propensity to vote, Euroscepticism, institutional trust, populism, and three additional items from the expert survey (see Supplementary Material).

All participants provided additional information voluntarily and were given the option to delete their data after receiving the match scores. Of the 40,000 users, about 32,000 completed all core VAA items, and around 26,500 answered the socio-demographic questions as well. Approximately 15,000 users completed the additional questionnaire (details are reported in the Supplementary Material).

Evaluating and Improving Data Quality

As opt-in samples, VAA data can be subject to several biases related to education, political interest, age, and gender (Pianzola, 2014). Although analyses with unweighted VAA data may not necessarily yield different conclusions compared to probability samples (Thomeczek et al., 2025), VAA research suggests calculating survey weights to address this issue (Toshkov and Romeijn, 2021).

To increase data quality, several steps are taken. We remove speeders who spend less than 170 seconds on the website. The distribution of age, education, and gender in our VAA dataset, compared to the official census data from the “eurostat” R-package

("lfst_r_lfsd2pop") from 2023, is presented in the Supplementary Material. Generally, and as expected, highly educated males and users under 44 are overrepresented.

Therefore, we calculate sampling weights based on age, education, and gender. We further account for regions (16 federal states grouped into eight broader regions to address large population disparities). Before calculating weights, we remove cases with missing values on the weighting variables or 15 core VAA items. In total, we provide survey weights for 25,847 users (weight range: 0.15-31.8). By design, the weighted joint marginal distributions of these four variables match those of the Census data.

Many researchers may be interested in a dataset that more closely resembles the German population. Therefore, we provide a quasi-representative sample by drawing a quota sample ($n=2,000$) from the full weighted dataset using probability-proportional-to-size sampling based on post-stratification weights. As most researchers are focused on election behaviour, we have excluded cases with missing data on EP vote intention. We reweighted this dataset, which has a much smaller weight range (0.38-4.1).ⁱ

While many election studies rely on quota samples from online panels due to cost considerations, our post-hoc sampling adjustment employs established and reproducible weighting procedures. Furthermore, our approach takes the joint marginal distributions into account, whereas most online panel companies only sample by fixed quotas for individual variables.

Nevertheless, weighting for sociodemographics does not address biases related to political interest (Pianzola, 2014). To evaluate whether this poses a problem, we compare the political interest of VAA users with that of respondents in the 2024 European Election Study (EES). The results indicate that politically interested VAA users are only slightly overrepresented among VAA users compared to the EES sample. This difference disappears entirely once non-voters are excluded (see the Supplementary Material). We therefore conclude that the data quality is comparable to that of the EES for studying voters, but is not suitable for studying non-voters.

The Perks of VAA Data

VAA datasets offer several advantages over traditional surveys, most notably that user and party positions are collected simultaneously with the same items and on the same scale, allowing to analyse party-voter congruence.

We illustrate this potential in Figure 1, which displays the medians of parties (y-axis) and voters (x-axis) on three issues: support for European integration, common EU foreign policy, and EU enlargement, as indicated by EP vote intention. The Supplementary Material includes another version of this Figure using mean values and confidence intervals.

The deviations from the diagonal (dotted) line indicate incongruence. Notably, radical parties (Linke, BSW, AfD) tend to be more critical of European integration than their voters. Conversely, support for EU enlargement is somewhat lower among Volt and Gruene (Greens) voters compared to their respective parties. Finally, while congruence on the EU's power (transfer back vs further transfer) is relatively high, BSW and especially Linke are less supportive of more EU power than their voters. Voters of Gruene and Volt are, vice versa, slightly less supportive of further power transfers than their parties, although expert codings for these parties suggest contested or ambiguous stances on these EU issues (see Supplementary Material). While the expert-level dataset and voter dataset also allows to model positional ambiguity (see Supplementary Material), the large number of EU items enables researchers to analyse party-voter congruence for specific EU issues with different dynamics, as Figure 1 shows.

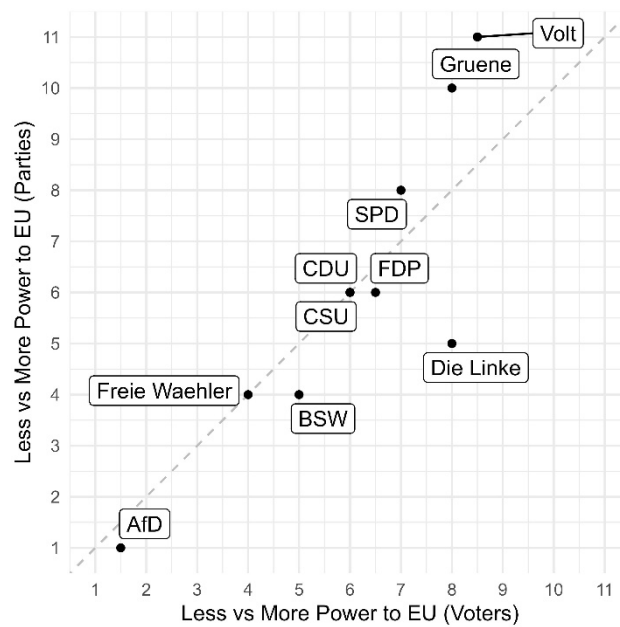
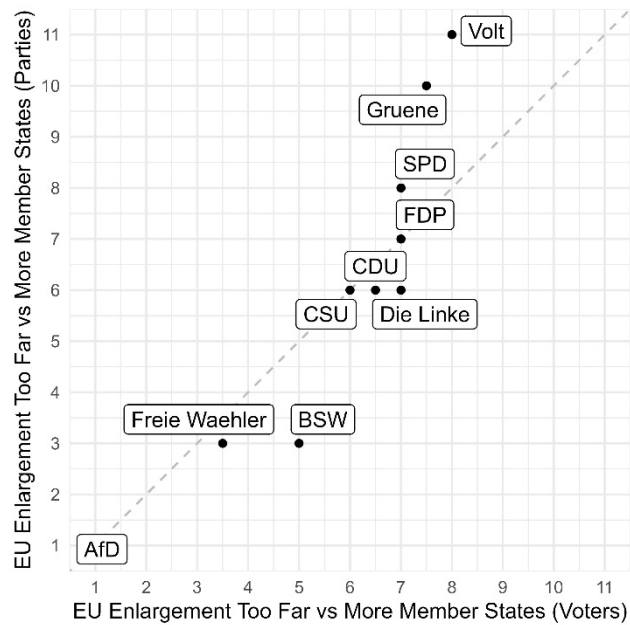
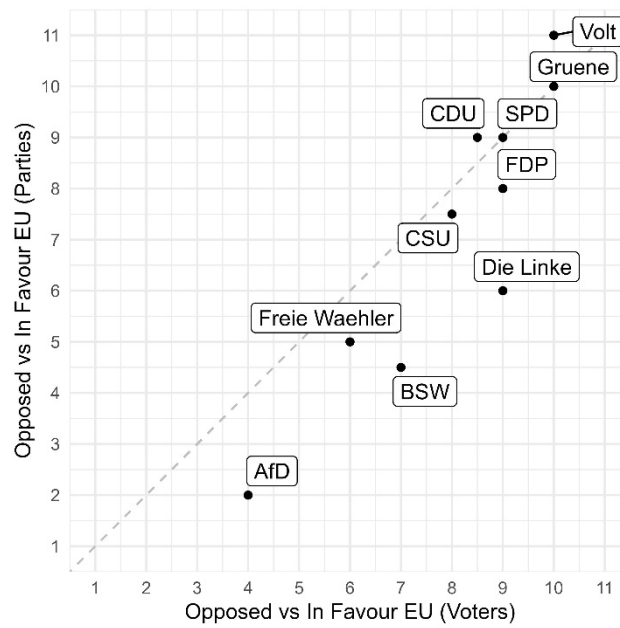


Figure 1.

Another advantage of our data is that, even after cleaning, it retains a large sample suitable for detailed analyses. Unlike Bundestag elections, EP elections in Germany do not have a five-percent threshold, giving smaller parties a realistic chance of winning seats. In 2024, 15 German parties secured representation in the EP. More than 3,900 users in our weighted dataset indicated an intention to vote for a party that gained seats in the 2024 EP elections but has not won seats in the 2021 Bundestag election. This makes the VAA dataset particularly valuable for studying smaller parties such as Volt (2.6%; 1,545 users), Free Voters (2.7%; 188), Die PARTEI (1.9%; 294), OEDP (0.6%; 138), and BSW (6.2%; 307).

Voters of such minor challenger parties are typically underrepresented in probability samples of 1,000–2,000 respondents, making their political preferences difficult to analyse. Yet these parties often reflect emerging movements, such as the BSW. Volt, as a pan-European party, is of great interest to European Union researchers, as it also competes in other member states. The VAA dataset is therefore not only valuable for understanding the German context but also of interest to researchers studying smaller parties in other countries.

Figure 2 shows the average support for EU integration by EP vote intention (parties with $n < 90$ removed for displaying reasons).

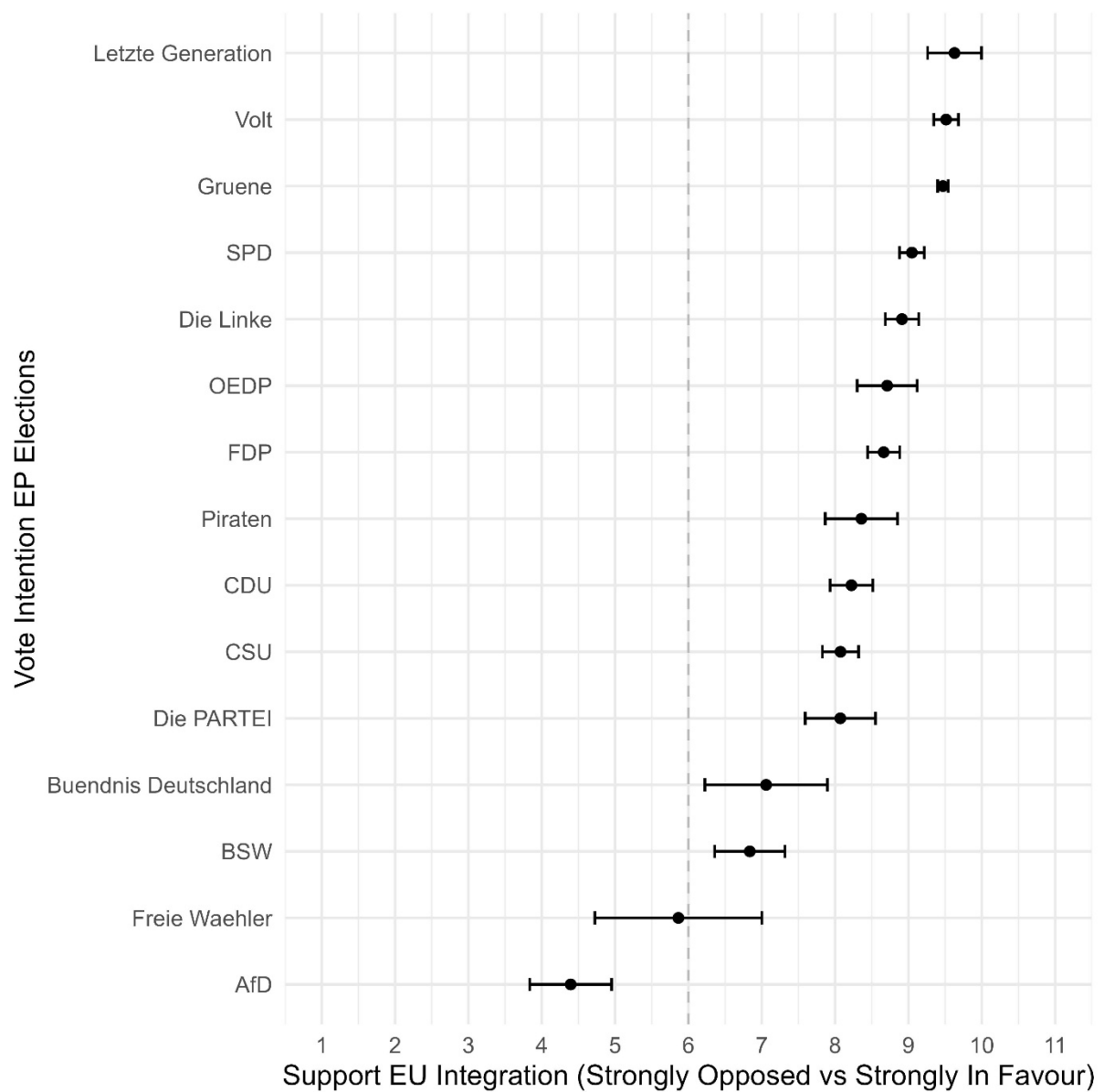


Figure 2.

Figure 3 plots these mean positions against the left-right self-placement of these voters. It shows a strong correlation, indicating that more right-leaning respondents are also more sceptical of European integration.

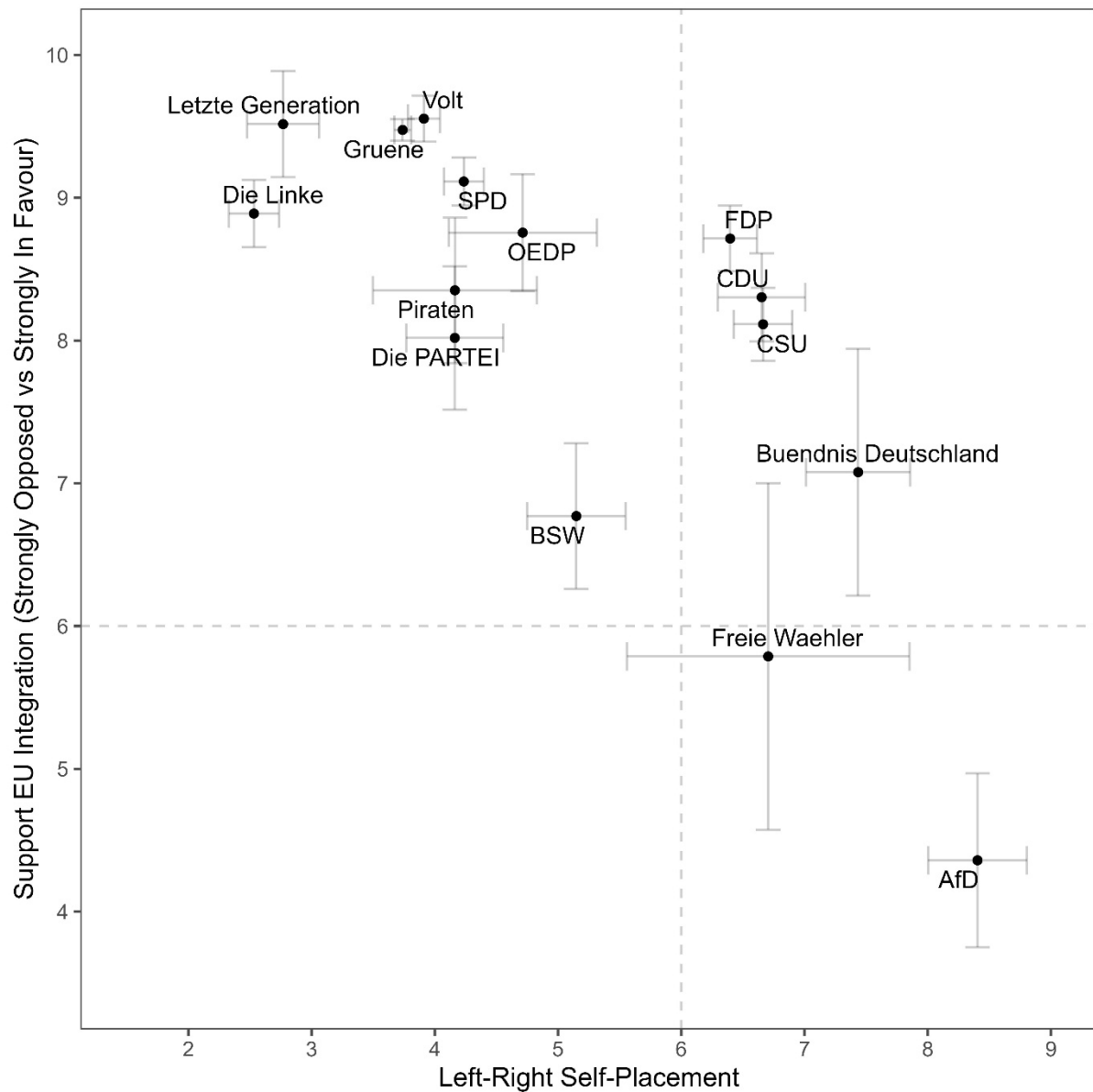


Figure 3.

Conclusion

VAA's have become established data sources in political science for analysing voters and parties. VAA data can provide valuable insights into phenomena we can only rarely observe otherwise, namely party and voter positions on the same issues. It also enables us to explore smaller subgroups, which cannot be studied with small-n probability samples.

We have presented the new Europartycheck dataset, which comprises over 40,000 users. This dataset can be combined with GEPARTEE, a dataset consisting of party

positions for 16 parties in Germany on 18 identical issues, with a focus on five key EU policies. In contrast to other VAA datasets, Europartycheck offers richer data, with a high share of VAA users having provided answers to socio-demographics and additional political variables. User (and party) positions are available on 11-point scales, which offer more flexibility than 3- or 5-point scales typically used in VAA datasets, with additional saliency measures. We offer survey weights and a quasi-representative quota sample to address the issue of data representativeness. Furthermore, we have demonstrated that VAA users are as politically interested as respondents of the German EES 2024 dataset.

Our dataset supports a detailed analysis of German parties and voters in the 2024 EP elections and is especially valuable for studying underrepresented groups, such as supporters of new/smaller parties, and support for specific EU policies. This makes it a useful resource not only for research on Germany but also for scholars interested in Euroscepticism, electoral behaviour, party system change, and the dynamics of challenger parties more broadly.

Literature

- Garzia D and Marschall S (2019) Voting Advice Applications. In: *Oxford Research Encyclopedia of Politics*. Oxford: Oxford University Press.
- Jolly S, Bakker R, Hooghe L, et al. (2022) Chapel Hill Expert Survey trend file, 1999–2019. *Electoral Studies* 75: 1–8.
- Lindstädt R, Proksch S-O and Slapin JB (2020) When Experts Disagree: Response Aggregation and its Consequences in Expert Surveys. *Political Science Research and Methods* 8(3). Cambridge University Press: 580–588.
- Meijers MJ and Zaslove A (2020) Measuring Populism in Political Parties: Appraisal of a New Approach. *Comparative Political Studies* 54(2): 372–407.
- Norris P (2020) Measuring populism worldwide. *Party Politics* 26(6): 697–717.
- Pianzola J (2014) Selection biases in Voting Advice Application research. *Electoral Studies* 36: 272–280.
- Thomeczek JP, Wurthmann C and Stecker C (2024) Europartycheck: VAA User Data and GEPARTEE Expert Survey (Party Positions). Harvard Dataverse. Available at: <https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/7PBJS9>.
- Thomeczek JP, Zhirnov A, Scotto di Vettimo M, et al. (2025) One model to rule them all? Choosing two-dimensional spaces for European political landscapes with VAA data. *Journal of Information Technology & Politics*. Online First.
- Toshkov D and Romeijn J (2021) How to estimate the policy preferences of party supporters: Disaggregating data from voting advice applications versus modeling survey responses. *Electoral Studies* 74: 1–8.
- Van Camp K, Lefevere J and Walgrave S (2014) The Content and Formulation of Statements in Voting Advice Applications: A Comparative Analysis of 26 VAAs. In: *Matching Voters with Parties and Candidates: Voting Advice Applications in Comparative Perspective*. Colchester: ECPR Press, pp. 11–32.

Data Availability Statement (DAS)

The datasets is available on Harvard Dataverse: <https://doi.org/10.7910/DVN/7PBJS9>

Online Appendix

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Table A1. List of Expert Survey Items.

Item	Scale	Group	In VAA?
eucohesion	1 Strongly opposes the EU Structural Funds 11 Strongly supports the EU Structural Funds	EU	Core
euenlargement	1 EU enlargement has gone too far 11 The EU should be expanded to include additional member states	EU	Core
euforeign	1 Believes member states should prioritize their own interests 11 Believes it is important for the EU to speak with one voice	EU	Core
euintegrationtoofar	1 The EU should return powers to national governments 11 National governments should transfer more powers to the EU	EU	Core
euposition	1 Strongly opposed to EU integration 11 Strongly in favor of EU integration	EU	Core
civilblaworder	1 Strongly favors prioritizing civil liberties 11 Strongly favors strict laws to combat crime	GAL-TAN	Core
immigratepolicy	1 Strongly supports liberal immigration policies	GAL-TAN	Core

	11 Strongly supports restrictive immigration policies		
lgb	1 The rights of sexual minorities should be restricted 11 The rights of sexual minorities should be expanded	GAL-TAN	Core
multiculturalism	1 Strongly favor a multicultural society 11 Strongly favor that migrants adapt	GAL-TAN	Core
trans	1 Transgender rights should be restricted 11 Transgender rights should be expanded	GAL-TAN	Core
urbanrural	1 Strongly support rural interests 11 Strongly support urban interests	GAL-TAN	Core
econinterven	1 Strongly supports state intervention in the economy 11 Strongly opposes state intervention in the economy	Economic	Core
environment	1 Strongly favors environmental protection, even at the expense of economic growth 11 Strongly favors economic growth, even at the expense of	Economic	Core

	environmental protection		
protectionism	1 Strongly supports international free trade 11 Strongly supports protecting domestic production	Economic	Core
redistribution	1 Strongly supports social redistribution 11 Strongly opposes social redistribution	Economic	Core
antielitism	1 Do not see the political elite critical at all 11 Sees the political elite very critical	Populism	Additional
peoplecentrism	Agreement with the statement that “People should always have the final say, not political parties or politicians.” 1 Not at all 11 Very much	Populism	Additional
Irgen	Placement on a left-right scale. ¹ 1 Left 11 Right	General Scale	Additional
galtan	Placement on GAL-TAN scale. 1 Libertarian/postmaterialist 11 Traditional/authoritarian	General Scale	Not included

¹ In accordance with the wording in CHES, in the expert parties, the labels “extreme left”, “center”, and “extreme right” were used.

lrecon	Placement on a left-right economic scale. <small>Fehler! Textmarke</small> nicht definiert. 1 Left 11 Right	General Scale	no
libdem	Support of liberal- democratic norms and values. 1 Respects such norms 11 Undermines such norms	Democracy	no

Note: For length reasons, antielitism, peoplecentrism and lrgen were only asked in the additional survey of the VAA. The items galtan and lrecon were not included in the VAA, as detailed policies of these dimensions were already covered by the VAA items. The item libdem was also not included, as experts gave feedback that the item was not specific enough.

Table A2. Sources of Constructs/Items used in the VAA Additional Survey.

Set of Items/Construct	Source
Ideational Populism	Castanho Silva et al., 2019)
Propensity to Vote	van der Eijk et al., 2006
Euroscepticism	Schmitt et al., 2014

Figure A1. Boxplot of Party Expert Placements.

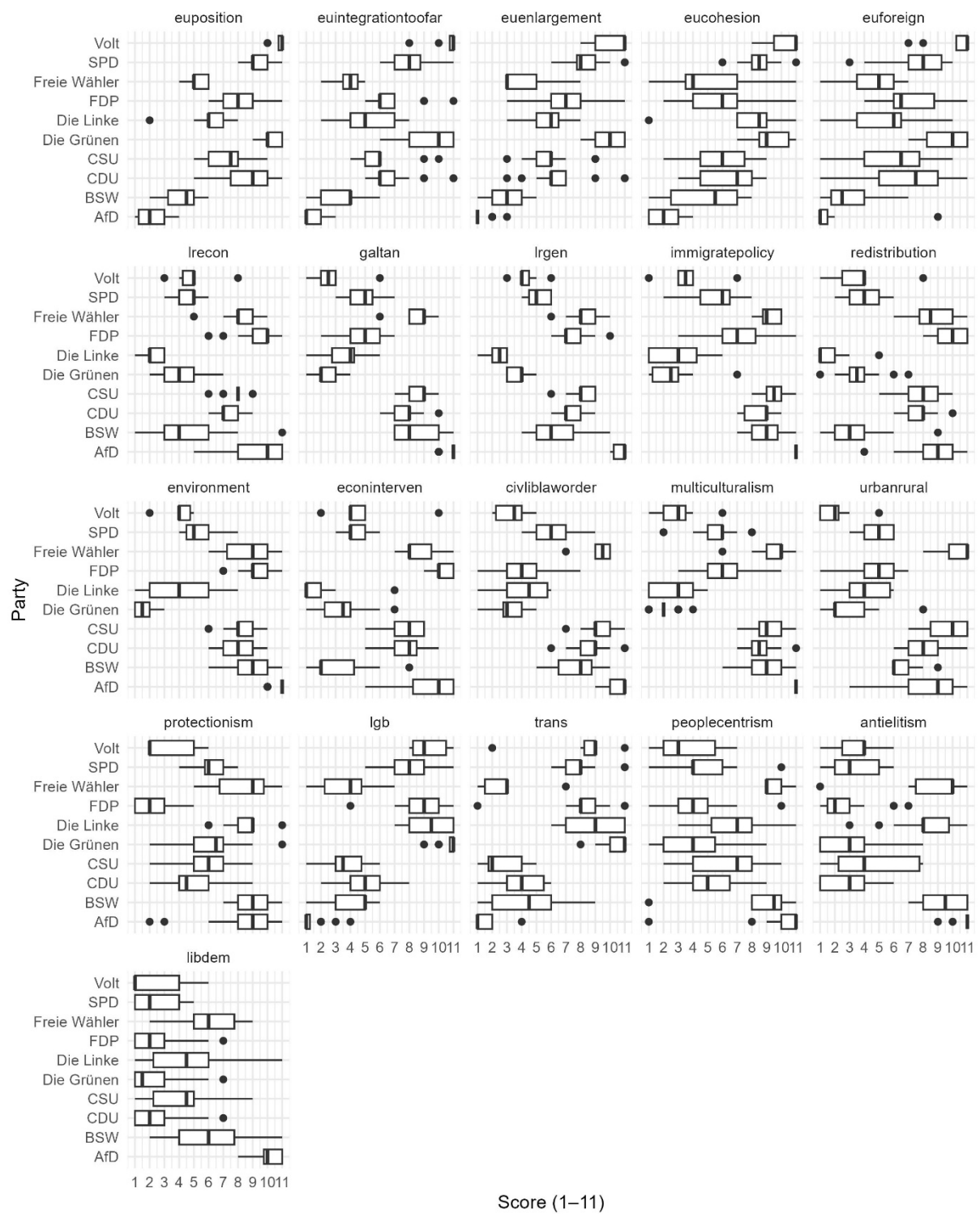
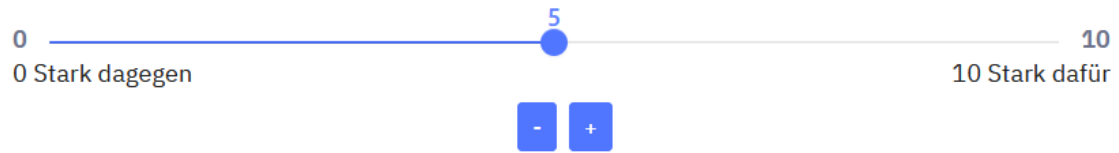


Table A3. Overview of Data Subsets.

Data (Sub)Set	N
Full Dataset	40,820
Answered 15 Core VAA Items	32,085
Answered 15 Core VAA Items + All Sociodemographics	26,612
Answered 15 Core VAA Items + All Sociodemographics + Last Item of Additional Questionnaire	14,997

Figure A2. Example of VAA Question.

Europäische Integration: Wie ist Ihre grundsätzliche Haltung zur Europäischen Integration?



Wie wichtig ist Ihrer Meinung nach dieses Thema? (freiwillige Zusatzangabe)

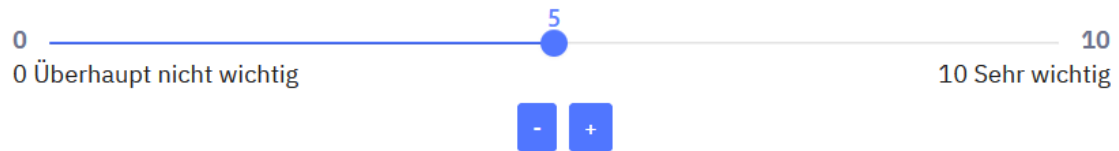
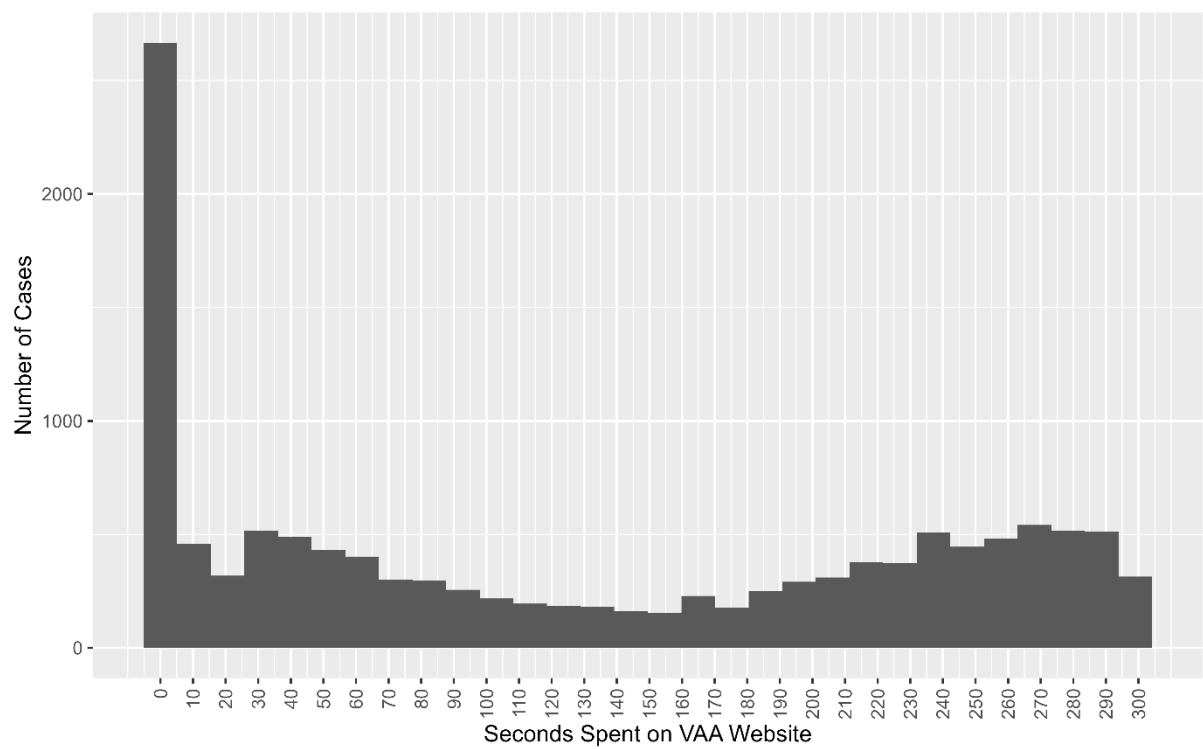


Table A4. Comparison of Sociodemographic Groups in Census and VAA Data

Category		Census		VAA	
		n	Share	n	Share
Age 16-34*	1	18,708,300	26.3	8,876	34.3
Age 35-44	3	10,934,300	15.4	5,745	22.2
Age 45-65	4	23,494,400	33.0	9,016	34.9
Age over 65	5	17,987,300	25.3	2,210	8.6
Without University Degree	0	51,086,700	71.8	8,513	32.9
With University Degree	1	20,037,600	28.2	17,334	67.1
Male	1	35,004,100	49.2	16,227	62.8
Female	2	36,120,200	50.8	9,620	37.2

*The respective Census category also includes 15-year-olds and thus does not perfectly align with the VAA age category.

Figure A3. Histogram of Time Spent on VAA.



Comparison with EES 2024

To address the issue of data quality, we compare our VAA dataset to the German sample of the European Election Study (EES) 2024 (Popa et al., 2024). As VAA usage is known to be linked to political interest (i.e., those more interested in politics are more likely to use VAAs, see Pianzola, 2014), we focus on comparing respondents' political interest. As political interest was asked on a four-point scale in the EES (no neutral category provided), we rescaled both variables to have the same range from 0 to 1. The weighted mean in the EES sample is slightly lower (0.64 compared to 0.76 in the weighted VAA samples), although also here, politically interested respondents seem to be overrepresented. As the lack of a neutral category could bias the results, we also calculated the (weighted) share of respondents showing high or very high interest in politics (top two answer categories). As Table A5 shows, the mean values are relatively similar (0.71 vs 0.74/0.75). We therefore conclude that while politically strongly interested individuals are overrepresented in our VAA dataset, they are only marginally less overrepresented in the EES sample.

Table A5. Comparison of Data Quality in EES 2024 and VAA Dataset.

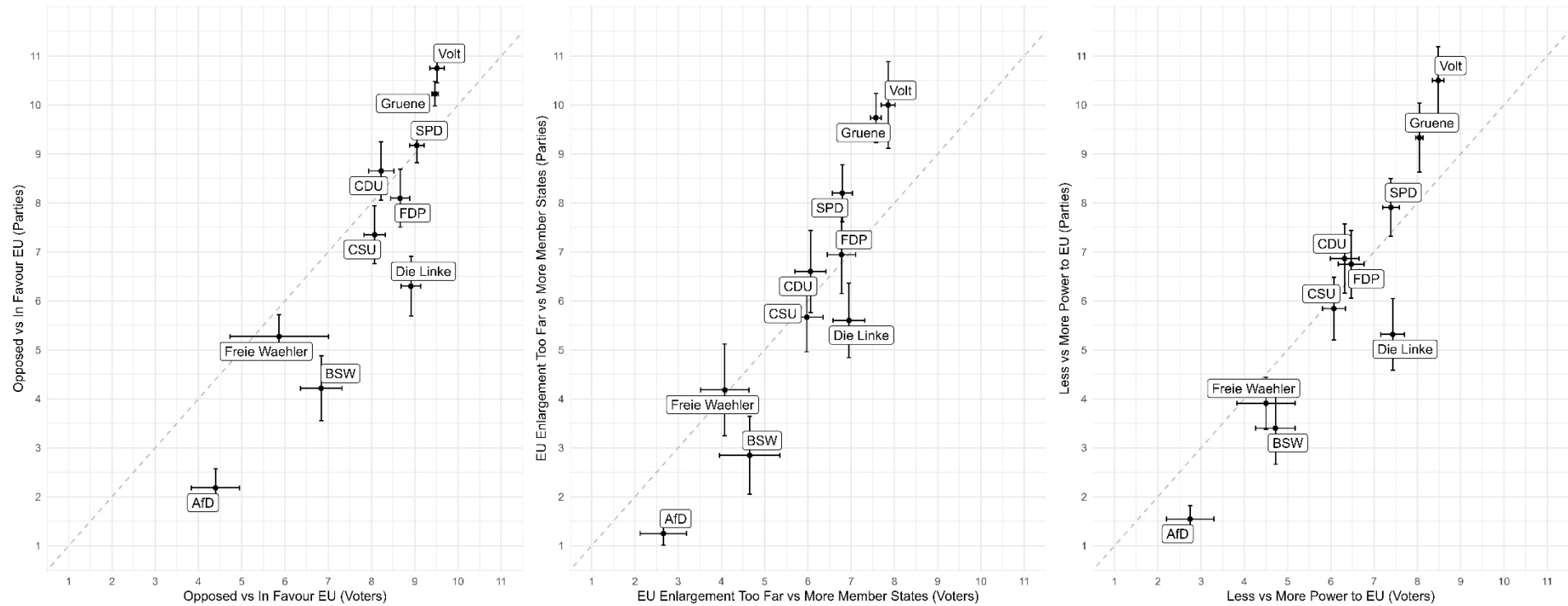
	EES (German Sample)	Full Weighted VAA Sample	Quasi- Representative VAA Sample
n	1,000	25,847	2,000
Mean Political Interest (rescaled to 0-1; weighted)	0.64	0.76	0.76
Share of highly politically interested respondents (strongly and quite interested; weighted)	0.71	0.74	0.75

As Table A6 shows, those differences, at least regarding highly politically interested respondents, fully vanish when non-voters are excluded. While around 20% of the EES respondents are non-voters, this share is very low in the quasi-representative VAA sample (0.25%). This corresponds to more recent findings that the effects of VAA usage on voter turnout are overstated, due to the self-selection bias around the intention to vote (Munzert and Ramirez-Ruiz, 2021).

Table A6. Comparison of Data Quality in EES 2024 and VAA Dataset (EU Voters Only).

	EES 2024 (German Sample)	Full Weighted VAA Sample (excluding Missings EU Vote Intention)	Quasi-Representative VAA Sample
n	791	14,198	1,995
Range of Weights	0.47 to 1.6	0.15 to 13.8	0.38 to 4.1
Mean Political Interest (rescaled to 0-1; weighted)	0.68	0.77	0.76
Share of highly politically interested respondents (strongly and quite interested; weighted)	0.77	0.76	0.75

Figure A4. Party-Voter Congruence on Three EU Items (Mean Expert Placement for Parties and Weighted Mean Voter Self-Placement by EP Vote Intention for Voters, including 95% CIs).



Literature

- Castanho Silva B, Andreadis I, Anduiza E, et al. (2019) Public Opinion Surveys: a New Scale. In: *The Ideational Approach to Populism: Theory, Method & Analysis*. London and New York: Routledge. Available at: https://populism.byu.edu/App_Data/Publications/memo.pdf (accessed 22 May 2017).
- Munzert S and Ramirez-Ruiz S (2021) Meta-Analysis of the Effects of Voting Advice Applications. *Political Communication* 38(6). Routledge: 691–706.
- Pianzola J (2014) Selection biases in Voting Advice Application research. *Electoral Studies* 36: 272–280.
- Popa SA, Hobolt SB, Van Der Brug W, et al. (2024) European Parliament Election Study 2024, Voter Study. GESIS. Available at: https://search.gesis.org/research_data/ZA8868?doi=10.4232/1.14409 (accessed 16 May 2025).
- Schmitt H, Hobolt SB, Popa SA, et al. (2014) European Parliament Election Study 2014, Voter Study, First Post-Election Survey.
- van der Eijk C, van der Brug W, Kroh M, et al. (2006) Rethinking the dependent variable in voting behavior: On the measurement and analysis of electoral utilities. *Electoral Studies* 25(3): 424–447.

ⁱ Readers can use the R-script included in the supplementary material to calculate weights for further data subsets.