

The more concentrated, the better represented? The geographical concentration of immigrants and their descriptive representation in the German mixed-member system

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Abstract

Does the geographical concentration of ethnic minorities influence their descriptive representation in closed-list systems? Counterintuitive to the idea that single-member district electoral rules are necessary for minorities' geographical representation, we argue that, in closed-list systems, parties are incentivized to allocate promising list positions to those minority candidates who are rooted in geographical areas where minorities concentrate. Empirically, we provide a case study of the list positions of dual candidates of immigrant-origin running in the German mixed-member system in 2013. Results show a relationship between the list positions of candidates of immigrant-origin and geographical concentrations of immigrant-origin residents.

Keywords

Descriptive representation, mixed-member systems, immigrant-origin candidates, geographical concentrations, ethnic minorities, closed-list systems

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Introduction

Investigating the descriptive representation of ethnic minorities is a fundamental topic in political science. The representation of ethnic minorities' interests, their political participation, and trust in democratic institutions, hinges on minorities' adequate numerical (or descriptive) representation in decision-making assemblies (Mansbridge, 1999). Since proportional representation (PR) systems perform better than single-member district (SMD) systems in producing proportionality between parties' vote and seat shares, they are often said to be more conducive to minority representation (Ruedin, 2009). However, scholarship demonstrates that the distinction between the two types of systems is not clear-cut. A key factor to be considered is the settlement patterns of minorities. That is, SMD systems can be more beneficial to geographically concentrated minorities than closed-list PR systems, while geographically dispersed minorities may find it easier to access the parliamentary ranks through closed-list PR systems (Bloemraad, 2013; Bochsler, 2011; Dancygier, 2014; Ruedin, 2009).

Evidence favouring the moderating effect of minorities' geographical concentrations is also provided by studies conducted in mixed-member (MM) systems (Donovan, 2007; Friedman, 2005; Kostadinova, 2007; Moser, 2008; Schönwälder, 2012; Wüst, 2014; Zollinger and Bochsler, 2012). Since MM systems create parliaments with a fixed share of seats elected under SMD and remaining seats allocated by PR (Shugart and Wattenberg, 2003), this line of research mainly seeks to make 'controlled' comparisons between levels of minority representation in the (closed-list) PR and in the SMD tier.

However, extant research in MM systems considers the geographical representation of minorities as a decisive factor in the SMD tier, while surprisingly little is known about the consequences of minorities' settlement patterns *in the closed-list PR tier of*

MM systems. Consequently, we ask in this paper whether minorities' geographical concentration influences descriptive representation in the closed-list PR tier of MM systems.¹ Pursuing this question provides an interesting research puzzle. From the perspective of formal electoral rules, minorities' geographical concentration may not be consequential in the PR tier because closed-list PR electoral rules lack the kind of geographical representation institutionalised in SMD systems (Latner and McGann, 2005). Conversely, minorities' geographical concentration could be a decisive factor for their descriptive representation in the closed-list PR tier of MM systems due to contamination effects between the two electoral tiers or due to informal recruitment rules requiring candidates to possess and maintain involvement in local politics. If candidates have such local attachments when running in the PR tier of MM systems, parties may have incentives to allocate promising list positions to minority candidates who are rooted in the geographical areas where minorities concentrate.

This article, we believe, is the first to pursue this research question. Moreover, by outlining a novel theoretical understanding of minorities' geographical representation, we make a theoretical contribution to the literature. Empirically, we provide a case study of list placements of dual candidates of immigrant origin running in the 18th German Bundestag elections held in 2013. Implemented in 1949, the German MM system has been in place continuously since then and is, therefore, the oldest existing MM system, which has, as a prototype, inspired other MM system designs globally in their basic, although not necessarily in all, features (Manow, 2015: 1–8). As such, the German electoral system may provide insights relevant for minority representation in other MM and closed-list PR systems, or for constitutional designers who plan to implement a German-style system.

Empirical results provide evidence that the list positions of dual candidates of immigrant-origin are positively related to geographical concentrations of immigrant-origin residents. This suggests that, in addition to formal electoral rules, other factors can affect geographical patterns of minority representation. Thus, our knowledge about the interplay of electoral rules, minorities' geographical representation, and their descriptive representation is far from complete, urging future research to investigate other determinants of local minority representation than formal electoral rules.

Electoral rules and the link between minorities' local concentration and their descriptive representation

The geographical representation of ethnic minorities is widely considered to be an important feature of SMD electoral rules for two main reasons. First, when the electoral territory is carved up into several SMDs, geographically concentrated minorities can become electorally powerful in a number of districts (or even the local majority) so that minority candidates are more likely to be electorally successful in these districts (Bochsler, 2010, 2011; Dancygier, 2014; Trounstein and Valdini, 2008: 555). Second, minorities' geographical concentration is also supposed to strengthen minority candidates' grassroots support within parties (Dancygier, 2014; Garbaye, 2000: 300; Laurence and Maxwell, 2012: 27). Dense networks of ethnic associations foster minorities' political participation and increase their local power resources at the grassroots level (Fennema and Tillie, 1999). Thus, minorities have greater opportunities to request that local party selectorates choose a local minority politician as a candidate in the upcoming district election (Dancygier, 2014: 236; Garbaye, 2000; Laurence and Maxwell, 2012: 21–29; Norris and Lovenduski, 1995: 143–165). However, if minorities are geographically dispersed under SMD electoral rules, then minorities may lose their local voting power and minority aspirants cannot rely on similar levels of local

grassroots support (Bochsler, 2010, 2011; Dancygier, 2014; Trounstine and Valdini, 2008). In other words, previous work suggests that the consequences of SMD electoral rules are contingent on minorities' geographical concentration.

In a similar vein, empirical research *in MM systems* mainly considers minorities' geographical concentration to be a decisive factor for descriptive representation in the SMD tier. Existing research in Eastern European MM systems suggests that, due to minorities' geographical concentration, the SMD tier provides often for similar or even better levels of minorities' descriptive representation compared to the PR tier (Friedman, 2005; Kostadinova, 2007). Other works suggest that the SMD tier may often be more conducive to minorities' descriptive representation since smaller districts are more likely to be ethnically homogenous, thus giving minorities more leverage to elect group members (Moser, 2008; Zollinger and Bochsler, 2012). Similarly, analysts of immigrant-minority representation in Germany ascribe lower levels of descriptive representation in the SMD tier to a pattern of modest geographical concentrations of immigrant groups (Donovan, 2007: 473; Schönwälder, 2012: 70–74).

Under closed-list PR electoral rules, whether in the PR tier of MM systems or in 'pure' PR systems, minorities' geographical concentration is not typically considered a driver of their descriptive representation. That may be because closed-list PR rules are typically envisioned to provide little leverage for geographical representation patterns (Latner and McGann, 2005). Moreover, closed-list PR rules are commonly thought to differ from SMD rules in that they put the electoral fate of minority candidates in the hands of national party elites rather than in those of local minority voters and/or activists. Regardless of minorities' settlement patterns, party elites are assumed to follow strategies of ticket-balancing reflecting the sociodemographic outlook of the overall electorate for the purpose of garnering votes from minority voters and to avoid

negative publicity about a potentially undiversified party list (Dancygier, 2014: 328; Laurence and Maxwell, 2012: 15–20; Norris and Lovenduski, 1995: 195; Valdini, 2012: 741; Zollinger and Bochsler, 2012: 615). Accordingly, there may be no relationship between the list position of minority candidates in the PR tier of a MM system and the local concentration of minority groups. Thus, it is not surprising that there is, as far as we know, a lack of research on the impact of the geographical concentration of ethnic minorities on their descriptive representation in the closed-list PR tier of MM systems as well as in closed-list PR systems.

Minorities' geographical representation in the PR tier of MM systems

Minorities' geographical concentration and their descriptive representation in the closed-list PR tier of MM systems may be more strongly related with each other than previous scholarship on minority representation in MM systems suggests. First, candidates in the PR tier may be locally connected due to contamination effects between the SMD and the PR tier. Indeed, literature largely unrecognised by scholarship on minority representation in MM systems suggests that the existence of two electoral tiers provides parties, candidates, and voters with new avenues for strategic behaviour. Bochsler, for example, demonstrates that, in compensatory MM systems, larger parties can make (illegitimate) deals with other parties and voters for the purpose of bypassing the compensatory mechanism and increasing their overall seat shares (Bochsler, 2012). Since the pioneering work of Herron and Nishikawa (2001), proponents of cross-tier contamination argue similarly that the behaviour of parties and voters differs strongly in MM systems from that of parties and voters in 'pure' SMD or PR systems.

Contamination posits that voters reward parties with PR votes in response to the personal appeal of SMD candidates; that is, personal votes cast in the SMD tier spill

over into votes for the party in the PR tier (Ferrara et al., 2005: 65–79; Hainmueller and Kern, 2008; Herron and Nishikawa, 2001; Manow, 2015: 61–85). Consequently, parties have vote-seeking incentives to nominate candidates to as many SMD districts as possible, even if they have no chance of winning the SMD race (Ferrara et al., 2005: 37; Herron and Nishikawa, 2001: 69–70). For this reason, it is common practice to nominate candidates in SMDs *and* in party lists simultaneously, so-called *dual candidates*² (Crisp, 2007; Ferrara et al., 2005; Hennl, 2014; Hennl and Kaiser, 2008; Manow, 2015: 161). In many MM systems, parties typically maximise their numbers of dual candidates by making the selection of candidates in the SMD tier a *requirement* for realistic list positions in the PR tier (Manow, 2015: 161). As local selection in the SMD tier is often considered a pre-condition for selection in realistic list positions in the closed-list PR tier, most viable list candidates may, therefore, be locally connected.

Second, party list candidates could be locally rooted due to informal recruitment requirements to maintain connections to local politics. In many closed-list PR and MM systems, political aspirants are required to gather political experience in local government, councils and/or party organisations before they are considered viable party list candidates. Even as elected legislators, they often keep their local mandates and offices in addition to their seats in the national parliament, thus effectively maintaining local political attachments. Evidence of such requirements is reported for many closed list systems, for instance, in Germany (Wessels, 1997), Israel (Hazan, 1999), Italy (Russo, 2011), the Netherlands (Leijenaar and Niemöller, 1997), and Portugal (Fernandes et al., 2017). For this reason, it is plausible to assume that grassroots support from local concentrations of ethnic minorities is often an inherent part of legislative recruitment in the closed-list PR tier of MM systems. Grassroots support ensures candidates' local selection in SMDs (if contamination is the driving mechanism), or

their access to local party/government mandates (if local mandate requirement is the driving mechanism), if not both.

Given such local attachments, parties seeking minority votes may have an incentive to provide minority candidates with better list positions if they originate from areas with concentrations of minority voters. By allocating realistic list positions to local minority representatives, parties can signal to minority voters that it takes the issue of minority representation seriously. According to Krauss and colleagues (2012), local voters are aware of the *list rankings* that *local* candidates occupy in the PR tier of MM systems. Voters know ‘that a high ranking... is a signal that the candidate is favored by the party’ (p. 750) and influences ‘the likelihood that the candidate will be elected of the list tier’ (p. 751). In other words, parties’ nomination decisions in the closed-list PR tier affect how voters evaluate local candidates and their parties. Thus, it is rational for minority voters to cast a vote for the local minority candidate’s party list as it increases the likelihood that the minority candidate is elected off the list, and minority voters can simultaneously reward the party for providing for local descriptive representation. Anticipating this behaviour, party elites have then the opportunity to mobilise local minority voters by manipulating candidates’ list rankings. Indeed, as every additional vote has the potential to increase a party’s seat share under rules of proportional representation, parties’ vote-seeking incentives to consider locally concentrated voting groups should be high.

This argumentation highlights the special role of *local* minority candidates for *local* minority mobilisation. Of course, in theory, the election of the candidate could simply be supported by voting for the party list regardless of whether the candidate is local or not. However, local candidates may be more visible to voters than other candidates on the list. As such, they could be utilised by their parties as important *local campaigning*

resources. As local candidates, they could mobilise the minority vote by canvassing ethnic community groups, knocking on doors of minority voters, meeting them face-to-face in the pedestrian area or by giving interviews to local media. In accordance, Gschwend and Zittel (2015) argue that local candidates establish important voting cues in MM systems because they are in close proximity to the voter and actually appear on the ballot paper in MM systems. Moreover, after the election, parties could assign the task of constituency casework to the (then elected) minority legislator for the purpose of nurturing, if not extending, the local minority voting base. For these reasons, party elites who seek the minority vote may have an incentive to place minority candidates higher on their party lists, if these candidates are from local areas where minority groups concentrate.

Thus, we hypothesise that *minority candidates receive better list positions in the PR tier if they are from areas of high minority concentration*.

Case selection, data and variables

To study empirically the relationship between minorities' geographical concentrations and their descriptive representation in the closed-list PR tier of MM systems, we provide a case study of the 2013 German Bundestag elections focussing on the recruitment of immigrant-origin candidates in the PR tier. Germany's long-standing history of immigration and the increasing ethnic diversity of the electorate, combined with a stark underrepresentation of immigrant-origin citizens in the Bundestag make Germany a very relevant case for the study of immigrant-minority representation. Due to its prototypical relevance, Germany's MM proportional system is also widely considered a prime example for studying the consequences of MM systems for political representation (Manow, 2015: 1-8).

Voters can cast a candidate vote in a single-member district race (SMD tier) as well as a party vote for a closed list of candidates in 16 multi-seat districts (PR tier). The system is further compensatory in that the PR tier determines the number of parliamentary seats that parties ultimately receive. Moreover, like in most MM systems, dual candidacy is an important institutional feature of the system. All main parties decide party list nominations *after* nominations have been decided at the local level in order to ensure priority for constituency candidates to receive the best positions in the list, while remaining (mainly unwinnable) list slots are filled with list-only candidates (Manow, 2015: 161; Reiser, 2014: 59). In the 2013 Bundestag election, for example, out of a total of 332 elected candidates in the PR tier, 306, or 92%, were elected as dual candidates, while the percentage of successful candidates who ran only on a list amounted to only 8% of all PR tier legislators.

Thus, the fact that almost all viable party list candidates are dual candidates provides us with the practical advantage of being able to link individual list candidates unambiguously to a specific local area. Consequently, we collected data on all 1138 dual candidates running in the 2013 election for one of the five most relevant political parties (CDU/CSU, SPD, FDP, The Left, and Greens), omitting the selective groups of district only ($n = 355$) and list only candidates ($n = 538$) from the sample. However, the seemingly advantage of analysing only dual candidates' list position has important consequences for disentangling the underlying assumed mechanisms. We explain this in greater detail in the discussion.

The dataset was compiled with the help of Parlamentwatch e.V., a registered German charity (www.abgeordnetenwatch.de), which records detailed background information on all constituency candidates. The organisation kindly provided the respective data, which we complemented with official data from the Federal Electoral

Commissioner (Bundeswahlleiter, 2013) and sources described in the following paragraphs.

Given that candidate selection predetermines candidates' electoral prospects when closed party lists are in use (Hazan and Rahat, 2010: 13), we focus on candidates' list positions as a dependent variable. Thereby, it is instrumental to include successful as well as unsuccessful candidates in our analysis, because relying just on elected representatives (successful candidates) does not allow us to gain insights into the recruitment decisions taken before the election (Dancygier, 2014). To operationalize the dependent variable, we follow Hazan and Rahat, for whom a list position is viable if it can be considered 'winnable before the elections... [such that] there is a need for a clear-cut and fixed delineation of the "realistic" from the "unrealistic"' (Hazan and Rahat, 2010: 14).

To capture parties' assessment of how promising each list position is, we build on Hennl and Kaisers' work on women's representation in Germany. In their study, the authors incorporate a survey with the executive committees of the regional party associations asking for the criteria they use for estimating safe list positions. The responses suggest that parties rely mainly on survey data in combination with previous election results. Moreover, since the authors also asked for the exact number of estimated safe list positions, they find that the average of list mandates won in the previous and in the analysed election is a good indicator of parties' anticipation of safe list positions (Hennl and Kaiser, 2008: 327). In line with this, we consider a candidates' list position as *promising* if it is smaller or equal to the average of list mandates that the party won in the previous and in the analysed election. Nonetheless, the last promising list position is of course less promising than those high on the list, while the position just below the defined delineation line can be considered as better than the last position

on the entire list. We consider the significance of these differences by subtracting a candidate's individual list position from the last promising position on a list, thus producing a continuous measure of candidates' *relative list positions*. A value of '0' denotes the last 'promising' position on a respective list, while positive (negative) values refer to positions above (below) the threshold, while also indicating each position's numerical distance to the threshold.

Following previous research on immigrant-minority representation in Germany (Donovan, 2007; Schönwälder, 2012; Wüst, 2014), we define and code candidates in our dataset as being of immigrant origin if they were born (a) outside the Federal Republic of Germany's present territory with foreign nationality at birth; (b) in Germany but with foreign nationality at birth (first generation); or (c) with German nationality and at least one parent of foreign nationality at birth (second generation). For the actual coding of dual candidates' immigrant backgrounds, we draw mainly on the information published by 'Mediendienst Integration' (Mediendienst Integration 2013) and other publicly available sources, such as personal websites, party websites, Wikipedia entries, and media interviews. In this way, we are able to identify 73 candidates of immigrant-origin, which amounts to 6.4 % of all candidates in this dataset (captured in the dichotomous variable *CIO*).

To measure the size of the immigrant-origin electorate at the constituency-level, we rely on the percentage of foreign nationals in the population (*%FN*). It ranges from 1 to 28 percent, with an average of 9 percent. Obviously, this indicator can only approximate the immigrant-origin electorate, because foreign nationals, by definition, do not have the right to vote in national elections. Nevertheless, given that citizens of immigrant origin and foreign nationals tend to reside in the same neighbourhoods, *%FN* is a reasonable approximation of a constituency's immigrant-origin electorate. Based on

census data at the level of administrative districts (Kreise), in 2013 the correlation between the two indicators was $r=0.78$ (Wüst 2014: 14). Moreover, another important limitation is that relying on this indicator does not allow us to distinguish between the population shares of different immigrant groups at the district-level. We return to this issue in the discussion.

A set of control variables is supposed to account for variations influencing candidates' relative list positions. At the level of regional multi-member districts, we control for *district magnitude*, accounting for the fact that party lists tend to be longer in districts of higher magnitude. At the party level, we include five dummy variables, one for each political party (*CDU/CSU*, *SPD*, *Greens*, *The Left*, and *FDP*). At the constituency level, we include *voter turnout* as well as *parties' vote shares* in the previous election (t-1) to control for the possibility that parties reward more politically active and supportive constituencies with a 'list' legislator in parliament (Manow, 2015: 78).

At the level of individual candidates, we also consider sociodemographic differences that may make candidates more attractive to party list selectors, including whether or not candidates are *female* and have a university degree (*tertiary education*) as well as candidates' *age* to account for the possibility that party list selectors prefer candidates who are better educated or are in more advanced career stages (Norris and Lovenduski, 1995: 113-15). Lastly, given that *incumbency* status is an important informal nomination rule in Germany (Reiser, 2014: 59), we also control for whether a candidate is a 'list' or 'district' incumbent or neither.

Table 1 provides descriptive statistics of the variables described. Our dependent variable ranges from -50 to 18 with an average of -7, showing that most dual candidates do not occupy a promising list position. Overall, 304 out of 1138 dual candidates

occupy relative list positions greater or equal to zero, which seems a reasonable estimate when compared to the 306 dual candidates that were actually elected in the PR tier in 2013.

Table 1. Descriptive statistics

	N	Mean	Min	Max	SD
Relative list position	1138	-6.94	-50	18	11.29
% FN	1138	9.10	1.01	28.37	5.48
CIO	1138	0.06	0	1	0.25
District magnitude	1138	36.53	4	74	22.93
CDU/CSU	1138	0.21	0	1	0.41
FDP	1138	0.23	0	1	0.42
Greens	1138	0.19	0	1	0.39
The Left	1138	0.12	0	1	0.33
SPD	1138	0.25	0	1	0.43
Voter turnout (t-1)	1138	71.52	58.93	79.79	3.88
Party vote share (t-1)	1138	19.89	3.78	49.47	9.65
Female	1138	0.34	0	1	0.47
Age	1138	47.77	19	78	10.82
Tertiary education	1121	0.79	0	1	0.41
Not incumbent	1138	0.61	0	1	0.49
List incumbent	1138	0.23	0	1	0.42
SMD incumbent	1138	0.16	0	1	0.37

Data analysis and results

Using candidates' relative list positions as a dependent variable allows us to compare candidates' electoral prospects across party lists and multi-member districts. However, the empirical analysis must take into account that our operationalisation of relative list positions only constitutes a 'limited' measure (Long, 1997: 187) of candidates' electoral prospects in the PR tier. To illustrate this point, consider the example of two candidates occupying relative list positions of, say, -50 and -40. Although the candidate occupying the latter position is ten positions higher up on the list, her chance of obtaining a seat in parliament is equally bad when compared to the other candidate (the likelihood of getting elected is close to 0% for both candidates)³, such that this difference in list positions should not be relevant to voters, candidates, or parties. It follows that the effect of minorities' geographical concentration described in our article does not apply to differences in relative list positions below a certain list position threshold. For this

reason, it is instrumental to censor observations falling below this threshold when examining our dependent variable in a regression analysis (Long, 1997: 188). When the dependent variable is limited in this way, Tobit regression models produce more accurate parameter estimates than OLS models and, hence, are preferred (Long, 1997: 189). Consequently, we employ Tobit models that left-censor the sample for relative list positions smaller than -20, thus censoring candidates who have less than a 3% chance of getting elected in the PR tier.⁴ Results presented do not vary greatly when changing the censoring threshold (see supplementary material). To take into account the clustering of the data inside multi-member districts, all regression coefficients are estimated with robust standard errors clustered on the 16 German *Länder*.

Table 2 presents results of six Tobit models determining candidates' relative list positions. The first model examines the impact of local immigrant shares, candidates' immigrant backgrounds, and an interaction term⁵ of these variables on the dependent variable without considering the impact of the control variables. By including the interaction term, we intend to test whether dual candidates of immigrant-origin occupy relatively higher list positions in the German PR tier when they originate from areas with a higher local foreigner share or whether the two indicators are statistically unrelated to each other.

The statistically significant positive effect of the interaction term suggests that a 10% increase in local immigrant shares (about two standard deviations) improves the relative list placement of a candidate of immigrant origin by one position ($(-0.15 + 0.26) * 10 = 1.1$), while the insignificant effect of the constituent term (%FN) indicates that the local immigrant share has a slightly negative, nonsignificant effect on the relative list position of other candidates. The negative effect of the constituent term suggests

that for every immigrant-origin candidate who moves upward on the list, another candidate moves down, thus producing a small negative coefficient.

Table 2. Tobit regression models

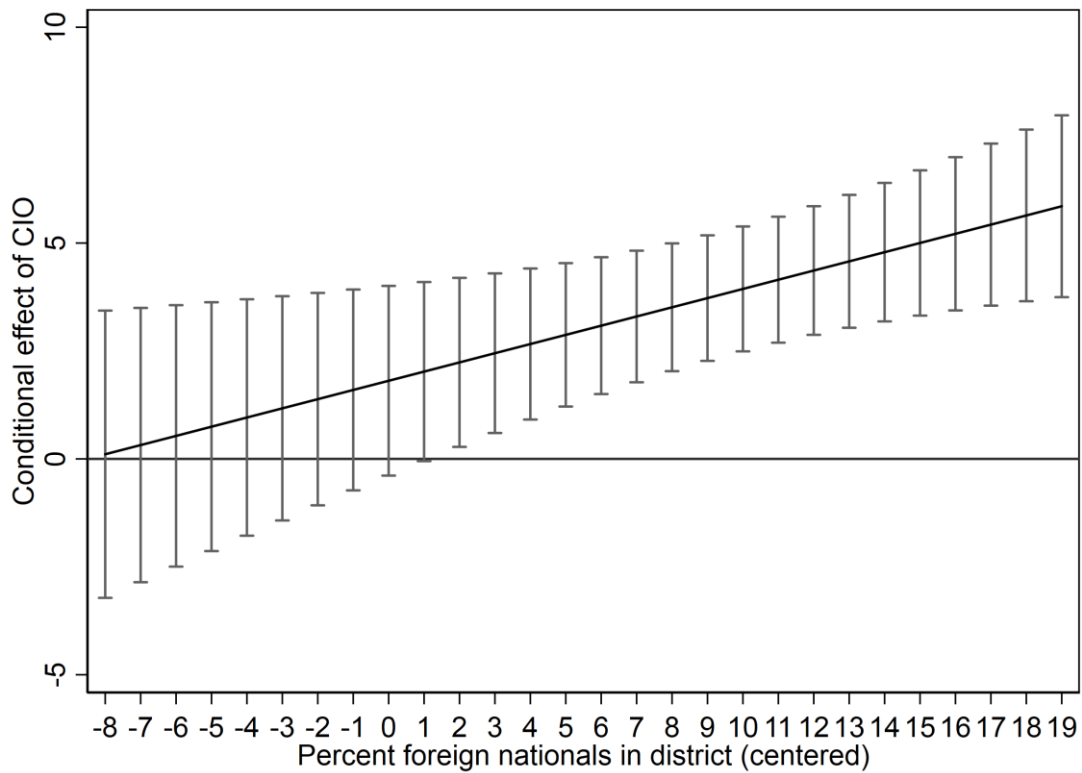
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
<i>Independent variables</i>						
% FN ^a	-0.15 (0.12)	0.02 (0.08)	-0.14 (0.11)	-0.15 (0.12)	-0.21 (0.11)	-0.07 (0.08)
CIO	2.31 (1.76)	2.31 (1.61)	1.32 (1.49)	2.30 (1.59)	2.87* (1.37)	1.81 (1.12)
CIO * % FN	0.26** (0.08)	0.16* (0.08)	0.23* (0.11)	0.26** (0.09)	0.24** (0.08)	0.21* (0.09)
<i>Multi-member district level controls</i>						
District magnitude ^a		-0.12*** (0.02)				-0.11*** (0.02)
<i>Party-level controls^b</i>						
FDP			-3.22* (1.26)			-4.76* (2.42)
Grüne			0.39 (1.35)			-3.13 (1.70)
Linke			4.39*** (0.84)			0.53 (1.26)
SPD			2.12* (1.05)			1.14 (1.60)
<i>Constituency-level controls^a</i>						
Voter turnout (t-1)				0.01 (0.10)		0.13 (0.07)
Party vote share (t-1)				-0.00 (0.05)		-0.16*** (0.03)
<i>Candidate-level controls</i>						
Female candidate					3.31*** (0.58)	2.49*** (0.49)
Tertiary education					1.39* (0.58)	1.79** (0.57)
Age ^a					-0.02 (0.01)	-0.04* (0.02)
C List incumbent ^c					11.46*** (2.32)	11.46*** (2.34)
C SMD incumbent ^c					4.55*** (1.14)	5.06*** (1.32)
Constant	-6.42*** (1.13)	-6.54*** (0.47)	-6.78*** (0.94)	-6.42*** (1.11)	-11.96*** (2.04)	-10.65*** (1.17)
Sigma	9.61*** (1.56)	9.33*** (1.56)	9.32*** (1.50)	9.61*** (1.56)	7.99*** (1.12)	7.41*** (1.05)
N	1138	1138	1138	1138	1121	1121
Censored N	144	144	144	144	141	141
Log-likelihood	-3835.26	-3793.49	-3799.81	-3835.24	-3592.52	-3501.08
Nagelkerke R ²	0.01	0.08	0.07	0.01	0.30	0.40

Note: Tobit regression models with left-censoring threshold at relative list position of -20. Table entries are unstandardised coefficients with robust standard errors clustered on 16 multi-member districts in parantheses. ^a Variables are centered at their global mean; ^b 'CDU/CSU' is the reference category; ^c 'Not incumbent' is the reference category; * p<0.05, ** p<0.01, *** p<0.001.

In Models 2 to 5, we add control variables depending on their level of measurement to the regression model. Most control variables work as expected and, as the models' fit statistics reveal (indicated by higher values for Log-likelihood and Nagelkerkes' R^2), differences in district magnitude, party affiliations, and candidate-level characteristics feature strongest in the explanation of candidates' relative list positions. Candidate-level variables have particularly strong explanatory power, mostly due to the incumbency variable, thus indicating that incumbent PR legislators are strongly advantaged on the list. Nevertheless, besides these influences, in all models the previously described effect of the interaction term remains robust, that is, indicating a statistically significant and positive effect of the local percentage of foreign nationals on the relative list placements of immigrant-origin candidates. Even in Model 6, where we add all control variables to the model, the relationship remains stable and the effect size substantial. Increasing the local percentage of foreign nationals in this model by 7 % (about one and a third standard deviations) improves the relative list placement of candidates of immigrant-origin by one position ($(-0.07 + 0.21) * 7 = 0.98$).

Further elaborations of our data suggest that the statistical association is mainly driven by the three parties on the political left (SPD, Greens, The Left). However, this does not come as a surprise given the well-known left-wing bias of immigrant-minority representation in Western European democracies (e.g. Bloemraad, 2013: 664). We provide additional empirical material and discussions on this issue in the supplementary material to this paper. Taken together, results do not change considerably, when model 6 is replicated for left-wing parties only, because left-wing parties are a priori more likely to select immigrant-origin candidates in any case, and because the distribution of foreigner shares is strongly biased towards smaller values for the few immigrant-origin candidates who run for right-wing parties.

Figure 1. Marginal effects of CIO on relative list position depending on local share of foreign nationals with 95% confidence intervals



Note: Based on Model 7 reported in Table 2. Remaining variables are hold at their means

Figure 1 visualises the finding from Model 6 in a marginal effect plot showing how the effect of CIO on the realistic list position changes conditional on the local immigrant share (centred). The upward slope suggests that the impact of CIO on the dependent variable increases as the local share of foreign nationals increases. From the 95% confidence intervals, it can be inferred that the positive effect of CIO becomes significant when the share of foreign nationals exceeds the average foreigner share by at least 2%. Taken together, these results indicate that the list positions of dual candidates of immigrant-origin are positively related to geographical concentrations of immigrant-origin residents. Thus, we consider our hypothesis as confirmed. For robustness checks, please see the supplementary material.

Discussion and conclusion

In this paper, we pursue the question of whether geographical patterns of minority representation exist in the PR tier of the German MM system. A review of previous research does not suggest the existence of a link between minorities' geographical concentrations and their descriptive representation in the closed-list PR tier of MM systems. Subsequently, two arguments of why candidates may have, in many cases, local roots despite their nomination on a closed party list are proposed. First, party list candidates run in many MM systems simultaneously as SMD candidates due to contamination effects between the SMD and PR tier. Second, under formal closed-list PR electoral rules, candidates and legislators are often involved in local politics, for example as local councillors or party officials. Given these local attachments, party elites may have incentives to allocate better list positions to minority candidates who are rooted in areas of high minority density in order to attract the local minority vote. In line with this argumentation, the presented empirical evidence shows that dual candidates of immigrant-origin received better party list positions preceding the 2013 Bundestag elections when they were selected to run simultaneously as district candidates in local constituencies where many citizens of immigrant-origin reside.

Despite this, our study has several limitations. First, a major concern is the unavailability of detailed district-level sociodemographic data. Due to the non-existence of such data, we have to rely on the local share of foreign nationals as a proxy for the immigrant-origin electorate in candidates' home areas. However, in an ideal world, we would not only have a direct measure of our target group at the local level, but we would also be able to distinguish between the shares of different immigrant groups. Unfortunately, we are unable to do so because there is no district-level sociodemographic data available. For this reason, our analysis relies on the implicit

assumption that immigrant-origin voters prefer any immigrant-origin candidate over a native candidate, even if the immigrant-origin candidate has a different national background than the voter.

Although this is not ideal, it can be argued that when minority voters are unable to select a representative with reliable descriptive characteristics, they nevertheless prefer pseudo-descriptive representatives, whose characteristics mimic descriptive representation (Mansbridge, 1999: 645). Such an understanding is also supported by empirical research on immigrants' voting behaviour. This literature suggests that disadvantaged immigrant groups tend to see their own social and economic disadvantages as linked to the disadvantages of immigrants more generally (Sanders et al., 2014). For this reason, most immigrant voters tend to vote for immigrant-origin candidates, irrespective of whether the candidate has a matching or different national background, because voters perceive immigrant-origin candidates to be more trustworthy than native candidates in representing the interests of immigrant groups (Bergh and Bjorklund, 2011; Teney et al., 2010; Zingher and Farrer, 2016). In addition, it can be argued that relying on the foreigner share should make for a tough test of our hypothesised link as it should bias the coefficient of the interaction term downward in case there was no voting link between voters and candidates of different immigrant origin.

Second, as the German MM system operates in a PR tier with several multi-member districts, the composition of party lists may be targeted to the regional sociodemographic profile. This relationship might feed into the link between minorities' local concentration and their descriptive representation. In other words, it is possible that list positions of immigrant-origin candidates are to some extent affected by the minority population shares of multi-member districts. Although this potential effect is

accounted for in our empirical models through the consideration of robust standard errors clustered at the level of regions (multi-member districts), the question remains whether our finding is specific to the German system or whether it applies also to MM systems operating in national PR tiers. Although we cannot answer this question, it can be argued that minor changes in MM electoral system design have occurred in MM systems in the past and may happen in the future; for example changing from a national to a regionally differentiated PR tier, or vice versa. Therefore, even if our finding is specific to the German-style system, electoral system reformers may want to consider it when evaluating potential changes to the territorial organisation of the PR tier of MM systems.

A third limitation is that our single-country study does not allow us to distinguish the consequences of contamination-induced dual candidacy requirements from consequences of candidates' other involvements in local politics. Unfortunately, including a control group of list-only candidates as a means to separate these effects is not feasible. List-only candidates are *a priori* very unlikely to receive a promising list position; therefore, they are too selective a group to be compared to dual candidates in Germany.

Although our study leaves open a number of questions, it makes a major contribution to the study of electoral systems and minority representation as it is the first to shed light on the link between minorities' local concentration and their descriptive representation in the closed-list PR tier of MM systems. As such, it makes plausible arguments for why this link should be there and provides first empirical evidence from a country that is particularly relevant with regard to immigrant-minority representation. Thus, the present contribution is an important reference point for future studies of minorities' descriptive representation in MM and closed-list PR systems. A

crucial point is the possibility of geographical representation in the PR tier as a consequence of contamination effects. In fact, confirmation of contaminated minority representation flowing from the SMD to the PR tier would have important implications for previous scholarship conducted in MM systems. This line of research relies exclusively on the assumption of independent electoral tiers. In this regard, although our article cannot ultimately prove contamination effects, at least it casts doubts regarding the validity of the assumption of independence. Thus, we urge future researchers to keep in mind that it is not necessarily appropriate to assume independent electoral tiers when studying minorities' descriptive representation in MM systems. This article narrows crucial gaps in previous scholarship on minority representation in MM and closed-list PR systems, while outlining avenues for future research.

To test the generalisability of the finding, future studies should examine the extent to which it travels to other MM as well as to 'pure' closed-list PR systems. First, future research may develop and test hypotheses regarding the consequences of different institutional variations within the broader category of MM systems. Although the German system is widely recognised to be the prototype MM system, guiding implementation in other countries (Manow, 2015: 1-8), these systems do not resemble the German one in every detail. We already noted that other systems might operate in a nationwide rather than in several regional multi-member districts. MM systems can also differ in other aspects, for example as to whether the PR tier is compensatory or not, and as to whether dual candidacy⁶ is allowed or not (Krauss et al., 2012; Shugart and Wattenberg, 2003). While we would not necessarily expect patterns of minorities' geographical representation in the PR tier to differ depending on such different MM system designs, only future empirical scrutiny will determine if the found geographical representation link also exists in these.

Second, we need research on minorities' geographical representation in 'pure' closed-list PR systems as well as comparisons of this type of system with MM systems. Indeed, geographical patterns of minority representation may not be limited to the PR component of MM systems. Since candidates' involvement in local politics is a common feature of many 'pure' closed-list PR systems, similar effects may be found here. Moreover, by comparing MM with 'pure' closed-list PR systems, future research should be better able to disentangle effects of contamination from effects of candidates' local involvement that generally apply to closed-list PR electoral systems. Based on such a comparative research design, the contamination thesis would find strong corroboration if minorities' geographical representation is found to be a more decisive feature in mixed than in 'pure' systems. A finding of similar patterns of geographical representation in both types of systems would, on the other hand, strengthen the thesis that such representational patterns can be a feature of any closed-list system.

However, new databases are needed to allow the tracing of minority representation across different electoral systems and, ideally, even further down the 'ladder of recruitment' by incorporating the aspirants applying for candidacy in the analysis. Future research should build such databases and investigate whether, how, and which institutions of local representation matter to minorities' descriptive representation across a wide range of electoral systems.

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Supplementary material

Supplementary material is available at journals.sagepub.com/home/ips.

Notes

¹ Throughout this paper, the terms ‘minority’ and ‘ethnic minority’ are used interchangeably. Following previous research (Bochsler, 2010; Moser, 2008, p. 280; Ruedin, 2009), ethnic minority groups are in a numerical minority position and members of these groups self identify with each other due to common religion, language, cultural history, race, or national identity. Thus, the definition applies to minority groups with a long-standing history of residence in a country (autochthonous) as well as to immigrant minorities (allochthonous).

² Dual candidacy exists in many MM systems, among them Hungary, Italy (before 2005), Japan (lower chamber), Lithuania, New Zealand, Scotland, Wales (since 2016) and the German regional parliaments (see Crisp, 2007: 1462; Ferrara et al., 2005: 18; Hennl, 2014: 94; Krauss et al., 2012: 754). Exceptions extend to Japan (upper chamber), Thailand, Ukraine and Wales (before 2016).

³ To illustrate this point statistically, we fit a bivariate probit regression model estimating the effect of relative list positions on the likelihood of getting elected off a party list in 2013 (see Table A1 in the supplementary material) and also visualised the relationship in a marginal effects plot (Figure A1 in the supplementary material). The graph shows a distinct ‘floor effect’ of our dependent variable: In other words, the relative list position between the lowest observed value of -50 and approximately -20 has literally no positive effect on a candidate’s electoral prospects, while increasing the relative list positions between values of approximately -20 and 18 translates continuously into better electoral prospects.

⁴ This election likelihood follows from the probit regression estimation shown in Table and Figure A1.

⁵ The centring of %FN at its mean value is supposed to handle multicollinearity between the interaction term and its constituent terms (see also supplementary material).

⁶ In order to examine whether the dual candidacy provision is prerequisite for contamination-induced geographical representation in MM systems, future research may turn to cases that do not allow for dual candidacy. For example, it may be possible to study how the implementation of dual candidacy in Wales in 2016 influenced minority representation as compared to previous elections. Alternatively, future research may compare minority representation in Wales (before 2016) and Scotland, a MM system that allows dual candidacy. As both systems are subnational British electoral systems, this research design would resemble a most similar systems design.

References

- Bergh, Johannes and Tor Bjorklund (2011). The Revival of Group Voting: Explaining the Voting Preferences of Immigrants in Norway. *Political Studies* 59(2): 308–327.
- Bloemraad, Irene (2013). Accessing the Corridors of Power: Puzzles and Pathways to Understanding Minority Representation. *West European Politics* 36(3): 652–670.
- Bochsler, Daniel (2010). Electoral rules and the representation of ethnic minorities in post-communist democracies. *European Yearbook of Minority Issues* 7: 153–180.
- Bochsler, Daniel (2011). It is not how many votes you get, but also where you get them. Territorial determinants and institutional hurdles for the success of ethnic minority parties in post-communist countries. *Acta Politica* 46(3): 217–38.
- Bochsler, Daniel (2012). A quasi-proportional electoral system ‘only for honest men’? The hidden potential for manipulating mixed compensatory electoral systems. *International Political Science Review* 33(4): 401–20.
- Bundeswahlleiter (2013). *Wahl zum 18. Deutschen Bundestag am 22. September 2013. Sonderheft: Die Wahlbewerber für die Wahl zum 18. Deutschen Bundestag 2013.* Wiesbaden.

- Crisp, Brian F. (2007). Incentives in Mixed-Member Electoral Systems: General Election Laws, Candidate Selection Procedures, and Cameral Rules. *Comparative Political Studies* 40(12): 1460–1485.
- Dancygier, Rafaela M. (2014). Electoral Rules or Electoral Leverage? Explaining Muslim Representation in England. *World Politics* 66(2): 229–263.
- Donovan, Barbara (2007). ‘Minority’ Representation in Germany. *German Politics* 16(4): 455–480.
- Fennema, Meindert and Jean Tillie (1999). Political Participation and political trust in Amsterdam: civic communities and ethnic networks. *Journal of Ethnic and Migration Studies* 25(4): 703–726.
- Fernandes, Jorge M, Cristina Leston-Bandeira and Carsten Schwemmer (2017). Election proximity and representation focus in party-constrained environments. *Party Politics* (July 2016).
- Ferrara, Federico, Eric S Herron and Misa Nishikawa (2005). *Mixed Electoral Systems. Contamination and its Consequences*. New York: Palgrave Macmillan.
- Friedman, Eden (2005). Electoral System Design and Minority Representation in Slovakia and Macedonia. *Ethnopolitics* 4(4): 381–96.
- Garbaye, Romain (2000). Ethnic minorities, cities and Institutions: A comparison of the modes of management of ethnic diversity of a French and British city. In Ruud Koopmans and Paul Statham (eds), *Challenging Immigration and Ethnic Relations Politics*. Oxford: Oxford University Press.
- Gschwend, Thomas and Thomas Zittel, (2015). Do constituency candidates matter in German Federal Elections? The personal vote as an interactive process. *Electoral Studies* 39: 338–349.

- Hainmueller, Jens and Holger L Kern (2008). Incumbency as a source of spillover effects in mixed electoral systems: Evidence from a regression-discontinuity design. *Electoral Studies* 27(2): 213–227.
- Hazan, Reuven Y (1999). Constituency interests without constituencies: the geographical impact of candidate selection on party organization and legislative behavior in the 14th Israeli Knesset, 1996–99. *Political Geography* 18: 791–811.
- Hazan, Reuven Y and Gideon Rahat (2010). *Democracy within Parties: Candidate Selection Methods and Their Political Consequences*. Oxford: OUP Oxford.
- Hennl, Annika (2014). Intra-party dynamics in mixed-member electoral systems: How strategies of candidate selection impact parliamentary behaviour. *Journal of Theoretical Politics* 26(1): 93–116.
- Hennl, Annika and André Kaiser (2008). Ticket-balancing in mixed-member proportional systems. Comparing sub-national elections in Germany. *Electoral Studies* 27(2): 321–336.
- Herron, Eric S and Misa Nishikawa (2001). Contamination effects and the number of parties in mixed-superposition electoral systems. *Electoral Studies* 20(1): 63–86.
- Kostadinova, Tatiana (2007). Ethnic and women's representation under mixed election systems. *Electoral Studies* 26: 418–31.
- Krauss, Ellis, Kuniaki Nemoto and Robert Pekkanen (2012). Reverse Contamination: Burning and Building Bridges in Mixed-Member Systems. *Comparative Political Studies* 45(6): 747–773.
- Latner, Michael and McGann, Anthony (2005). Geographical representation under proportional representation: The cases of Israel and the Netherlands. *Electoral Studies* 24(4): 709–734.

- Laurence, Jonathan and Rashaan Maxwell, (2012). Political Parties and Diversity in Western Europe. In Teri Givens and Rashaan Maxwell (eds), *Immigrant Politics: Race and Representation in Western Europe*. Boulder: Lynne Rienner Publishers.
- Leijenaar, Monique and Niemöller, Kees (1997). In Pippa Norris (ed.), *Passages to power. Legislative recruitment in advanced democracies*. Cambridge: Cambridge University Press.
- Long, J Scott (1997). *Regression Models for Categorical and Limited Dependent Variables*. Thousand Oaks: Sage.
- Manow, Philip (2015). *Mixed Rules, Mixed Strategies. Candidates and Parties in Germany's Electoral System*. Colchester: ECPR Press.
- Mansbridge, Jane (1999). Should Blacks Represent Blacks and Women Represent Women? A Contingent 'Yes'. *The Journal of Politics* 61(3): 628–657.
- Mediendienst Integration. (2013). Bundestagskandidaten mit Migrationshintergrund. Retrieved 9 March 2016, from https://mediendienst-integration.de/fileadmin/Dateien/Bundestagskandidaten_MDI.pdf
- Moser, Robert G (2008). Electoral Systems and the Representation of Ethnic Minorities: Evidence from Russia. *Comparative Politics* 40(3): 273–292.
- Norris, Pippa and Joni Lovenduski (1995). *Political Recruitment: Gender, Race, and Class in the British Parliament*. Cambridge: Cambridge University Press.
- Reiser, Marion (2014). The universe of group representation in Germany: Analysing formal and informal party rules and quotas in the process of candidate selection. *International Political Science Review* 35(1): 55–66.
- Ruedin, Didier (2009). Ethnic Group Representation in a Cross-National Comparison. *The Journal of Legislative Studies* 15(4): 335–354.

- Russo, Federico (2011). The Constituency as a Focus of Representation: Studying the Italian Case through the Analysis of Parliamentary Questions. *The Journal of Legislative Studies* 17(3): 290–301.
- Sanders, David, Anthony F Heath, Stephen D Fisher and Maria Sobolewska (2014). The Calculus of Ethnic Minority Voting in Britain. *Political Studies* 62: 230–51.
- Schönwälder, Karen (2012). Cautious Steps: Minority Representation in Germany. In Terri E Givens and Rashaan Maxwell (eds), *Immigrant Politics: Race and Representation in Western Europe*. Boulder: Lynne Rienner Publishers.
- Shugart, Matthew S and Martin P Wattenberg (2003). Mixed-Member Electoral Systems: A Definition and Typology. In Matthew S Shugart and Martin P Wattenberg (eds), *Mixed-Member Electoral Systems: The Best of Both Worlds?* Oxford: Oxford University Press.
- Teney, Celine, Dirk Jacobs, Andrea Rea and Pascal Delwit (2010). Ethnic voting in Brussels: Voting patterns among ethnic minorities in Brussels (Belgium) during the 2006 local elections. *Acta Politica* 45(3): 273–97.
- Trounstine, Jessica L and Melody E Valdini (2008). The Context Matters: The Effect of Single Member vs At-Large Districts on City Council Diversity. *American Journal of Political Science* 68(4): 554–569.
- Valdini, Melody E (2012). A deterrent to diversity: The conditional effect of electoral rules on the nomination of women candidates. *Electoral Studies* 31: 740–749.
- Wessels, Bernhard (1997). Germany. In Pippa Norris (ed.), *Passages to power. Legislative recruitment in advanced democracies*. Cambridge: Cambridge University Press.
- Wüst, Andreas M. (2014). Immigration into Politics: Immigrant-origin Candidates and

Their Success in the 2013 Bundestag Election. *German Politics & Society* 32(3): 1–15.

Zingher, Joshua N and Benjamin Farrer (2016). The electoral effects of the descriptive representation of ethnic minority groups in Australia and the UK. *Party Politics* 22(6): 691–704.

Zollinger, Daniel and Daniel Bochsler (2012). Minority representation in a semi-democratic regime: the Georgian case. *Democratization* 19(4): 611–41.

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