## Inclusion by Design

Measuring Minority Inclusion Comparatively to Assess Institutions for Divided Societies

David Lublin<br>American University<br>dlublin@american.edu


#### Abstract

I propose new cross-national measures of minority inclusion based on ethnic minority support for government parties. These measures will greatly aid efforts to design political institutions intended to achieve greater minority inclusion and to ameliorate ethnic conflict by allowing for more sophisticated quantitative cross-country assessments of the effect of institutions on inclusion. I further explain how the proposed measure can be estimated to a useful degree of accuracy through multiple methods, including polls and ecological inference from ethnic and election data.


The inclusion of ethnic minority groups is critical to avoiding or ameliorating ethnic conflicts and building more just polities. Political scientists have often identified the exclusion from power of ethnic minority groups as a means of stoking discontent that often leads to ethnic conflict (Esmen 1994; Guelke 2004; Jenne 2007; Schneckener and Wolff 2004; Wimmer 2002). Perhaps Northern Ireland is the paradigm case. While Catholic Republicans regularly gained election to the regional assembly, they had absolutely no hope of exercising power in system that entrenched Protestant Unionist domination. The regional government proved unequal to resolving tensions to the satisfaction of either the majority or the minority, and the ensuing violence known as the Troubles lasted roughly three decades (O'Leary 2019; O'Leary and McGarry 2016).

Consequently, analyzing the impact of different institutional arrangements on ethnic minority inclusion is central to moving closer towards the seemingly chimerical goal of designing institutions to prevent or to assuage ethnic conflict. Yet assessing minority group inclusion across different countries has proved a slippery, difficult task, making it difficult to assess the impact of competing institutional design models (Kroeber 2017b; 2018).

Sophisticated past studies conducted within individual countries that assess minority representation and inclusion provide little guidance. Scholars of American politics, for example, have produced a wealth of work analyzing minority success in garnering descriptive representation-the election of minority group members to office-and substantive representation-the articulation and support for minority policy preferences (Cameron, Epstein and O'Halloran 1996; Canon 1999; Davidson and Grofman 1994; Grofman 1998; Grofman, Handley and Niemi 1992; Lublin 1997; Lublin et al 2019; Parker 1990; Swain 1995), as conceptualized by Hanna Pitkin (1972).

But descriptive representation is not the same as inclusion or power. Substantive representation also fails to capture these concepts when limited to the representation of minority group interests as opposed to their achievement. Scholarly analyses that capture success by minority groups in producing policy changes still do not provide clues on how to compare minority group power cross-nationally.

Vast differences in minority group situations and policy goals render cross-national measurement of inclusion extremely challenging. Ethnic minorities vary enormously in terms of size, geographic concentration, resources, and policy goals (Kroeber 2017b; 2018). Limiting the focus to minority-oriented issues does not really solve the problem. Dispersed racial minorities like African Americans possess very distinct histories and concerns from concentrated linguistic minorities like Basques in Spain. Seemingly similar groups such as Walloons in Belgium and Quebecers in Canada still face separate challenges or have different goals.

Even identifying distinct ethnic groups can prove quite tricky (Cheesman and Ford 2007; Fearon 2003; Ferree 2012; Posner 2004; Safran 2008; Scarritt and Mozaffar 1999). Identities rest in a range of ascriptive, socially defined characteristics such as language, race, ethnicity, and religion. Individuals may also possess multiple cross-cutting identities, like those related to
caste, religion and language in India (Chandra 2004; Chandra 2012; Selway 2011). Ethnicities may also nest inside one another like matryoshka dolls (Ferree 2012). In Zambia, for example, competing linguistic groups each encompass a large range of distinct ethnic groups (Posner 2004).

The ongoing problem in measuring minority inclusion even rudimentarily across countries is far from a minor issue. Beyond limiting our ability to comparatively examine minority inclusion, it severely undercuts efforts to gain purchase on how to design institutions to promote minority inclusion and avoid ethnic conflict.

## Measuring Minority Inclusion

Building on past work that focus on the linkage between ethnicity and party (Amorim Neto and Cox 1997; Caramani 2004; Chandra 2004; Clark and Golder 2006; Hicken and Stoll 2011; Jones 2004; Lublin 2017a; Lublin 2017c; Madrid 2012; Mylonas and Roussias 2008; Ordeshook and Shvetsova 1994; Posner 2005; Selway 2011), this study proposes two closely related measures of ethnic minority inclusion: (1) the share of minority group members who voted for the political parties that form the government, or provide outside support for it, and (2) the share of minority group members among the supporters of these parties. In countries with dominant or very strong presidents, similar measures can gauge minority inclusion in the winning presidential candidate's electoral coalition.

These measures follow the intuition that governments with high levels of minority support are more likely to address their concerns. At the very least, such governments ought to exhibit less hostility to minority interests than ones that do not have their support or rely on them to remain in office. Parties outside the government but needed to pass legislation or on confidence votes should also be able to extract concessions, though I plan to develop versions of these proposed inclusion measures that treat their supporters separately. Governments that rely more heavily on minority support should also prove more attentive to their concerns than when their weight is relatively small.

Since these measures rely entirely on minority preferences as exhibited through elections, they avoid the pitfalls of assuming minority group unanimity or focusing only on the dominant viewpoint within the minority group. After all, minority group cohesion may vary greatly from group to group and country to country. Similarly, they avoid identifying ethnic minority concerns with ethnic parties, which rarely gather all minority support and often do not exist where electoral laws inhibit their formation (Basedau et al 2014; Bogaards, Basedau and Hartmann 2010; Birnir 2004; Lublin and Wright 2014; Moroff 2010; Van Cott 2003).

These measures possess attributes that make them more useful and a genuine advance over past scholarly efforts. In contrast to attempts to compare ethnic minority inclusion via legislation, one can easily utilize these measures across countries with a higher degree of confidence. They function well over time even as ethnic minority concerns and partisan
divisions may alter. They further reflect changing power combinations as governments fall and new governments form not just due to new elections but also between elections.

These measures of inclusion will allow for cross-national tests of the competing models for promoting ethnic minority inclusion. The remainder of this paper overviews different institutional models for promoting inclusion, as well as difficulties challenging each of them, before turning to the practical difficulties surrounding the estimation of the proposed measures of minority inclusion based on voting behavior.

## Competing Models for Promoting Representation, Inclusion and Interethnic Peace

Practitioners and political scientists have proposed a large variety of institutional mechanisms designed to advance ethnic minority representation and inclusion.

## Advancing Minority Representation

Measures that are specifically intended to advance representation may not advance inclusion. Just because a group's members sit in a legislature does not mean that the body will attend to their concerns or even place them on the agenda. Despite not necessarily resulting in greater inclusion, they merit discussion because their adoption often stems from the belief that more minority representation will advance their inclusion.

Non-Substantive Descriptive Representation. Countries have adopted measures that assure minority descriptive representation but not that the minority representatives necessarily reflect the viewpoint of their group. India reserves many constituencies for members of Scheduled Castes (SCs). Since SCs comprise no more than one-third of any constituency, SC MPs may win election without much SC support or commitment to SC interests (Jensenius 2015; McMillan 2005). Similarly, Lebanon previously allocated seats confessionally within winner-take-all multimember districts that allowed the district majority to select minority group MPs (EI Machnouk 2018; El Samad 2007; Salloukh 2006).

Quotas on party lists are mostly associated with the promotion of the election of more women to parliament but can also assure minority descriptive representation (Krook 2009). Singapore requires that that party slates include minority Malay and Indian nominees in its multimember constituencies elected by the block vote (Tan 2013). As in India and Lebanon, there is no inherent link between the minority MPs and minority group preferences.

Mauritius's unique best-loser system promotes greater ethnic balance by awarding eight seats to members of groups underrepresented among the 62 MPs elected from winner-take-all multimember constituencies. At the same time, the requirement to balance the choices for the best-loser seats between the winning and losing parties means that there is no necessary alignment between the best-loser MPs and their community's preferences (Fessha and Ho Tu Nam 2015; Mathur 1997; Mozaffar 2005).

More broadly, the use of multimember constituencies in countries like Mauritius provides opportunities for elites to construct multiethnic slates and give voters an opportunity to vote for an ethnic minority in addition to, rather than to the exclusion of, majority group members (Fessha and Ho Tu Nam 2015; Mozaffar 2005). Wilma Rule (1987) argues that multimember constituencies aid the election of women in a similar manner. But, as in Lebanon's multimember districts with reserved seats, there is no guarantee that any elected minority candidates are the preferred candidates of the minority group.

Substantive Descriptive Representation. Political scientists have closely analyzed a wide variety of means to assure the election of legislators who provide both descriptive and substantive representation for minority groups. Most obviously, one can construct an electoral system that permits ethnic minorities to form successful parties. The shape of the system needed to allow for minority-oriented parties to succeed depends on their size and geographic distribution. While many perceive proportional representation (PR) as advantageous for minority communities, majoritarianism can work just fine for large, regionally concentrated minorities, such as Francophone Quebecers in Canada or Scots in the UK (Bélanger et al; Bochsler 2010; Bochsler 2011; Lublin 2014; Massicotte 2005).

Efforts to manipulate constituency boundaries to advance minority representation are probably most identified with the U.S. due to its extensive reliance on racial redistricting to assure African American and Latino representation (Lublin 1997). Though usually seen as suited to majoritarian electoral systems, the same approach can be applied to PR systems. For example, Finland's multimember PR constituencies allow Swedish-speaking Finns to elect MPs in all districts with significant Swedish populations even if they have never been intentionally drawn on a linguistic basis (McRae 1997).

Countries can reserve seats for members of particular groups with only members of that group allowed to vote for them-a practice known as communal voting. This practice is often used in countries to assure a place at the table for small minorities, such as for Hungarians and Italians in Slovenia or Afro-Colombians in Colombia. Sometimes, as with the Banabans in Fiji, minorities have a right to have a representative participate even if they can't vote (Reynolds 2005; Kroeber 2017a; Lublin and Wright 2013).

Cyprus tried this approach on a much larger scale with Greek and Turkish Cypriots voting separately for all members of their ill-fated post-independence parliament (Baier-Allen 2004; Dodd 2010). New Zealand now combines a version of this approach successfully with its overlay of a second set of districts for voters who chose to be on the Maōri list of voters (Banducci, Donovan and Karp 2004; Sullivan and Vowles 1998).

In places with PR systems, lower legal thresholds for minority parties can facilitate their entry into parliament. Romania's embrace of this approach has resulted in the regular election of roughly 18 single MP minority parties (Alionescu 2004; Protsyk and Matichescu 2010). Recently, Hungary adopted a similar law, but it did not aid any minority parties in its first outing in the 2018 elections (Kállai 2019).

No matter the means, methods that provide for minority substantive representation may still leave minority groups without power, as there remains a real difference between voice versus inclusion. Indeed, having a say can simply heighten alienation if it never translates into political influence and ability to shape policy outcomes.

## Assuring Minority Inclusion

Scholars have advanced several models designed to ensure minority inclusion. All possess defects either in providing minorities meaningful influence or in promoting a functional multiethnic democracy. This section reviews four models for inclusion along with challenges that may result in failure to achieve minority inclusion or democratic stability.

Though presented separately here, one should keep in mind that each is really more an archetype that encompasses a range of possibilities. Aspects of institutional arrangements contained in one model are often not mutually exclusive from those of another. The proposed measures of minority inclusion will allow for better testing not just of competing overall models but of the efficacy of more specific institutional arrangements.

Power Alternation. A central tenet of democracy is that new elections may one day allow the outs to become the ins. In recent decades in the U.S., this has often occurred at the federal level. African Americans and Latinos were largely shut out under President Trump and the Republican Congress elected in 2016 but gained influential posts when Democrats gained a majority in the House of Representatives in 2018.

The central problem, of course, is that polarization on ethnic lines may lead to an entrenched majority that is unlikely to lose so long as voting resembles an ethnic census. While perhaps most infamously associated with post-partition Northern Ireland (O'Leary and McGarry 2016), strong racial polarization results in near permanent exclusion of African American Democrats from positions of power in state government in Mississippi.

In more closely divided countries, like Guyana and Trinidad and Tobago, demographic changes or political shifts among smaller groups, may eventually allow the out group to win power. The tightness of the contests, however, may only promote greater ethnic mobilization and demands for ethnic loyalty as both groups grasp for power (Horowitz 1985; Meighoo 2003; Premdas 1999; Premdas and Ragoonath 1998; Ryan 2007; Wilson 2012). The stakes are even higher in countries where the state controls a higher share of economic resources.

Consociationalism. Closely associated with Arend Lijphart (1969), consociationalism requires inclusion through institutions designed to force compromise. The exact form may vary-overly so, according to critics (Anderweg 2000; Bogaards 2000)—but the consociational systems usually possess certain key characteristics. Proportional representation assures that legislatures includes major social groups and reflects societal cleavages.

Political elites negotiate broad coalition cabinets, often much larger than needed for a legislative majority, that mediate between groups. The executive dominates the cabinet much less than under majoritarian, Westminster systems. Strong bicameralism combined with decentralization protects minority interests. Written constitutions, sometimes with further group protections, along with judicial review further guard against majoritarianism.

Lijphart (1969) developed his model in the context of countries, like the Netherlands and Switzerland, with histories of strong interest group corporatism, but it is applied increasingly to palliate ethnic conflict. At their strongest, consociational systems mandate inclusion along a constitutionally recognized cleavage. Belgium requires an even cabinet division between the Dutch and the French linguistic groups and has alarm bell protections for vital group interests (Deschouwer 2009; Fitzmaurice 1996; McRae 1986).

Northern Ireland allocates cabinet posts proportionally among parties and its government must command dual support from Unionist and Nationalist parties (O'Leary 2019; O'Leary and McGarry 2016). Bosnia's plural executive contains equal numbers of Bosniacs, Serbs and Croats, and its government must have support from all three communities (Bennett 2016; Bose 2002; Sebastián-Aparicio 2014). Switzerland's seven-member executive council has a norm, rather than a requirement, for linguistic diversity (Linder 1998; McRae 1983; Steinberg 1986). Though normally linked with PR, Cyprus tried consociationalism with communal voting and a majoritarian electoral system, which obviously didn't work well (Baier-Allen 2004; Dodd 2010).

Beyond illustrating the flexibility in consociational arrangements, Cyprus shows that the requirement for compromise fundamentally challenges its success. Consociationalism just will not function without sufficient willingness from all sides to make it work. Either due to a lack of cross-group or civic goodwill or a focus on zero-sum issues, dysfunctional gridlock can result instead of multiethnic governance. Bosnia's government has shown a near total inability to function without external pressure (Bennett 2016; Sebastián-Aparicio 2014). Northern Ireland has been unable to form governments for roughly one-third of the period since the signing of the Good Friday Agreement in 1998 (O'Leary 2019; O'Leary and McGarry 2016).

Consociationalism's anti-democratic components can also build resentment among majorities and runs against the notion of majority rule embedded in the democratic idea. Unsurprisingly, larger groups like the Greek Cypriots and Bosniacs react by arguing for greater centralization and weaker minority protections that minority groups inevitably resist (Bennett 2016; Dodd 2010; Sebastián-Aparicio 2014).

Decentralization. Devolving responsibilities to territorial units is part of the consociational tool kit but is frequently adopted independently. Often conflated with federalism, usually defined as a constitutionally enshrined high-level of decentralization, this approach to the amelioration of ethnic tension depends on ethnically distinct groups living in geographically concentrated areas.

By giving limited powers to subnational governments, it allows minorities who are regional majorities more say over selected policy areas and thus weaken anti-state sentiment. It is one of the most widely tried solutions of the modern era, having been used in Belgium, Canada, Ethiopia, India, North Macedonia, Pakistan, South Africa, Spain and the United Kingdom (Baruah 2010; Deschouwer 2009; Dickovick and Gebre-Egziabher 2014; Faiz 2015; Fessha and Bezabih 2019; Fitzmaurice 1996; Keating and Laforest 2018; Lijphart 1996; Lyon 2012; Lyons 2019; Moreno 2001; Moore 1997; O’Leary 2019; Picard and Mogale 2014). As Kanchen Chandra (2004) perceptively points out, multiple governmental levels provide additional opportunities for inclusion, especially if voters possess multiple cross-cutting identities that may result in their inclusion as members of one group even if excluded as members of another.

Majorities are often chary of decentralization, seeing it as the first step towards the destruction of the country by giving minorities control over a specific territory (Rasaratnam 2016). By allowing subnational actors to gain control over political resources, decentralization may inadvertently aid separatist or irredentist movements. Critics of decentralization point to the strength of separatist movements in Catalonia, Scotland and Quebec as evidence (Bakke 2015; Bélanger 2018; Colomer 2017; Griffiths et al 2015). Irredentist ambitions among Serbs and Croats play a major role in Bosnia's continual dysfunction (Bennett 2016). Decentralization proponents contend that centralization would have resulted in far greater conflict. Some scholars have found that the type of decentralization influences its impact on the organization of ethnically oriented parties and separatism (Brancati 2009; Lublin 2014; Lublin 2017c).

Minorities may also see decentralization as an inadequate substitute for an independent country. They may also worry that centralizing elites may reverse it at the first opportunity without their consent, as occurred in both Anglophone West Cameroon eleven years after independence and in Eritrea ten years following its absorption into Ethiopia (Konings and Nyamnjoh 2019; Dias and Dorman 2019). Regional governments may also lack influence over critical decisions, including resources allocations, made at the center (Lyon 2012).

Historically, non-geographic decentralization, or communalism, was a much more prominent method of addressing ethnic differences. Devolving responsibilities to ethnic communities, often highly geographically mixed, was the major approach of the Ottoman Empire before its demise (Jelavich 1983). Israel still uses it in its administration of marriage and divorce law (Arian 2005). Cyprus tried it more widely in its failed post-independence system (Baier-Allen 2004; Dodd 2010).

Centripetalism. Associated with Donald Horowitz (1985) and Benjamin Reilly (2001), the laudable idea at the heart of centripetalism is to create incentives to reach across community boundaries. Benjamin Reilly (2001) argues that the alternative vote, also known as ranked choice voting, encouraged candidates in hyper-diverse Papua New Guinea's to seek preferences from other groups rather than avoid them out of fear being killed, as had occurred under the traditional single-member plurality Westminster approach. This approach inherently involves substantive representation even as it promotes peaceful coexistence.

At the same time, Papua New Guinea's extreme diversity renders it unique. Effort to promote similar cross-community appeal have had only very limited success under Northern Ireland's single-transferable vote electoral system, though some contend that it has aided more moderate parties on each side of the divide and encouraged moderation among more extreme parties (Jarrett 2017; Mitchell 2014). It's also difficult for ranked choice voting to spur reaching across ethnic divisions in countries with more geographically segregated communities. Preference voting has had no real impact in Sri Lankan presidential elections because the victor has always gained a majority in the first round (Lijphart 2007).

Interestingly, there are signs that majoritarian electoral systems have the potential to promote greater interethnic cooperation, especially when there are more than two groups and they are geographically mixed. At a minimum, multimember constituencies allow parties to offer balanced tickets. This approach has been shown to facilitate the election of women by avoiding a choice between voting only for a man or only for a woman (Rule 1987).

In Mauritius, multimember districts combined with a ban on bullet voting (i.e. voting for fewer candidates than the maximum) has encouraged the formation of multiethnic electoral coalitions with multiethnic slates in constituencies. The Hindu majority is wary of pursuing solo dominance if only because defectors could all too easily form a majority by uniting with other population groups. Though this system is hard to replicate, it remains intriguing as Mauritius seemed on the precipice of ethnic violence at independence but is now considered one of Africa's economic and democratic success stories even if tensions remain (Fessha and Ho Tu Nam 2015; Mozaffar 2005).

## Estimating Minority Voting Behavior

Estimating ethnic minority support for different parties over time for a broad range of countries is a major challenge. The estimation of minority support for political parties will rely on three types of sources: (1) previous scholarly research, (2) polling data, and (3) ecological inference utilizing aggregate election results. Basing estimates on multiple types for countries and elections with available data will increase the accuracy of estimates.

Scholarly experts on individual countries have sometimes already calculated support for parties for ethnic groups using polling data or ecological inference augmented by their own deep knowledge of the country's politics. Segregation between Israel's Arab and Jewish communities has facilitated As'ad Ghanem's (2001) estimation of Arab voting behavior over many Israeli elections. This form of ecological inference is known as homogenous precinct (i.e. polling place) analysis in the U.S.

Polling data can also prove very useful but also has its limitations. National elections studies for many countries gather data on both ethnicity and voting behavior. The Canadian National Election Study, for example, makes it easy to estimate Francophone voting behavior, facilitated in part by an oversample of Quebec respondents. Other cross-national surveys, like
the Comparative Study of Electoral Systems (CSES) provide similar data, though some, such as Afrobarometer and Latinobarometer, look mainly prospectively at future votes.

Additionally, minorities comprise only a minority of polling samples and estimates for minority groups may prove only very rough estimates without an oversample. The problem is worse for smaller minorities or surveys with smaller samples. Calculating estimates for different regions, useful if one wants to assess the impact of factors that may vary by region within countries, is even more difficult due to further sample size shrinkage. Surveying diverse ethnic communities can also prove tricky. Critics have argued, for example, that exit polls from U.S elections underestimate Latino and Asian American Democratic support because they offer the survey only in English (Lo Wang 2017; Pedraza and Wilcox-Archuleta 2017; Waldman 2016). Many Afrobarometer respondents believe that the government is behind the poll.

Ecological inference leverages aggregate ethnic and electoral data to estimate voting behavior by ethnic group. EI, the method developed by Gary King (1997), relies on combining insights from both homogenous precinct analysis with the general linkage between varying shares of a group and support for parties across units. Like all ecological inference methods, it remains vulnerable to the ecological fallacy. Specifically, if the voting behavior of a group changes systematically as the group's share of the population increases, the results will be biased and can also prove wildly inaccurate.

Application of double regression, another ecological inference technique, to racially polarized elections in the U.S. frequently produces estimates that under $0 \%$ or over $100 \%$ of a group voted for a candidate-one sign of the problem that El avoids. Nevertheless, El is not immune to these issues. When I examined county-level data from the 2000 U.S. presidential election, El estimated that roughly 40\% of black Mississippians voted for George W. Bush. The results stemmed from the tendency of whites who lived in counties with more black voters to vote Republican at higher rates than whites in counties with fewer black voters. Utilizing smaller units often solves the problem because it multiplies the available data and thus information on which to base the estimates. In this case, using precinct instead of county-level data produced estimates that hewed closely to exit poll results.

The Mississippi example shows nicely why it makes sense to use multiple approaches to obtain the best possible estimates. Efforts to calculate the voting behavior of Swedish-speaking Finns, a minority of roughly 5\% in Finland, reinforces the utility of this approach. Scholarly discussions and data from the Finnish National Election Study reveals that a clear majority vote for the Swedish People's Party but are less enlightening about their support for other parties.

However, as in many other countries, one can match linguistic and electoral data at the relatively fine-grained municipal level in Finland. ${ }^{1}$ Ecological analysis using this data not only

[^0]confirms the polling results but also allows for more complete and accurate estimates by party even at the regional level. Though data are not available at the municipal or equivalent level for all countries, they are available at the constituency (e.g. Ghana, Malaysia) or regional level (e.g. Belize, Benin) for many others.

## Avoid Making the Perfect the Enemy of Advances

Despite the greater utility of these ethnic minority inclusion measures, they remain flawed. Two countries with governments equally reliant on minority support may reveal different levels of responsiveness to ethnic minority concerns. They may also not place ethnic minority members in equally powerful public posts. Still, they provide a good rough gauge and are at least more of an apples-to-apples comparison than provided by attempts to compare legislation for different groups operating in contrasting contexts.

Other natural concerns include that publicly available measures of ethnic populations are also imperfect. Even avoiding the most problematic cases with unusable data, concerns remain. In Bulgaria, ethnic Turks appear less likely to answer ethnicity and language questions (Haralampiev and Blagoev 2014). Boycotts of the 2011 Kosovo Census by ethnic Serbs and Roma requires using OSCE population estimates for these groups (Calu 2020). At the same time, much social science research continues to rely heavily on census data.

Relatedly, critics of ecological inference point out that it can result in biased estimates. Yet estimates like these can prove extremely useful despite problems. U.S. courts routinely rely on ecological inference estimates provided by experts of voting behavior by race in making judgements about racial polarization critical to rulings on whether compliance with the Voting Rights Act requires redrawing legislative districts. Grofman, Handley and Lublin (2020) show that social science experts have been able to able this methodology to produce very accurate conclusions regarding the probability that a district will elect a minority-preferred candidate in state legislative and congressional elections.

Even older methods of ecological inference that produced impossible estimates (i.e. less than 0 percent or over 100 percent support for a candidate) avoided by El have proved useful to courts. Though an estimate that -3 percent of Black voters supported a candidate is obviously inaccurate, it still tells us that Black support for the candidate was very low. (It also reveals that the non-Black support for the same candidate must be a little lower than indicated by the estimate.) Similarly, even if an estimate of minority support for a party is not quite right, it remains a useful estimate.

These potential problems should not lead social scientists to throw their hands up in despair. After all, we still use polls despite low response rates and multiple other problems such as interviewers accidentally influencing respondents, unintended bias within questions, and

[^1]respondents with no knowledge inventing answers. As with polls, we should do our best to apply ecological inference methods with as much accuracy as possible.

The high degree of ethnic segregation among aggregate units in many countries helps facilitate better results. For example, in Slovakia, most ethnic Hungarians live in the southern part of the country. Even in mixed areas, the large number of available units helps separate Slovak and Hungarian neighborhoods and tease out differences between predominantly Slovak and Hungarian areas. In contrast, ecological inference is not much use in estimating voting behavior by gender due to the lack of gender segregation.

As with polls, potential problems suggest using ecological inference results intelligently and keeping in mind results from other sources and hard-won information from more textured qualitative research studies. In that vein, I hope to conduct in-country visits and my own qualitative analyses once travel becomes possible again.

The bottom line remains that this approach for gauging the level of ethnic minority inclusion through support for governments has great potential to allow for cross-country comparisons and better analyses of what institutional designs foster inclusion. Not to mention that the data collected on ethnicity and elections from a wide variety of countries should prove invaluable to other researchers looking to conduct projects using these data.

## References

Alionescu, Ciprian-Calin. 2004. "Parliamentary Representation of Minorities in Romania." Southeast European Politics 5: 1(June), 60-75.

Amorim Neto, Octavio, and Gary W. Cox. 1997. "Electoral Institutions, Cleavage Structures, and the Number of Parties." American Journal of Political Science 41: 1(January):149-74.

Anderweg, Rudy B. 2000. "Consociational Democracy." Annual Review of Political Science 3: 1(June), 509-36.

Arian, Asher. 2005. Politics in Israel: The Second Republic, Second Edition. Washington, DC: CQ Press.

Baier-Allen, Susanne. "The Failure of Power-sharing in Cyprus: Causes and Consequences." In Managing and Settling Ethnic Conflicts: Perspectives on Successes and Failures in Europe, Africa and Asia, 77-93. New York: Palgrave Macmillan.

Bakke, Kristin M. 2015. Decentralization and Intrastate Struggles: Chechnya, Punjab and Québec. New York: Cambridge University Press.

Banducci, Susan A., Todd Donovan and Jeffrey A. Karp. 2004. "Minority Representation, Empowerment, and Participation." Journal of Politics 66: 2(May), 534-56.

Baruah, Sanjib, ed. 2010. Ethnonationalism in India. New York: Oxford University Press.

Basedau, Matthias, Matthijs Bogaards, Christof Hartmann and Peter Niesen. 2007. "Ethnic Party Bans in Africa: A Research Agenda." German Law Journal 8: 6(June), 617-34.

Bélanger, Éric, Richard Nadeau, Ailsa Henderson and Eve Hepburn. 2018. The National Question and Electoral Politics in Quebec and Scotland. Montreal: McGill-Queen's Press.

Bennett, Christopher. 2016. Bosnia's Paralyzed Peace. New York: Oxford University Press.

Birnir, Jóhanna Kristín. 2004. "Stabilizing Party Systems and Excluding Segments of Society? The Effects of Formation Costs on New Party Foundation in Latin America." Studies in Comparative International Development 39: 3(September), 3-27.

Bochsler, Daniel. 2010. Territory and Electoral Rules in Post-Communist Democracies. New York: Palgrave Macmillan.
—__ 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.

Bogaards, Matthijs. 2000. "The Uneasy Relationship between Empirical and Normative Types in Consociational Theory." Journal of Theoretical Politics 12: 4, 395-423.

Bogaards, Matthijs, Matthias Basedau and Christof Hartmann. 2010. "Ethnic Party Bans in Africa: An Introduction." Democratization 17: 4(July) 599-617.

Bose, Sumantra. 2002. Bosnia after Dayton: Nationalist Partition and International Intervention. New York: Oxford University Press.

Brancati, Dawn. 2009. Peace by Design: Managing Intrastate Conflict through Decentralization. New York: Oxford University Press.

Calu, Marius-Ionut. 2020. Kosovo Divided: Ethnicity, Nationalism and the Struggle for a State. New York: Bloomsbury.

Cameron, Charles, David Epstein and Sharyn O'Halloran. 1996. American Political Science Review 90: 4(December), 794-812.

Caramani, Danielle. 2004. The Nationalization of Politics: The Formation of National Electorates and Party Systems in Western Europe. New York: Cambridge University Press.

Canon, David T. Race, Redistricting and Representation: The Unintended Consequences of Black Majority Districts. University of Chicago Press.

Chandra, Kanchan. 2004. Why Ethnic Parties Succeed: Patronage and Ethnic Head Counts in Africa. New York: Cambridge University Press.
——_, ed. 2012. Constructivist Theories of Ethnic Politics. New York: Oxford University Press.
Cheeseman, Nicholas and Robert Ford. 2007. "Ethnicity as a Political Cleavage." Afrobarometer Working Papers, No. 83(November).

Chhibber, Pradeep and Ken Kollman. 2004. The Formation of National Party Systems: Federalism and Party Competition in Canada, Great Britain, India, and the United States. Princeton, NJ: Princeton University Press.

Clark, William Roberts, and Matt Golder. 2006. "Rehabilitating Duverger's Theory: Testing the Mechanical and Strategic Modifying Effects of Electoral Laws." Comparative Political Studies 39: 6(August):679-708.

Choudhry, Sujit, ed. 2008. Constitutional Design for Divided Societies. New York: Oxford University Press.

Colomer, Josep M. 2017. "The Venturous Bid for the Independence of Catalonia." Nationalities Papers 45: 5(September), 950-67.

Davidson, Chandler and Bernard Grofman, eds. 1994. Quiet Revolution in the South: The Impact of the Voting Rights Act 1965-1990. Princeton, NJ: Princeton University Press.

Deschouwer, Kris. 2009. The Politics of Belgium: Governing a Divided Society. New York: Palgrave Macmillan.

Dias, Alexandra and Sara Dorman. 2019. "'We Didn't Fight for This': The Pitfalls of State- and Nation-Building in Eritrea." Secessionism in African Politics: Aspiration, Grievance, Performance, Disenchantment edited by Lotje de Vries, Pierre Englebert and Mareike Schomerus, 395-422. New York: Palgrave Macmillan.

Dickovick, J. Tyler and Tegegne Gebre-Egziabher. 2014. "Ethiopia: Ethnic Federalism and Centripetal Forces." In Decentralization un Africa: The Paradox of State Strength edited by J. Tyler Dickovick and James S. Wunsch, 69-90. Boulder, CO: Lynne-Rienner Publishers.

Dodd, Clement. 2010. The History and Politics of the Cyprus Conflict. New York: Palgrave Macmillan.

El Machnnouk, Saleh. 2018. "Electoral System Reform in Lebanon: Dilemmas of a Consociational State." Ethnopolitics. 17: 1(April), 1-20.

El Samad, Ali. 2007. "Le découpage électoral au Liban : une lecture géopolitique de la loi de 2000." L'Espace Politique. https://doi.org/10.4000/espacepolitique.568.

Esmen, Milton J. 1994. Ethnic Politics. Ithaca, NY: Cornell University Press.
Faiz, Asma. 2015. Making Federation Work: Federalism in Pakistan After the $18^{\text {th }}$ Amendment. New York: Oxford University Press.

Fearon, James D. 2003 "Ethnic and Cultural Diversity by Country." Journal of Economic Growth. 8: 2(June), 195-222.

Fessha, Yonatan and Biniyam N. Bezabih. 2019. "Federation Among Unequals: A Country Study of Constitutional Asymmetry in Ethiopia." In Constitutional Asymmetry in Multinational Federalism: Managing Multinationalism in Multi-tiered Systems, 137-62. New York: Palgrave Macmillan.

Fessha, Yonatan and Nora Ho Tu Name. 2015. "Is It Time to Let Go? The Best Loser System in Mauritius." Afrika Focus 28: 1, 63-79.

Ferree, Karen. 2012. "How Fluid is Fluid? The Mutability of Ethnic Identities and Ethnic Volatility in Africa." In Constructivist Theories of Ethnic Politics, edited by Kanchan Chandra, 31240. New York: Oxford University Press.

Fitzmaurice, John. 1996. The Politics of Belgium: A Unique Federalism. London: Hurst and Company.

Ghanem, As'ad. 2001. The Palestinian-Arab Minority in Israel, 1948-2000: A Political Study. New York: SUNY Press.

Griffiths, Ryan D., Pablo Guillen Alvarez and Ferran Martinez i Coma. 2015. "Between the Sword and the Wall: Spain's Limited Options for Catalan Separatism." Nations and Nationalism 21: 1(January), 43-61.

Grofman, Bernard, ed. 1998. Race and Redistricting in the 1990s. New York: Agathon Press.
Grofman, Bernard, Lisa Handley and David Lublin. 2020. "Can Social Science Evidence Be Trusted in Voting Rights Litigation? Ascertaining Whether a Minority Community Will Have an Equal Opportunity to Elect a Candidate of its Choice in a Given Legislative or Congressional District" Under review.

Grofman, Bernard, Lisa Handley and Richard G. Niemi. 1992. Minority Representation and the Quest for Voting Equality. New York: Cambridge University Press.

Guelke, Adrian, ed. 2004. Democracy and Ethnic Conflict: Advancing Peace in Deeply Divided Societies. New York: Palgrave Macmillan.

Haralampiev, Kaloyan and Dimitar Blagoev. 2014. "Ethnicity Non-Identification in the 2011 Census in Bulgaria." Paper presented at the European Population Conference, Budapest, Hungary, 25-28 June. https://bit.ly/3aPOgKn.

Hicken, Allen, and Heather Stoll. 2011. "Presidents and Parties: How Presidential Elections Shape Coordination in Legislative Elections." Comparative Political Studies 44: 7(July), 854-83.

Horowitz, Donald L. 1985. Ethnic Groups in Conflict. Berkeley, CA: University of California Press.

Jarrett, Henry. 2017. Peace and Ethnic Identity in Northern Ireland: Consociational Power Sharing and Conflict Management. New York: Routledge.

Jelavich, Barbara. 1983. History of the Balkans: Eighteenth and Nineteenth Centuries. New York: Cambridge University Press.

Jenne, Erin K. 2007. Ethnic Bargaining: The Paradox of Minority Empowerment. Ithaca, NY:

Cornell University Press.

Jensenius, Francesa R. 2015. Social Justice through Inclusion: Consequences of Electoral Quotas in India. New York: Oxford University Press.

Kállai, Péter. 2019. "Minority Representation in the Hungarian Parliament." V4 Human Rights Review 1: 1(September), 16-18. https://bit.ly/2QnkQK9.

Keating, Michael and Guy Laforest. 2018. Constitutional Politics and the Territorial Question in Canada and the United Kingdom: Federalism and Devolution Compared. New York: Palgrave Macmillan.

King, Gary. 1997. A Solution to the Ecological Inference Problem: Reconstructing Individual Behavior from Aggregate Data. Princeton, NJ: Princeton University Press.

Kollman, Ken, Allen Hicken, Daniele Caramani, David Backer, and David Lublin. 2019. Constituency-Level Elections Archive. Produced and distributed by Ann Arbor, MI: Center for Political Studies, University of Michigan, http://www.electiondataarchive.org.

Konings, Piet and Francis B. Nyamnjoh. 2019. "Anglophone Secessionist Movements in Cameroon." Secessionism in African Politics: Aspiration, Grievance, Performance, Disenchantment edited by Lotje de Vries, Pierre Englebert and Mareike Schomerus, 5990. New York: Palgrave Macmillan.

Kroeber, Corinna. 2017a. "Exploring the Impact of Reserved Seat Design on the Quality of Minority Representation." Ethnopolitics 16: 2, 196-216.
—_一 2017b. "Trading Voices for Votes: The Impact of Electoral Systems on the Substantive Representation of Ethnic Minorities." Ph.D. diss., University of Salzburg.
—_. 2018. "How to Measure the Substantive Representation of Traditional Excluded Groups in Comparative Research." Representation 54: 3(August), 241-59.

Krook, Mona Lee. 2009. Quotas for Women in Politics: Gender and Candidate Selection Reform Worldwide. New York: Oxford University Press.

Lijphart, Arend. 1969. "Consociational Democracies." World Politics. 21: 2(January), 207-225.
1991. "The Alternative Vote: A Realistic Alternative for South Africa?" Politikon 18: 2(June), 91-101.
—_. 1996. "The Puzzle of Indian Democracy: A Consociational Interpretation." American Political Science Review 90: 2(June), 258-68.

Linder, Wolf. 1998. Swiss Democracy: Possible Solutions to Conflict in Multicultural Societies. New York: Palgrave Macmillan.

Lo Wang, Hansi. 2017. "Trump Lost More Of The Asian-American Vote Than The National Exit Polls Showed." NPR. 18 April. https://n.pr/3gmWs5W.

Lublin, David. 1997. The Paradox of Representation: Racial Gerrymandering and Minority Interests in Congress. Princeton, NJ: Princeton University Press.
——. 2004. The Republican South: Democratization and Partisan Change. Princeton, NJ: Princeton University Press.
__. 2013. "The 2012 Latvia Language Referendum." Electoral Studies: 32: 2(June), 385-7.
—_. 2014. Minority Rules: Electoral Systems: Decentralization and Ethnoregional Party Success. New York: Oxford University Press.
__ 2017a. "Electoral Systems, Ethnic Diversity and Party Systems in Developing Democracies. Electoral Studies 47(June), 84-93.
——. 2017b. "Electoral Systems, Ethnic Heterogeneity and Party System Fragmentation." British Journal of Political Science. 47: 2(April), 373-89.
—_. 2017c. "Electoral Systems, Ethnic Heterogeneity and Party System Fragmentation." British Journal of Political Science. 47: 2(April), 373-89.

Lublin, David, Lisa Handley, Thomas Brunell and Bernard Grofman. 2020. "Minority Success in Non-Majority Districts: Finding the 'Sweet Spot.'" Journal of Race, Ethnicity and Politics 5: 2(July), 275-98.

Lublin, David and Matthew Wright. 2014. "Don't Start the Party: Assessing the Electoral Effect of Legal Provisions Impeding Ethnoregional Parties." Election Law Journal 13: 2(May), 277-87.
—__ 2013. "Engineering Inclusion: Assessing the Effects of Pro-Minority Representation Policies." Electoral Studies 32: 4(December), 746-55.

Lyon, Aisling. 2012. "Decentralization and the Management of Ethnic Conflict: A Case Study of the Republic of Macedonia." Ph.D. dissertation. Department of Peace Studies, School of Social and International Studies, University of Bradford.

Lyons, Terrence. 2019. The Puzzle of Ethiopian Politics. Boulder, CO: Lynne-Rienner Publishers.

Madrid, Raúl. 2012. The Rise of Ethnic Politics in Latin America. New York: Cambridge University Press.

Massicotte, Louis. 2005 "Canada: Sticking to First-Past-the-Post, for the Time Being." In The Politics of Electoral Systems, edited by Michael Gallagher and Paul Mitchell, 99-118. New York: Oxford University Press.

Mathur, Raj. 1997. "Parliamentary Representation of Minority Communities: The Mauritian Experience." Africa Today 44: 1(January-March), 61-82.

McMillan, Alistair. 2005. Standing at the Margins: Representation and Electoral Reservation in India. New York: Oxford University Press.

McRae, Kenneth D. 1983. Conflict and Compromise in Multilingual Societies: Switzerland. Waterloo, ON: Wilfrid Laurier Press.
——. 1986 Conflict and Compromise in Multilingual Societies: Belgium. Waterloo, ON: Wilfrid Laurier Press.
——. 1997 Conflict and Compromise in Multilingual Societies: Finland. Waterloo, ON: Wilfrid Laurier Press.

Meighoo, Kirk Peter. 2003. Politics in a Half-Made Society: Trinidad and Tobago, 1925-2001. Kingston, Jamaica: Ian Randle Publishers.

Michael, Michális Stavrou. Resolving the Cyprus Conflict: Negotiating History, $2^{\text {nd }}$ ed. New York: Palgrave Macmillan.

Mitchell, Paul. 2014. "The Single Transferable Vote and Ethnic Conflict: The Evidence from Northern Ireland." Electoral Studies 33: 1(January), 246-57.

Moore, Christopher. 1997. 1867: How the Fathers Made a Deal. Toronto: McClelland and Stewart.

Moreno, Luis. 2001. The Federalization of Spain. London: Frank Cass Publishers.
Moroff, Anika. 2010. "Party Bans in Africa—An Empirical Overview." Democratization 17: 4(July), 618-41.

Mozaffar, Shaheen. 2005. "Negotiating Independence in Mauritius." International Negotiation 10: 2(January), 263-91.

Mylonas, Harris, and Nasos Roussias. 2008. "When Do Votes Count? Regime Type, Electoral Conduct, and Political Competition in Africa." Comparative Political Studies 41:

11(November):1466-91.

Norris, Pippa. 2004. Electoral Engineering: Voting Rules and Political Behavior. New York: Cambridge University Press.

O’Leary, Brendan. 2019. A Treatise on Northern Ireland. Vol. 2, Control. Oxford University Press.
O'Leary, Brendan and John McGarry. 2016. The Politics of Antagonism: Understanding Northern Ireland. New York: Bloomsbury Academic.

Ordeshook, Peter C., and Olga V. Shvetsova. 1994. "Ethnic Heterogeneity, District Magnitude, and the Number of Parties." American Journal of Political Science 38: 1(February): 10023.

Parker, Frank R. 1990. Black Votes Count: Political Empowerment in Mississippi after 1965. Chapel Hill: University of North Carolina Press.

Pedraza, Francisco I. and Bryan Wilcox-Archuleta. 2017. "Precinct Returns Prove Exit Polls Wrong on Latino Vote." The Nevada Independent (blog). https://bit.ly/2Ys3D70.

Picard, Louis A. and Thomas Mogale. 2014. "South Africa: Decentralization and the Apartheid Legacy." In Decentralization un Africa: The Paradox of State Strength edited by J. Tyler Dickovick and James S. Wunsch, 183-204. Boulder, CO: Lynne-Rienner Publishers.

Posner, Daniel N. 2004. "Measuring Ethnic Fractionalization in Africa." American Journal of Political Science 48: 4(October), 849-63.
—_. 2005. Institutions and Ethnic Politics in Africa. New York: Cambridge University Press.
Protsyk, Oleh and Lupsa Marius Matichscu. 2010. "Electoral Rules and Minority Representation In Romania." Communist and Post-Communist Studies 43: 1(March), 31-41.

Premdas, Ralph R. 1999. "Guyana: Patterns of Ethnic Conflict and the Requirements for Reconciliation." In Identity, Ethnicity and Culture in the Caribbean edited by Ralph R. Premdas. St. Augustine, Trinidad and Tobago: University of the West Indies.

Premdas, Ralph R. and Bishnu Ragoonath. 1998. "Elections, Ethnicity and Democracy in Trinidad and Tobago: Analyzing the 1995 and 1996 Elections." Commonwealth and Comparative Politics. 36: 3(November), 30-53.

Rasaratnam, Madurika. 2016. Tamils and the Nation: India and Sri Lanka Compared. New York: Oxford University Press.

Reilly, Benjamin. 2001. Democracy in Divided Societies: Electoral Engineering for Conflict

Management. New York: Cambridge University Press.
Reynolds, Andrew. 2005. "Reserved Seats in National Legislatures: A Research Note." Legislative Studies Quarterly 30: 2(May), 301-10.

Ryan, Selwyn. 2007. "The Politics of Deadlock in Trinidad and Tobago, 1995-2002." In Governance Conflict Analysis and Conflict Resolution edited by Cedric H. Grant and R. Mark Kirton, 141-166. Kingston, Jamaica: Ian Randle Publishers.

Rule, Wilma. 1987. "Electoral Systems, Contextual Factors and Women’s Opportunity for Election to Parliament in Twenty-Three Democracies." Western Political Quarterly 40: 3(September), 477-98.

Safran, William. 2008. "Language, Ethnicity and Religion: A Complex and Persistent Linkage." Nations and Nationalism 14: 1(January), 171-90.

Salloukh, Bassel F. 2006. "The Limits of Electoral Engineering in Divided Societies." Canadian Journal of Political Science. 39: 3(September), 635-55.

Scarritt, James R. and Shaheen Mozaffar. 1999. "The Specification of Ethnic Cleavages and Ethnopolitical Groups for the Analysis of Democratic Competition in Contemporary Africa." Nationalism and Ethnic Politics 5: 1(Spring), 82-117.

Sebastián-Aparicio, Sofia. 2014. Post-War Statebuilding and Constitutional Reform: Beyond Dayton in Bosnia. New York: Palgrave Macmillan.

Selway, Joel Sawat. 2011. "The Measurement of Cross-cutting Cleavages and Other Multidimensional Cleavage Structures." Political Analysis 19: 1(Winter), 48-65.

Sullivan, Ann and Jack Vowles. 1998. "Realignment? Maori and the 1996 Election." In Voters' Victory? New Zealand's First Election Under Proportional Representation edited by Jack Vowles, Peter Aimer, Susan Banducci and Jeffrey Karp. Auckland University Press.

Swain, Carol M. 1995. Black Faces, Black Interests: The Representation of African Americans in Congress, Enlarged Ed. Cambridge, MA: Harvard University Press.

Reynolds, Andrew. 2010. Designing Democracy in a Dangerous World. New York: Oxford University Press.

Schneckener, Ulrich and Stefan Woff. 2004. Managing and Settling Ethnic Conflicts: Perspectives on Successes and Failures in Europe, Africa and Asia. New York: Palgrave Macmillan.

Steinberg, Jonathan. 1996. Why Switzerland? Second Edition. New York: Cambridge University

Press.

Tan, Netina. 2013. "Manipulating Electoral Laws in Singapore." Electoral Studies 32:
4(December), 632-43.

Van Cott, Donna Lee. 2003. "Institutional Change and Ethnic Parties in South America," Latin American Politics and Society 45: 2(Summer), 1-39.

Waldman, Paul. 2016. "Why the Exit Polls are Wrong on Latino Votes." Washington Post. 15 November. https://wapo.st/32eKc2I.

Wimmer, Andreas. 2002. Nationalist Exclusion and Ethnic Conflict: Shadows of Modernity. New York: Cambridge University Press.

Wilson, Stacy-Ann. 2012. Politics of Identity in Small Island Societies: Guyana, the Fiji Islands, and Trinidad and Tobago. New York: Palgrave Macmillan.


[^0]:    ${ }^{1}$ Finland also illustrates the importance of careful data matching because the electoral data, but not the ethnic data, reflected a few municipal mergers and required summing the ethnic data from the former municipalities to

[^1]:    match the electoral data from the merged municipalities. The author has experience with these sorts of data matching challenges in both the U.S. and abroad (Kollman et al 2019; Lublin 1997; Lublin 2004; Lublin 2014).

