# Women, Parties, and Politics: A Party-Based Theory of Substantive Representation 

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#### Abstract

The relationship between women's presence in office and attention to women on the policy agenda has attracted a great deal of attention from scholars and activists alike. While most work focuses on the role played by female legislators, in advanced parliamentary democracies political parties shape the relationship between women's numeric and policy representation. I offer a new party-based theory of substantive representation that accounts for both the gender makeup of parties' elected officials and parties' vote-seeking and policyoriented motivations. Using an original dataset measuring attention to women on the platforms of 58 parties in 12 Western European countries between 1980 and 2008, I show that a majority of parties' behavior can be explained by motivational accounts. For these organizations, the presence of female politicians has little independent effect on women's policy representation. At the same time, increasing the proportion of seats held by women can generate substantive representation, but only when the parliamentary delegation has significant policy-making authority.


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Increasing women's participation in electoral politics has moved from a peripheral issue to a priority for a number of activists, politicians, and international governing organizations. Concerns with gender equality in political representation are at the heart of the modern women's rights movement-receiving significant attention in both the 1979 Convention on the Elimination of All Forms of Discrimination Against Women and the 1995 Beijing Platform for Action. At the same time, political parties and national legislatures in over one hundred countries have adopted policies mandating the selection of female candidates for political office. Though there are many arguments for increasing the number of female politicians, practitioners often advocate for women's participation because they believe it will heighten attention to women on the policy agenda.

In tandem with this heightened attention from policy actors, there is a growing body of research exploring the consequences of women's numeric (or descriptive) representation for policy (or substantive) representation. This literature spans subfields, including normative theory (Mansbridge 1999, Williams 1998), as well as American (Carroll 2001, Thomas 1994) and comparative politics (Kittilson 2008, Schwindt-Bayer and Mishler 2005). These studies often reveal a positive relationship between the number of female representatives and the responsiveness of legislatures to women's issues. This link is often taken as evidence of female legislators' efforts to promote women's issues.

Although practitioners and researchers often focus on the role played by female legislators, in Western Europe parties, rather than individual legislators, are "responsible for the life of the government," deciding both who will come into power and structuring the policy activities of parliaments (Woldendorp, Keman and Budge 2000). Due to their control over both candidate selection and policy formation, it is impossible to understand the relationship between women's presence and policy representation in advanced parliamentary democracies without accounting for the role played by political parties. This in turn demands a party-centric theory of women's substantive representation.

In this paper I develop and test this party-based theory of substantive representation.

Within this theoretical framework, I identify four alternative relationships generating policy representation for women: the direct relationship, which focuses on female parliamentarians; the intervening relationship, which addresses female party elites; the vote-seeking relationship, which accounts for parties' electoral aims; and the policy-stability relationship, which focuses on stable party attitudes. The first two factors account for the gender composition of the party, while the third and fourth relationships capture party motivations. I further theorize that a single compositional or motivational explanation will not explain all party behavior. Instead, I argue that increasing the proportion of seats held by women is likely to generate substantive representation only in parties where the parliamentary caucus has significant policy-making authority.

I test my theory's predictions with the first empirical analysis that directly examines women's substantive representation at the party level across countries and over time. To conduct this analysis, I constructed an original data set measuring attention to women on the platforms of 58 parties in 12 Western European countries between 1980 and 2008. I use a finite mixture model with concomitant variables to classify each of these parties as belonging to one of four nonnested components, representing the direct, intervening, vote-seeking, and policy-stable relationships. The number of parties that are well explained by each component provides a principled measure of the explanatory power of this posited relationship. The concomitant variables, which capture the location of policy-making authority with the party, reveal the organizational characteristics that are associated with parties' classification by these alternative relationships.

The party-based theory of substantive representation reveals a great deal about why parties represent women on their policy agendas. The results demonstrate that $40 \%$ of parties are consistent with compositional explanations. When explaining policy representation, it is thus necessary to consider the makeup of the parliamentary party and its leadership. At the same time, the findings caution against placing too much emphasis on compositional explanations. For the majority of parties, attention to women on the policy agenda is explained by the motivational hypotheses. In particular, a plurality of organizations are explained by the policy-stability
relationship.
I further show that while a direct relationship is more likely to emerge in parties with powerful legislators, there are few cases in which the composition of the parliamentary delegation alone explains women's policy representation. Among parties explained by the other relationships, moreover, the impact of women's numeric representation is limited. Taken together, these findings have important implications for academics and policy actors alike.

## A Partisan Theory of Substantive Representation

Though women's substantive representation has been shown to be influenced by factors beyond women's presence in office (Htun and Weldon 2012, Weldon 2002, Wolbrecht 2000), much of the research on this topic continues to focus on the gender composition of political institutions. This body of research has made an important contribution to our understanding of legislative politics, comparative politics, and women's representation. At the same time, these works tend to assume a priori a direct link between women's descriptive and substantive representation. That is, they typically test the hypothesis of a direct relationship against a null hypothesis of no effect. When studies fail to reject this null hypothesis, this is taken as support for a causal link between women's descriptive and substantive representation. Though the existing literature has identified a myriad of factors that can mitigate the relationship between women's presence and policy representation, it has largely settled on a single account explaining any association between the two: the number of women matters.

While women and politics research generally focuses on the role played by female legislators, in Western Europe both women's descriptive and substantive representation are dictated by party politics. Women's presence in the national assembly, for example, is primarily a function of intra-party candidate selection processes. Political parties control the recruitment of candidates, determining both how many-and which—women stand for office. At the same time, parties also represent "the central mechanism" by which the democratic processes of delegation and accountability work in practice (Müller 2000, 309, emphasis in the original). Win-
ning parties' policy platforms typically serve as the basis for the legislative agenda (Klingemann, Hofferbert and Budge 1994) and parliamentarians influence policy primarily by acting within the party group to create support for their cause (Mattson 1995).

Given that parties determine both candidate selection and policy formation, it is impossible to understand the relationship between women's descriptive and substantive representation without theorizing about role played by these organizations. If women's presence in office is to lead to greater policy attention to women, I argue that this must largely occur through female politicians' efforts to transform their parties' agendas. Indeed, a positive correlation between women's presence and policy representation at the party level may be indicative of legislators' efforts to promote women's issues.

Parties' efforts to represent women's interests, however, are undoubtedly influenced by factors beyond the presence of women in the parliamentary caucus. The party politics literature suggests that parties may select candidates and build their agendas with the desire to achieve particular aims, including maximizing their vote share and implementing their preferred policies (Müller and Strøm 1999). Parliamentarians, moreover, are viewed as agents of the party who work to implement its goals. The composition of the parliamentary delegation is thus largely perceived to be irrelevant (Laver and Shepsle 1994). Women's presence and policy representation may in fact be spurious, with both forms of representation emerging from the aims of party elites. The very factors that explain women's presence in office may simultaneously influence attention to women on the policy agenda.

The women and politics research provides one approach for understanding how women's policy representation emerges and whether it is tied to women's presence in office: compositional explanations that focus on the gender makeup of parties' elected officials. In contrast, motivational approaches increase our understanding of parties' broader aims, yet ignore women's representation. Neither compositional nor motivational explanations alone are sufficient for explaining women's policy representation. In fact, focusing on one at the expense of the other offers an incomplete theory of substantive representation. Any theory of women's substantive
representation must account for both parties' motivational strategies and women's numeric representation.

Since arguments that address only parties' compositions or motivations are incomplete, testing these theories' predictions without considering alternative explanations can generate misleading empirical results. Work that focus exclusively on parties' motivations, while ignoring their gender makeup, can overlook the ways in which variation in party composition can influence policy construction. It thus risks presenting an incomplete assessment of agenda formation. At the same time, without accounting for parties' motivations it is difficult to interpret a correlation between women's descriptive and substantive representation. A positive association may indicate that female politicians are generating policy for women. Alternatively, it may reflect a spurious relationship in which both forms of representation reflect party leaders' aims. Falsely assuming a direct relationship can, in turn, have significant consequences for efforts to increase attention to women on the policy agenda. If the correlation is not explained by a direct relationship, actors focused on bolstering women's numeric representation with the aim of generating policy for women may find that their campaigns have only a limited effect.

Rather than assuming that any link between women's presence and policy representation necessarily reflects a causal relationship, I offer a party-based theory of substantive representation that accounts for both compositional and motivational explanations. This theory, moreover, does not assume that the factors shaping women's representation will be constant across parties. That is, I theorize that while for some organizations the presence of women in the parliamentary delegation may be the chief determinant of women's policy representation, for others the presence of female leaders, electoral aims, or even ideological congruence may exert greater influence on their behavior. I argue that compositional or motivational factors do not matter exclusively, but that taken together the party-based theory of substantive representation better captures the link between women's numeric and policy representation than either explanation alone.

## Compositional Explanations

There are at least two ways in which the gender composition of the parliamentary party may shape attention to women on the policy agenda. Most obviously, for some parties there may be a direct relationship, such that increasing the proportion of seats held by female legislators generates greater policy representation. Alternatively, for some parties there may be an indirect causal link between women's descriptive and substantive representation. I theorize that increasing the number of women in the legislature can result in the selection of a female party leader, who in turn increases women's substantive representation.

## A Direct Relationship: Women MPs Shaping the Party Agenda

Conventional wisdom suggests a direct link between women's descriptive and substantive representation. Cross-national research, for example, shows a positive correlation between the number of female legislators and measures of political, economic, and social gender equality (O'Regan 2000, Schwindt-Bayer and Mishler 2005). Similar results are found in studies of childcare coverage in Norwegian municipalities (Bratton and Ray 2002) and the adoption and scope of maternity and childcare leave policies in OECD democracies (Kittilson 2008).

The relationship between women's presence in office and policy outputs that benefit women is attributed to the causal role played by female MPs. Female representatives often hold different perspectives on women's issues than their male counterparts (Reingold 1992, SchwindtBayer 2006, Lovenduski and Norris 2003). They are also more likely to prioritize women's rights (Thomas 1994, Carroll 2001, Wängnerud 2005) and to view themselves as champions of women (Esaiasson 2000, Diaz 2005).

These policy attitudes in turn influence legislators' behavior. Female representatives are especially likely to serve on committees addressing social policy related to traditional women's interests (Bækgaard and Kjaer 2012, Thomas 1994). They participate more extensively in debates involving women and families (Celis 2006, Piscopo 2011, Taylor-Robinson and Heath 2003), and are more likely to introduce and cosponsor legislation that pertains to women (Barnes

2012, Franceschet and Piscopo 2008, Swers 2002).
Even in cases where men's and women's observed legislative behavior is similar, female MPs may work behind the scenes to influence parties' electoral manifestos and legislative agendas (Lovenduski and Norris 2003). Some (especially female) legislators claim that the entry of more women into politics has led parties to change their policy positions (Diaz 2005, Jiménez 2009). Women's presence in parties' parliamentary caucuses is, for example, associated with a greater emphasis on social justice issues in their electoral manifestos (Kittilson 2011). This may be a consequence of female legislators' greater propensity to act in favor of women during party parliamentary group meetings (Erzeel 2011).

## An Intervening Relationship: The Role of Female Party Leaders

While female MPs may directly influence women's substantive representation in some parties, in others a correlation between presence and policy representation may be explained by the ascension of female party leaders. Increasing the number of female legislators can alter both the supply of-and demand for-women in the party leadership. As women gain access to the organization's top position, they may be more able to attend to women on the policy agenda.

In terms of supply, MPs constitute the pool from which party leaders are drawn. Over time, electing more female parliamentarians thus increases the number of women who can fill this role. With respect to demand, increasing the number of female MPs may change the composition of the selectorate for leadership positions. When the parliamentary caucus helps select the party leader, women's increased presence among backbench MPs may allow female nominees to access positions of power within the party from which they were previously excluded.

The presence of female leaders may in turn influence the party's attitude towards advancing policy for women. In parliamentary systems, policy-making authority is located with the party leadership (Laver and Hunt 1992). In this vein, Katz (1986) argues that to understand party government it is necessary to consider the goals being pursued by party leaders. Harmel et al. (1995) further posit that changes in party leadership influence party behavior and that leaders'
policy aims can shape electoral platforms.
Evidence from the women and politics literature lends support to the notion of an indirect relationship between numeric and policy representation. The percentage of women in the legislature is one of the chief determinants of both the proportion of female ministers (Davis 1997, Krook and O'Brien 2012) and the ascension of female national leaders (Jalalzai 2008). Further analysis confirms that the presence of women in the parliamentary party is positively and significantly associated with the ascension of a female party leader (see appendix).

Female leaders may, in turn, attend to women on the policy agenda. Women's participation as internal officeholders increases attention to women's representation within the party (Caul 2001, Kittilson 2011). At the same time, the absence of female leaders can inhibit women's policy representation. Meyer (2003) argues, for example, that after Hildegard Hamm Brücher left the German Free Democrats in 2002, there were "no female members of great influence... who could promote women's rights" (408).

## Motivational Explanations

Though a number of studies link women's presence and policy representation, alternative research calls these compositional explanations into question. To begin with, women's substantive representation sometimes occurs despite women's low level of descriptive representation (Ayata and Tütüncü 2008, Wolbrecht 2000) and appears to be shaped by factors beyond women's presence in office (Weldon 2002, Htun and Weldon 2012). Within Western European states, moreover, executive dominance and party institutionalization have together reduced the importance of legislators' individual actions (Norton 1990). Even if MPs wish to shape-rather than simply react to-the policy agenda, because of their limited support staff and constrained budgets they often lack the capacity to independently influence the policy-making process (Uslaner and Zittel 2009). Taken together, these works suggest that descriptive representation is neither a necessary nor sufficient condition for substantive representation.

Substantive representation may not only emerge in the absence of descriptive represen-
tation, but in some cases the relationship between women's presence and policy representation may be spurious. In particular, the association may sometimes be explained by the motivations of the party leadership. These aims are causally prior to both increases in the number of female legislators and attention to women on the policy agenda. When controlling for these motivations, the association between descriptive and substantive representation diminishes. When left unaccounted for, however, they can generate a misleading correlation between presence and policy representation. The following subsections explore how both parties' vote-seeking aims and stable preferences can influence the adoption of policy for women.

## A Vote-Seeking Relationship: Accounting for Parties' Electoral Aims

Women's descriptive and substantive representation are both shaped by parties' electoral incentives (Kittilson 2006, Wolbrecht 2000). Studies of "contagion effects" in candidate selection suggest that women's numeric representation is bolstered by inter-party competition (Caul 2001, Matland and Studlar 1996). Case study research provides examples of parties that have tried to appeal to women voters by simultaneously nominating female candidates and advocating feminist policy stances (Beckwith 1985, Young 2000).

Beyond the women and politics literature, empirical analyses of party manifestos often explicitly connect programmatic shifts to vote-seeking behavior. Janda et al. (1995), for example, argue that electoral defeat is a necessary condition for producing major change in parties' subsequent manifestos. Similarly, Budge (1994) shows that past election results are correlated with ideological shifts among a subset of parties. Both movement in left-right ideological position (Somer-Topcu 2009) and changes in kurtosis scores (Walgrave and Nuytemans 2009) are more frequent among parties that have lost votes in the previous election.

Though parties wish to gain supporters from both sexes, the gendered ideological and cultural shifts of the 1960s and 1970s created additional incentives to target female voters. First, a broader trend of partisan dealignment was accompanied by an ideological shift among women. While traditionally more conservative, by the 1990s female voters in Western European nations
tended to be significantly more left-leaning than men (Inglehart and Norris 2003). Thus, parties of the right may work to retain (or regain) support among women, while parties of the left cultivate this new constituency.

This gender realignment, moreover, can be at least partially attributed to changing social and political values. The emergence of a group of voters committed to post-materialist idealsincluding self-expression, freedom, and gender equality-created a new set of issues that parties could use to court electoral support. As this "new politics" has become increasingly salient (Dalton and Wattenberg 2000), issues like equal opportunities, reproductive choice, and family structures have reached the political agenda (Inglehart 1997).

Together, the ideological realignment of female voters and politicization of gender issues created a political environment in which women's representation was increasingly salient. The nomination of female candidates and/or discussion of policy for women may be used to mobilize existing (or attract new) female supporters. Unlike many policy positions, moreover, women's issues are accessible to all parties. While a clear relationship has emerged between feminism and left-wing politics, women have not been wholly captured by left parties. To the contrary, attending to women can be in keeping with either conservative or progressive values. ${ }^{1}$

In many respects, the use of gender-based appeals is consistent with existing findings on party competition. Though research on manifestos shows a link between parties' electoral fortunes and platform change, the relationship is not as strong as vote-seeking aims might dictate. This is in part because positional shifting is costly and difficult to accomplish. Moving away from established policy preferences can jeopardize party loyalty among voters, activists, and donors (Adams et al. 2004, Somer-Topcu 2009).

[^0]Given that parties along the ideological spectrum can credibly appeal to female voters, focusing on women's representation allows them to respond to electoral demands without assuming the risk associated with shifting their left-right positions. Capturing even a small percentage of these voters can, in turn, influence election outcomes. As a result of these comparatively low costs and potentially large benefits, parties may have an electoral incentive to nominate female candidates and address women on their platforms.

## A Policy-Stability Relationship: Considering Parties' Policy Attitudes

The vote-seeking relationship notes that parties are often reluctant to reposition themselves on the ideological spectrum. Parties' overarching policy positions are, in fact, surprisingly stable over time (Budge et al. 2001, Walgrave and Nuytemans 2009). Some parties-including niche and peripheral left organizations-are especially ideologically rigid and non-responsive to public opinion (Adams et al. 2006, Adams, Haupt and Stoll 2009). Many others adhere to their previous programs simply because of uncertainty and the costs involved with moving away from the status quo (Budge 1994). This reluctance to alter policy positions may lead some parties to maintain relatively stable levels of attention to women's on their platforms over time.

Among "female-friendly" organizations, for example, women's presence in the parliamentary caucus may be a single manifestation of a broader commitment to representing women. Even in the absence of female parliamentarians, these parties would continue to promote women's policy representation. Similarly, parties that are hostile towards-or simply indifferent to-women may have few female MPs and little attention to women on their electoral programs. Though this leads to a correlation between women's descriptive and substantive relationship, this association does not result from the presence of female politicians per se.

This policy stability hypothesis does not negate the important role played by women. Even leftist movements have restricted feminist activities and relegated women's issues to the periphery (Gelb 1989, Lovenduski and Randall 1993). To overcome these obstacles, women had to engage in hard fought battles to place gender equality on the agenda (Lovenduski 1986). This the-
ory does, however, suggest that the work done by women at the time of agenda formation may solidify a commitment to gender equality on the party platform. Once the party becomes associated with women's policy representation, it may continue to promote female-friendly policies regardless of the presence or absence of female MPs. At the same time, those parties that have established themselves as reluctant to address women on their agenda may be unlikely to later change their position, even if the number of women in the parliamentary caucus increases. Thus, until another period of issue equilibrium disruption, many parties' attention to women may remain relatively constant (Wolbrecht 2000).

## Substantive Representation and the Location of Agenda Control

Drawing on both compositional and motivational explanations, the party-based theory of substantive representation identifies four ways in which women's presence and policy representation may be linked at the party level. A single relationship, however, may not explain all organizations. For some parties the link between descriptive and substantive representation may be direct, while others may be explained by the intervening or spurious relationships.

Which types of parties are likely to be well explained by each of these alternative explanations? That is, what attributes might be used to identify a direct, intervening, vote-seeking, or policy-stable organization? Though there are a number of party- and system-level characteristics that influence parties' policy agendas, I focus on parties' aims and the location of agenda control within the organization in order to distinguish between party-types.

Müller and Strøm (1999) theorize that parties' aims are threefold: to maximize electoral support; to accrue the benefits of serving in office; and to implement their preferred policy. Though parties would like to achieve all of these goals, in practice the extent to which they prioritize vote, office, or policy objectives varies across organizations. While some parties will alter their platforms to gain votes or office, others are more ideologically rigid and policy oriented.

Schumacher, de Vries and Vis (2013) argue that party organization largely determines the extent to which parties change their policy positions in response to shifts in the political en-
vironment. Organizations in which the leadership controls the agenda are more likely to alter their platforms in pursuit of the mean voter and political office. Activist-dominated organizations, which are constrained by their rank-and-file membership, are less responsive to these concerns. Instead they attend to party voters' preferences. Pedersen (2012) similarly suggests that as activists gain power, parties becomes less likely to prioritize office over policy.

These findings are broadly consistent with a large body of research that posits a link between party organization and aims. Laver and Hunt (1992) note the differing preferences of party leaders, legislators, and activists, for example, suggesting that the location of agenda control may generate different policy outcomes. Panebianco (1988) distinguishes between massbureaucratic parties-which are controlled by policy-seekers who prioritize ideological considerationsand careerist dominated electoral-professional parties that emphasize electoral concerns. Finally, Wolinetz (2002) posits that the policy influence of rank-and-file members is likely to be constrained in parties that are primarily concerned with electoral success. Policy-seeking parties, on the other hand, have active memberships that wield influence over party policy.

Just as party organization may influence partisan aims in general, it may also shape the relationship between women's numeric and policy representation in particular. Consider first the direct relationship. Variation in women's presence in the parliamentary caucus should have the greatest effect on women's policy representation when parliamentarians have a direct role in shaping the agenda. In contrast, when legislators have little influence over the policy platform, variation in women's numeric representation should be less important. The probability of being well explained by the direct relationship may therefore be highest among parties in which the parliamentary caucus holds sway over policy.

Like the direct relationship, the intervening relationship also emphasizes the gender composition of the party. This explanation, however, focuses on the importance of the female leaders in generating attention to women on the policy agenda. The presence or absence of female leaders may be most important in organizations that concentrate power within the party elite. The intervening relationship may therefore hold for organizations in which the leadership is
chiefly responsible for generating the party's policy platform.
The strength of party leaders vis-á-vis other actors may also be important for identifying vote-seeking organizations. As compared to other members, party leaders may be especially attuned to the strategic value of gaining and maintaining the support of women in the electorate. If charged with composing the party agenda, they may use the platform to appeal to female voters. Party activists, in contrast, are less likely to attend to women solely as a calculated effort to win supporters. Organizations in which leaders determine the platform are therefore also more likely to be consistent with the vote-seeking relationship.

Finally, policy-stable parties are expected to maintain a constant level of commitment to women's policy representation. Changes in the make-up of their parliamentary caucus, the position of women within the party, or vote-seeking incentives should not account for their behavior. Parties with strong legislators or powerful party leaders are thus less likely to demonstrate policy-stability, as these groups are especially responsive to changes in the make-up of the party and electoral motivations.

## Empirical Analysis

Political parties shape the relationship between women's presence and policy representation. I therefore posit a party-based theory of substantive representation that accounts for both parties' gender composition and their vote and policy motivations. I argue that no single explanation will account for all parties' behavior. Instead, for some organizations there may be a direct relationship between women's presence and policy representation, while others may be better explained by intervening or motivational factors. I theorize that the extent to which these alternative relationships explain party behavior is influenced by the distribution of policy-making authority within the organization.

Testing this party-based theory of substantive representation presents two unique challenges. To begin with, no previous study has directly measured women's substantive representation at the party level across countries and over time. To create such a measure, I focus on
instances of female-oriented issue-framing on parties' electoral manifestos. By systematically coding policy content about women in parties' platforms, I was able to construct an original dataset containing 58 parties across multiple elections held between 1981 and 2008 in 12 countries: Austria, Belgium, Denmark, France, Germany, Great Britain, Ireland, the Netherlands, Norway, Portugal, Spain, and Sweden.

The theoretical framework, moreover, cannot be tested using traditional modeling approaches. A standard regression analysis cannot account for subpopulations within the data, and will thus generate biased results. It also cannot determine which (if any) relationship explains attention to women among the largest number of parties, nor whether (and to what extent) the link between women's descriptive and substantive representation varies across partytypes. Finally, a conventional regression analysis provides no test of whether a party's probability of being consistent with each of the four relationships is influenced by its organizational characteristics.

I address these issues by implementing a finite mixture model with concomitant variables. Finite mixture models accommodate data in which observations arise from more than one group and these group affiliations are not known by the researcher (Everitt and Hand 1981, McLachlan and Peel 2000). Traditionally they are used to allow parameter values to vary across unobserved clusters, therefore increasing the flexibility of the model. I instead specify four nonnested regression models capturing each of the alternative theories and use concomitant variables to incorporate additional information on party structure into the model (Imai and Tingley 2012). The proportion of parties that are consistent with each model provides a measure of explanatory power for each compositional and motivational explanation. The inclusion of the concomitant variables provides information on whether different organizational forms are associated with classification by the alternative relationships.

## The Outcome Variable: Measuring Attention to Women on Party Manifestos

To measure women's policy representation at the party level, I consider parties' attention to women on their electoral manifestos. Manifestos outline parties' legislative priorities and make specific pledges on the policy themes they emphasize most (Mansergh and Thomson 2007). They offer the "only statement of policy issued authoritatively on behalf of the whole party" (Budge 1994, 450) and are correlated with party behavior once in office.

Despite their widespread use in the party politics literature, manifestos have received scant attention from women and politics scholars. There is only one cross-national analysis of the influence of women's numeric representation on variation in party platforms (Kittilson 2011). This study does not address parties' attention to women, but rather focuses on social justice issues and welfare state expansion. The research that does directly consider parties' discussion of women, on the other hand, focuses only on one or a small number of organizations (Campbell and Lovenduski 2005, Childs, Webb and Marthaler 2010, Freeman 2002, Jiménez 2009, Wolbrecht 2000).

As with any study of women's substantive representation, the operationalization of the outcome variable is a major concern. Some scholars focus on traditionally "feminine" issues related to the private sphere of social life. Legislation dealing with education, health, and poverty, for example, has been identified as addressing women's issues (Reingold 2000, Swers 2002). Others eschew these broader definitions in favor of more restrictive classifications. These have included policies specifically directed towards women (Wolbrecht 2000), with consequences that will disproportionately impact women (Carroll 1984), or that seek to increase the autonomy of women (Bratton and Haynie 1999, Lovenduski and Norris 2003).

Though most studies define women's issues a priori, others are skeptical of this approach. Gender is a cross-cutting cleavage and the heterogeneity among women calls into question the existence of a single set of shared policy objectives that transcend divisions such as class, race, and ideology. In deemphasizing women's differences, the issues identified by researchers may
fail to capture the diversity of women's interests and ascribe policy concerns to women that they do not themselves express (Molyneux 1985, Wängnerud 2000). This approach may in fact further essentialize and reify gendered identities (Celis 2006, Celis et al. 2008).

The dataset I constructed is rich and comprehensive, as it includes an ideologically diverse set of parties from 12 states over multiple elections. This variation makes it difficult to identify a single set of women's issues that can be generalized to all observations. To address the diversity of women's interests across time and space, I measure substantive representation as direct claims made on behalf of women by legislative parties, which is consistent with the theoretical conception of substantive representation as the performance of claim-making (Celis et al. 2008). "Acting for women" can thus be operationalized inductively, through the examination of claims to represent women or the "framing [of] issues as being of importance to women" (106). Based on this approach, I do not identify "women's issues" per se. Instead, I look for words that frame a subject as particularly relevant to female voters. The political party therefore determines the form and content of women's policy representation. ${ }^{2}$

To create the outcome variable, each manifesto was searched for instances of attention to women. The text analysis was based on a dictionary containing almost one hundred words signaling female-oriented issue framing. This dictionary was drafted from close readings of out-of-sample party platforms. It was then expanded based on the Beijing Declaration and Platform for Action, a comprehensive agenda for women's empowerment that emerged from the Fourth World Conference on Women held in $1995 .^{3}$ The volume of text to be analyzed—over five million words in total—precluded manual coding. Instead, the party programs were translated into English and subjected to an automated search for dictionary terms. ${ }^{4}$ Based on this analysis, the final measure of women's policy representation is a count of the number of female-oriented

[^1]framing words in the party manifesto. Though this approach is new to the gender and politics literature, several studies estimating parties' ideological positions have measured word frequencies on manifestos based on predefined coding "dictionaries" (Laver and Garry 2000, Laver 2001). ${ }^{5}$

## Operationalizing Compositional and Motivational Explanations

The direct, intervening, vote-seeking, and policy-stability relationships describe four alternative links between women's numeric and policy representation at the party level. The finite mixture model thus has four components, each containing a measure of the percentage of women in the party's parliamentary caucus and unique covariates describing each relationship. The number of parties that are classified by each of these component models, in turn, sheds light on the explanatory power of these compositional and motivational explanations.

The Direct Relationship: To capture the direct relationship, the model includes a component with a covariate measuring the percentage of seats held by women in the party's parliamentary caucus. As party platforms are written prior to the election, this variable is lagged. For the 2005 British manifestos, for example, data on the percentage of female MPs in the three major parties is taken from the results of the 2001 general election. Though the number of seats held by women in the legislature is widely available, no single source disaggregates this information by party. The data were gathered from party and legislative archives, as well as secondary sources. ${ }^{6}$ The Intervening Relationship: The intervening relationship posits that for some organizations the link between numeric and policy representation emerges only after women gain positions of power within the party. To represent the intervening relationship, the second component contains two indicator variables. The first captures whether the party has a current female leader. The second denotes parties that have had former female leaders. ${ }^{7}$ This variable was constructed

[^2]using information taken from the "World Political Leaders 1945-2005" database (de Zárate 2011). The Vote-Seeking Relationship: Vote-seeking parties advance women's numeric and/or policy representation in an effort to increase support among female voters. To capture vote-seeking spuriousness, the third component includes a measure of the differences among male and female voters' support for the party. With a difference of proportions test, I distinguish between parties that received greater support from female than male voters (vote-keepers), from male than female voters (vote-seekers), and those that witnessed no gendered difference in support in the previous election. This data was taken primarily from the Eurobarometer trend file (Schmitt and Scholz 2005), and supplemented with the European Values Study (European and World Values Surveys 2006) and the European Voter Database (Thomassen 2005). ${ }^{8}$

While differences in gender support alone may influence attention to women, parties may be more likely to appeal to female voters when they have lost electoral support. The model therefore also includes a covariate capturing the lagged change in party vote share. Using data from the ParlGov database (Döring and Manow 2010), this measure calculates the difference between the percentage of votes won by the party at the previous election (at time $t-1$ ) from the vote share of the preceding election (at time $t-2$ ). The change in vote share for the UK Labour Party in 2005, for example, is the percentage of votes won in 1997 (43.2\%) subtracted from the vote share in 2001 (40.7\%). This $-2.5 \%$ reflects the parties' modest loss of support. The interaction of gendered voting and change in vote share thus captures party vote-seeking incentives.

The Policy-Stability Relationship: Policy-stable parties are expected to maintain a constant level of commitment to women's policy representation. Changes in the gender makeup of their parliamentary delegations, the position of women within the party, or vote-seeking incentives should not account for their behavior. To capture this relationship, the fourth component contains the log of the number of words for women on the first available manifesto minus the log of the total number of words in the document. For parties well classified by this component, their

[^3]base-line level of attention to women is the best predictor of subsequent behavior.

## Operationalizing the Location of Policy-Making Authority

Though there are many factors that shape party behavior, I posited that classification by the four relationships could be explained by the location of intra-party policy-making authority. To test this assertion, I use three questions from an expert survey conducted by Laver and Hunt (1992). The survey asks about the influence held by party leaders, legislators, and activists over the policy agenda. The experts assign numbers from 1 to 20 , with higher values indicating greater control. These values are then transformed into standardized scores for each group of actors.

I use these scores to create two measures. Following Kitschelt (1997) and Schumacher, de Vries and Vis (2013), the first subtracts the activist score from the leadership score. This variable therefore captures party leaders' control of the policy agenda as compared to party activists. The second subtracts the activist score from the legislator score, representing the parliamentary caucuses' control of the policy agenda vis-á-vis activists. Using the differences between groups, as opposed to simply relying on the scores themselves, provides a measure of the extent to which each of these actors dominates the policy-making process.

Unlike the myriad of proxy measures that could be employed, these variables directly capture the location of policy-making authority within the party. As these questions were asked only once, however, it is necessary to use data from a single time point to classify parties that are observed over many elections. Addressing this concern, Schumacher, de Vries and Vis (2013) note that parties' organizational features are relatively fixed over time. Even when organizations evolve over the course of several elections, moreover, these historical patterns have lasting effects on the policy-making process. In fact, measures of party organization constructed from these expert survey questions predict changes in party manifestos ranging from 1977 to 2003.

## Modeling Strategy

I use a finite mixture model with concomitant variables to analyze the data because it offers several clear advantages over the conventional approach. First, by modeling the subpopulations within the data, it provides unbiased estimates of the parameters of the models for each group. Second, because the finite mixture model estimates the probability that each party is consistent with each of the four party-types, it offers a principled metric for comparing these relationships. Finally, the inclusion of concomitant variables elucidates the factors that explain which parties are best explained by the direct, intervening, vote-seeking, and policy-stability relationships.

A model is specified for each hypothesized subpopulation, and this model simultaneously tests whether clusters exist within the data and estimates the parameter values for each model in the mixture. Drawing on the four relationships posited by the theoretical framework, the population of parties is assumed to have $J=4$ subpopulations. The first is associated with the direct relationship, the second the intervening relationship, the third the vote-seeking relationship, and the fourth the policy-stability relationship. The mixture distribution for a party $p$ is given by a weighted sum over these four components, where each component's weight is the marginal probability that party $p$ is consistent with the theory $j$.

In a standard finite mixture model, the marginal probability that a party is consistent with a theory is simply the proportion of the population explained by that theory. I expand this model to use information about the party's organizational features to predict its behavior (Dayton and Macready 1988). The probability that party $p$ is consistent with theory $j$ (before observing its outcome) is modeled using concomitant variables describing these party-level characteristics. The coefficient of each concomitant variable for a particular component represents the effect of that variable on the relative probabilities of parties belonging to that theory. Thus, concomitant modeling allows us to identify the types of parties that are most (or least) likely to be consistent with the direct, intervening, vote-seeking, and policy-stability hypothe-
ses.
The finite mixture distributions with concomitant variables are described by

$$
\mathbf{y}_{p} \mid \pi_{1}\left(W_{p}\right), \ldots, \pi_{4}\left(W_{p}\right) \sim \sum_{j=1}^{4} \pi_{j}\left(W_{p}\right) F_{j}\left(\mathbf{y}_{p}\right)
$$

where, $p$ is the political party, $W_{p}$ is a vector of concomitant variables, and $\pi_{j}\left(W_{p}\right)$ is the marginal probability that a party with concomitant variable $W_{p}$ can be described by distribution $F_{j}$. The $F_{j}$ are distributions for different groups within the population. ${ }^{9}$

Parties are clustered into the four models based on the conditional inclusion probability, $\zeta_{p, j}$, that party $p$ is consistent with theory $j$. The inclusion probabilities weight the observations when fitting the components, so that parties with a higher probability of belonging to a component exert greater influence on its coefficient estimates. These inclusion probabilities are also used to compare the explanatory power of the four party-types. If almost all parties are consistent with a single cluster, this provides strong support for the relationship operationalized via this model. In contrast, if most parties fail to be well classified by any model, this indicates that none of the posited theories explain the variation in policy representation.

As the outcome variable is a count of the number of words on the party manifesto addressing women, it is modeled with a Poisson distribution. ${ }^{10}$ The log rate for each observation includes an offset term, $l_{p i}$, controlling for the log length of the document. Each component contains unique coefficients for the intercept and the percentage of women MPs, as well as covariates describing the specific hypothesis. Since the $\pi_{j}\left(W_{p} \mid \gamma_{j}\right)$ are probabilities that must add to one, they are modeled using multinomial logistic regression. This reflects standard practice

[^4]for analyzing the marginal inclusion probabilities using concomitant modeling. ${ }^{11}$

## Results and Discussion

The party-based theory of substantive representation reveals a great deal about why parties represent women on their policy agendas. To begin with, all parties are consistent with one of the four alternative relationships capturing the compositional and motivational explanations. ${ }^{12}$ If many observations were poorly classified, this would cast doubt on the explanatory power of the theoretical and empirical framework. That all parties were well classified suggest that the four components capture distinct party types.

The conditional inclusion probabilities also illustrate the causal heterogeneity underlying women's policy representation. Together the compositional explanations capture $40 \%$ of parties, while the remaining $60 \%$ are clustered by motivational accounts. Each of the four alternative relationships, moreover, captures at least $15 \%$ of parties. In fact, no one party-type explains a majority of observations. Clearly neither parties' gender makeup nor their vote-seeking aims and stable preferences alone can wholly explain the link between women's presence and attention to women on the policy agenda. Taken together in a single theoretical framework, however, they reveal they ways in which parties mediate women's representation.

## Compositional Explanations

In total, 23 of the 58 parties are well explained by compositional approaches. As noted in Table 1, however, the direct relationship accounts for the fewest parties, capturing only $16 \%$ of organizations. Contrary to literature emphasizing the role of female MPs in shaping substantive representation, the presence of women in the parliamentary party does not exercise a large independent effect on attention to women on European parties' policy agendas. This finding is nonetheless consistent with work on policy construction in Western European states.

[^5]Table 1: Finite Mixture Model of Poisson GLMs of Attention to Women on Party Manifestos

|  | Estimate | Std. Error | z value | $\operatorname{Pr}(>\|z\|)$ |
| :---: | :---: | :---: | :---: | :---: |
| Direct (Component 1) | Parties Classified: 9 of 58 (16\%) |  |  |  |
| Intercept | -7.795 | 0.053 | -146.561 | <0.001 |
| \% Women MP | 0.061 | 0.002 | 33.485 | <0.001 |
| Intervening (Component 2) | Parties Classified: 14 of 58 (24\%) |  |  |  |
| Intercept | -6.110 | 0.049 | -124.927 | <0.001 |
| \% Women MP | 0.012 | 0.002 | 7.428 | <0.001 |
| Current Fem Leader | 0.098 | 0.056 | 1.752 | 0.080 |
| Ever Fem Leader | - 0.223 | 0.049 | -4.682 | <0.001 |
| Vote-Seeking (Component 3) | Parties Classified: 13 of 58 (22\%) |  |  |  |
| Intercept | -6.357 | 0.046 | -139.530 | <0.001 |
| \% Women MP | 0.005 | 0.002 | 2.8535 | 0.004 |
| Vote-Share | -0.011 | 0.005 | -2.278 | 0.023 |
| Male Supported Parties | 0.185 | 0.042 | 4.438 | <0.001 |
| Fem Supported Parties | 0.672 | 0.080 | 8.400 | <0.001 |
| Male Supported Parties:Vote-Share | -0.099 | 0.016 | -6.416 | <0.001 |
| Fem Supported Parties:Vote-Share | 0.158 | 0.016 | 9.991 | <0.001 |
| Policy Stability (Component 4) | Parties Classified: 22 of 58 (38\%) |  |  |  |
| Intercept | -5.498 | 0.132 | -41.588 | 0.123 |
| \% Women MP | -0.002 | 0.001 | -1.541 | <0.001 |
| Women Words 1st Manifesto | 0.165 | 0.018 | 9.247 | <0.001 |

Notes: The outcome variable is a count of the number of words related to women in the party's electoral manifesto. Parties are considered to be consistent with a given component based on their conditional inclusion probabilities $\left(\zeta_{p, j}\right)$. All observations are statistically significantly consistent with one of the four theories at the $\alpha=0.05$ level. Coefficient estimates are also weighted based on these conditional inclusion probabilities. For the third component, the baseline category is gender-neutral observations.

As both Table 1 and Figure 1 illustrate, among direct relationship parties women's presence in the parliamentary delegation is positively correlated with attention to women on the manifesto. Increasing the percentage of women MPs from the first to the third quartile (from $8 \%$ to $29.5 \%$ female) is associated with a comparatively large increase in the predicted count of words related to women on the party manifesto (from 7 to 26 words). Among these parties, the effect of women's representation is even greater for values above the third quartile. At this point, comparatively small increases in women's presence are associated with large gains in policy representation. Consider the Swedish Moderate Party, for example, which is well classified by
the direct relationship. For this center-right organization, the percentage of words for women was over twice as large when women made up $40 \%$ of the parliamentary party as compared to when they held only a quarter of these seats.

Figure 1: Predicted Attention to Women on Manifesto (\% Women MPs)


Notes: These predicted probabilities were generated holding all other variables at their mean or modal values. The dashed lines represent $95 \%$ confidence intervals around these values.

The intervening relationship captures the other 14 parties that are consistent with the compositional approach ( $24 \%$ of total organizations). Among these parties, women's presence in the parliamentary caucus remains positively associated with women's policy representation. As shown in Figure 1, however, the impact of female MPs is more limited. Moving from the first to third quartile of female representation increases the predicted count by only nine (from 29 to 38 words for women).

While the limited impact of women's numeric representation conforms to theoretical expectations, the relationship between female party leaders and attention to women on the manifesto appears to be more complicated than initially hypothesized. As expected, comparing pre-
dicted word counts shows that parties that currently have a female leader dedicate significantly more attention to women than those that do not. This relationship breaks down, however, for parties that were previously female-led but do not currently have a woman at the helm. With a female leader no longer in power, the predicted word count drops significantly.

These findings may be explained by the diversity of European parties that selected female leaders prior to 2008. In contrast to widely held assumptions, additional analysis shows that parties' left-right positions do not predict whether a woman has ever ascended to the top position within the organization (see appendix). While green parties were more likely—and Christian democrats less likely-to have had a female party leader, there were no differences between social democratic, conservative, and liberal parties. Two agrarian parties were even led by women leaders during this era (the Swedish and Norwegian Center parties). In more traditional organizations, it is not surprising that after a female leader steps down her party reverts to lower levels of attention to women on its agenda.

## Motivational Explanations

While compositional explanations highlight the role of women within the party, motivational accounts emphasize partisan aims. Among the 35 organizations that are well explained by motivational approaches (60

The vote-seeking theory focuses on parties' electoral fortunes. As Figure 2 shows, changes in vote share are not only correlated with attention to women, but the size and direction of the association is influenced by the party's position among male and female voters. For genderneutral parties-those in which the difference in support among men and women is non-significanthaving lost votes in the previous election is associated with a small but significant increase in attention to women. When comparing the third quartile (a $1 \%$ increase in vote share) to the first quartile (a $4 \%$ decrease), the predicted count increases by one, from 18 to 19 words for women.

Figure 2: Predicted Attention to Women on Manifesto ( $\Delta$ Vote-Share)


Notes: These predicted probabilities were generated holding all other variables at their mean or modal values. The dashed lines represent $95 \%$ confidence intervals around these values.

The relationship between changes in vote share and attention to women is far larger for parties that receive both more and less support from women. Among parties that have fewer female than male supporters, a loss in vote share is associated with significantly more attention to women on the party manifesto. Moving from the third to the first quartile increases the predicted counts by 22, from 27 to 49 words. These organizations thus appear to be behaving as "vote-seekers," aiming to win over new female supporters after suffering losses.

In contrast to both gender-neutral and masculine parties, parties that receive significantly more support from female voters are less likely to mention women when they have lost electoral support. Moving from a one percent gain in vote share to a four percent loss decreases the predicted counts from 60 to 27 words related to women. For these female supported parties, losing votes appears to discourage subsequent attention to women on the policy agenda. Having gained support after advancing women's representation, on the other hand, encourages
these parties to include even more words for women on their manifestos.
Vote-seeking parties are most likely to attend to women on their policy agendas either when doing so has already proven to be a winning strategy or when they need to attract female voters to compensate for falling vote shares. They eschew gender-based appeals, however, when they are strong among male voters and gaining electoral support, as well as when this behavior appears to be a losing strategy (that is, they are disproportionately supported by women yet losing vote share). Comparing the platforms of the Spanish Socialist Workers' Party after losing electoral support illustrates this behavior. The party used more words for women when it had significantly less support from female voters and fewer words when it was more supported by women in the electorate.

Of the four relationships, the policy-stability component classifies the greatest number of parties. In essence, for a plurality of organizations attention to women is relatively unresponsive to the endogenous and exogenous factors captured by the other party-types. For this cluster, attention to women on the first available manifesto is positively correlated with the subsequent use of words for women. Comparing predicted values demonstrates that moving from the first to the third quartile in the percentage of words for women in the earliest available platform is associated with an increase from 13 to 19 words for women.

Among policy-stable parties, increasing women's participation without additional efforts to convince these organizations to attend to women is unlikely to generate change. Once policy for women reaches the agenda, however, it is likely to remain there over time. Both the Norwegian Progress Party and the Danish Socialist People's Party, for example, are well classified by this component. The Progress Party had almost no words for women on its first available manifesto. On subsequent platforms, the percentage of words for women increased, yet the party always remained below the mean. Fluctuations in women's policy representation across elections, moreover, do not clearly correspond to changes in women's presence in the parliamentary delegation. As compared to other organizations, the Socialist People's Party paid much greater attention to women on its first available manifesto. Over the next eight elections, the
party exceeded the mean percentage of words for women on five of its platforms. During this time, women's numeric representation varied between $23 \%$ and $43 \%$ of the parliamentary party. Once again, these changes were not associated with different levels of policy representation.

## Policy-Making Authority and Party-Type

To explain why particular parties might be consistent with each of the four theories, I turn to the concomitant variables capturing policy-making authority. The link between women's presence in the parliamentary party and women's substantive representation should be strongest among organizations that grant legislators policy-making authority. If the parliamentary caucus is marginalized in the policy construction process, this direct relationship should not emerge.

As Table 2 shows, the results are largely consistent with these theoretical expectations. As legislators become stronger vis-á-vis activists, the probability of being classified by the direct relationship increases significantly. Organizations in which parliamentarians have less agenda control, on the other hand, are less likely to be consistent with this party-type. Holding leaders' and activists' power at their mean values, when legislators' power is at its minimum value the predicted probability of classification by the direct relationship is near zero. In contrast, when the parliamentary caucus is at its most powerful, the probability of a party clustering with the direct relationship is 0.61 . Parties in which legislators have greater policy-making authority are thus more likely to be consistent with a direct relationship between women's presence and policy representation than those that locate authority with activists or leaders.

Table 2: Coefficients of Location of Power Concomitant Variables

|  | Estimate | Std. Error | z value | $\operatorname{Pr}(>\|\mathrm{z}\|)$ |
| :--- | :---: | :---: | :---: | :---: |
| Intervening (Component 2) |  |  |  |  |
| Intercept | 0.986 | 0.661 | 1.491 | 0.136 |
| Leg. Power - Act. Power | -3.514 | 1.810 | -1.941 | 0.052 |
| Lead. Power - Act. Power | 1.274 | 0.885 | 1.441 | 0.150 |
| Vote-Seeking (Component 3) |  |  |  |  |
| Intercept | -0.659 | 0.689 | 0.956 | 0.339 |
| Leg. Power - Act. Power | -4.632 | 1.856 | -2.495 | 0.013 |
| Lead. Power - Act. Power | 2.211 | 0.936 | 2.361 | 0.018 |
|  | Policy-Stability (Component 4) |  |  |  |
| Intercept | 1.435 | 0.629 | 2.283 | 0.022 |
| Leg. Power - Act. Power | -2.646 | 1.668 | -1.586 | 0.113 |
| Lead. Power - Act. Power | 1.237 | 0.824 | 1.502 | 0.133 |

Notes: The coefficient estimates and standard errors were generated by a multinomial logistic regression model. The baseline category is the direct relationship component.

Beyond the role played by the parliamentary caucus, the power afforded to party leaders and activists also influences the relationship between women's numeric and policy representation. When either leaders' or activists' power are at their maximum values, the probabilities of inclusion with the direct party-type are 0.02 and 0.01 respectively. Organizations in which leaders are especially strong are, however, significantly more likely to be vote-seeking parties (0.43). This may in turn explain why these parties so readily shift their attention to women depending of their electoral fortunes. Party leaders are more likely that other actors to view women's policy representation strategically, focusing attention on women when they need female voters' support and eschewing electorally costly gender-based appeals.

Clearly, it cannot be assumed that all parties will respond similarly to women's increased presence in their parliamentary delegations. In fact, there is arguably no single strategy for generating attention to women that will be appropriate in all settings. While bolstering women's representation is especially important when MPs have greater policy-making authority, activists must pursue alternative approaches when organizations curb parliamentarians' power. When party leaders construct policy, for example, it may be more effective to convince them that at-
tending to women is a vote-winning strategy. When parties that have fallen into a period of policy-stability, activists should focus on disrupting the party equilibrium rather than channeling female candidates into existing power structures.

## Conclusions

Inspired by the observation that parties with very different backgrounds make pledges to women on their electoral platforms, this paper develops and tests a new party-based theory of women's substantive representation. The theory and results speak to scholars of comparative politics, normative theories of representation, women and politics, party politics, and legislative politics. With an original dataset and novel methodological approach, I show that neither compositional nor motivational explanations alone can adequately explain variation in women's substantive representation among Western European parties. Instead, both approaches must be combined in a single theoretical and empirical framework.

The party-based theory of substantive representation has important implications for academics and activists alike. For scholars of women and politics, the results show that focusing exclusively on compositional explanations can lead us to overlook the partisan factors explaining women's policy representation. The majority of parties are explained by the motivational hypotheses, with a plurality of organizations being consistent with the policy-stability component. The direct relationship, in particular, accounts for only a small subset of parties. The majority of organizations are better explained by the alternative party-types, and for these parties the impact of women's numeric representation on policy representation is limited.

Given these findings, it is clear that in considering only the behavior of-and constraints facing—female MPs and party leaders, we may inadvertently ignore the important role parties' preferences play in both contributing to, and also tempering, women's policy representation. Testing compositional explanations like the direct relationship only against a null hypothesis is thus insufficient. Instead, it is necessary to seriously consider the alternative causal mechanisms that could link descriptive and substantive representation.

Future work should therefore be careful not to a priori ascribe an important role to backbench representatives or female party leaders. Instead, it should ask why the link between women's presence and policy representation may emerge. In this regard, it is especially important to consider which actors control women's (descriptive and substantive) representation and what factors motivate their behavior. In Western European states, this means focusing on political parties, with particular attention to the aims of the dominant actors within these organizations. In systems that give greater authority to individual legislators, it may be more important to consider the institutional rules that incentivize politicians to represent women's interests.

The analysis also offers insights for the literature on party and legislative politics. While most research focuses on parties as unitary actors, $40 \%$ of parties were best explained by compositional rather than motivational approaches. Among parties that are consistent with the intervening relationship, those with female leaders dedicate significantly more attention to women on their platforms. In parties where legislators have substantial policy-making authority, moreover, changes in the gender makeup of the parliamentary party can lead to differences in women's policy representation.

These findings demonstrate that the composition of the party can influence policy construction. Though this work focuses on women's representation, addressing party makeup may also be relevant for other traditionally underrepresented groups (as well as for interests that are not based on ascriptive identities). Party politics scholars could thus benefit from further evaluating which groups and interests are represented within the organization and which are excluded from power. This includes assessing who leads the party and how these individuals may influence the policy formation process. When the parties' legislators are especially powerful, we should further explore who comprises the parliamentary delegation.

Like the party-based theory of substantive representation, causal complexity is central to many theories of party politics (Budge 1994, Katz and Mair 1995, Müller and Strøm 1999). The results from the empirical analysis further reinforce the need to seriously consider the heterogeneity that exists among parties. At the same time, though researchers posit that parties have
variable reactions to internal and external stimuli, with standard regression techniques it is difficult to test these theories or accurately distinguish parties as belonging to different types. The method applied here can be used to test for the existence of causal heterogeneity among parties and to determine which (and how many) organizations fall into each category.

Finally, the party-based theory of substantive representation has significant normative implications for those committed to promoting women's representation. In recent years, increasing women's access to political office has become a priority for a number of policy actors, largely based on the assertion that women's presence generates attention to women on the policy agenda. The results, however, show that there is significant heterogeneity in parties' responses to women's numeric representation. While for a small subset of organizations an increase in the percentage of women in the parliamentary caucus is associated with large gains in attention to women, for most the effect of women's presence is minimal. The consequences of this finding are twofold.

The limited support for the direct relationship first indicates that arguments for women's numeric representation should not be linked to policy representation. There are reasons to strive for gender parity in legislatures beyond the expectation of increased attention to women. Given that factors beyond the control of women MPs are often the most important predictors of women's policy representation, arguing for women's presence on this basis may ultimately inhibit their access to political office. When women's inclusion is predicated on the assumption that female MPs "matter" for substantive representation, their failure to do so undermines efforts to advance descriptive representation.

Beyond the need to separate the aims of descriptive and substantive representation, it is clear that there is no single solution to the problem of increasing attention to women on parties' policy agendas. Instead, it is necessary to tailor the approach based on the party's organizational structure. As legislators become more powerful vis-á-vis other actors, the probability of being classified by the direct relationship increases significantly. This implies that if the parliamentary caucus has meaningful influence over the agenda, it may in fact be best to
focus on increasing women's presence in the delegation in order to achieve greater policy representation. Where legislators play a more limited role, however, it is necessary to pursue other strategies (such as concentrating on the composition of the leadership and the party's electoral aims). Though these results in some ways complicate efforts to increase women's substantive representation, they clearly illustrate that focusing solely on increasing women's numeric representation is rarely the optimal approach.

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## Appendix

## Female Party Leader Models

## Logistic GLM of Presence of Female Party Leader (\% Women in Parliamentary Party)

|  | Estimate | Std. Error | t value | $\operatorname{Pr}(>\|\mathrm{t}\|)$ |
| ---: | ---: | ---: | ---: | ---: |
| (Intercept) | -0.013 | 0.043 | -0.294 | 0.769 |
| \% Women MP Lagged | 0.010 | 0.001 | 7.146 | $<0.001$ |

Notes: The outcome variable is a binary measure that distinguishes parties that have had a female leader from those that have not.

## Logistic GLM of Presence of Female Party Leader (Left-Right Position)

|  | Estimate | Std. Error | t value | $\operatorname{Pr}(>\|\mathrm{t}\|)$ |
| ---: | ---: | ---: | ---: | ---: |
| (Intercept) | 0.327 | 0.066 | 4.976 | 0.000 |
| Left-Right Position | -0.016 | 0.012 | -1.337 | 0.182 |

Notes: The outcome variable is a binary measure that distinguishes parties that have had a female leader from those that have not.

Logistic GLM of Presence of Female Party Leader (Party Family)

|  | Estimate | Std. Error | t value | $\operatorname{Pr}(>\|\mathrm{t}\|)$ |
| ---: | ---: | ---: | ---: | ---: |
| (Intercept) | 0.257 | 0.070 | 3.688 | 0.000 |
| Agrarian | 0.326 | 0.138 | 2.364 | 0.019 |
| Christian Democrat | -0.210 | 0.094 | -2.219 | 0.027 |
| Communist | -0.035 | 0.098 | -0.357 | 0.722 |
| Ecologist | 0.354 | 0.120 | 2.958 | 0.003 |
| Liberal | 0.021 | 0.090 | 0.231 | 0.818 |
| Special Issue | 0.043 | 0.148 | 0.290 | 0.772 |
| Social Democrat | -0.062 | 0.083 | -0.745 | 0.457 |

Notes: The outcome variable is a binary measure that distinguishes parties that have had a female leader from those that have not. Conservative parties serve as the baseline category.

## The Finite Mixture Model with Concomitant Variables

The finite mixture distributions with concomitant variables are described by

$$
\mathbf{Y}_{p} \mid \pi_{1}\left(W_{p} \mid \gamma_{1}\right), \ldots, \pi_{4}\left(W_{p} \mid \gamma_{4}\right), X_{p}, W_{p}, \Gamma, \Theta \sim \sum_{j=1}^{4} \pi_{j}\left(W_{p} \mid \gamma_{j}\right) F_{j}\left(\mathbf{Y}_{p} \mid X_{p}, \theta_{j}\right)
$$

where $p$ is the political party, $W_{p}$ is a vector of concomitant variables, $\Gamma=\left\{\gamma_{j}\right\}_{j=1}^{4}$ is the set of all concomitant parameters, and $\pi_{j}\left(W_{p} \mid \gamma_{j}\right)$ is the marginal probability that a party with concomitant variable $W_{p}$ can be described by distribution $F_{j}$. The $F_{j}$ are distributions for different groups within the population, $\Theta=\left\{\theta_{j}\right\}_{j=1}^{4}$ is the set of all model parameters for the components of the mixture, and $X_{p}$ are the covariates used to predict the response $\mathbf{Y}_{p}$.

We assume that each party $p$ is described by a single theory $j$. However, we do not observe this classification and must infer it from the data. We define the random variable $Z_{p}$ to be the unobserved latent party-type for party $p$. Thus $\pi_{j}\left(W_{p} \mid \gamma_{j}\right)$ is the marginal probability that $Z_{p}=j$ (or the inclusion probability prior to observing the response $\mathbf{Y}_{p}$ ). This model can be written as

$$
\begin{aligned}
& \mathbf{Y}_{p} \mid Z_{p}=j \sim F_{j}\left(\mathbf{Y}_{p} \mid X_{p}, \theta_{j}\right) \\
& Z_{p} \mid \pi_{1}\left(W_{p} \mid \gamma_{j}\right), \ldots, \pi_{4}\left(W_{p}\right) \sim \operatorname{Cat}\left(\pi_{1}\left(W_{p} \mid \gamma_{j}\right), \ldots, \pi_{4}\left(W_{p} \mid \gamma_{j}\right)\right) \\
& \pi_{j}\left(W_{p} \mid \gamma_{j}\right)= \frac{e^{W_{p} \gamma_{j}}}{\sum_{j=1}^{4} e^{W_{p} \gamma_{j}}} \\
& F_{j}\left(Y_{p i} \mid X_{p}, \theta_{j}\right)= \operatorname{Pois}\left(Y_{p i} \mid \lambda_{p i, j}\right) \\
& \log \left(\lambda_{p i, j}\right)= \mu_{p i, j} \\
& \mu_{p i, 1}= \beta_{0,1}+\beta_{M P, 1} X_{p i, M P}+l_{p i} \\
& \mu_{p i, 2}= \beta_{0,2}+\beta_{M P, 2} X_{p i, M P}+\beta_{F L C} X_{p i, F L C} \\
&+\beta_{F L E} X_{p i, F L E}+l_{p i} \\
& \mu_{p i, 3}= \beta_{0,3}+\beta_{M P, 3} X_{p i, M P}+\beta_{G S} X_{p i, G S} \\
&+\beta_{V S} X_{p i, V S}+\beta_{G S V S} X_{p i, G S} X_{p i, V S}+l_{p i} \\
& \mu_{p i, 4}= \beta_{0,4}+\beta_{M P, 4} X_{p i, M P}+\beta_{F W} X_{p i, F W}+l_{p i}
\end{aligned}
$$

Here $\gamma_{1}=0$, making the direct hypothesis the reference group for the multinomial logistic regression.

Parties are clustered into the four models based on the conditional inclusion probability,
$\zeta_{p, j}$, that observation $p$ is consistent with theory $j$ (or the inclusion probability after observing the response $\mathbf{Y}_{p}$ ). The conditional inclusion probabilities are given by,

$$
\zeta_{p, j}=\operatorname{Pr}\left(Z_{p}=j \mid \Theta, \Gamma,\left\{X_{p}, \mathbf{Y}_{p}, W_{p}\right\}_{p=1}^{N}\right)=\frac{\pi_{j}\left(W_{p} \mid \gamma_{j}\right) F_{j}\left(\mathbf{Y}_{p} \mid X_{p}, \theta_{j}\right)}{\sum_{j^{\prime}=1}^{4} \pi_{j^{\prime}}\left(W_{p} \mid \gamma_{j^{\prime}}\right) F_{j^{\prime}}\left(\mathbf{Y}_{p} \mid X_{p}, \theta_{j^{\prime}}\right)}
$$

These conditional inclusion probabilities are obtained through a simple application of Bayes' Rule. They take into account both the $X_{p}$-which are used to explain behavior by the components of the model—as well as the $W_{p}$, which provide additional information for clustering the observations.

The conditional inclusion probabilities are used to weight the observations when fitting the components. Following Imai and Tingley (2012), observation $p$ is classified as statistically significantly consistent with theory $j$ for a given misclassification rate $\alpha$ if $\zeta_{p, j}>\lambda$, where $\lambda$ is defined as

$$
\lambda=\inf \left\{\lambda: \frac{\sum_{p=1}^{P} \sum_{j=1}^{4}\left(1-\zeta_{p, j}\right) \mathbf{1}\left\{\zeta_{p, j} \geq \lambda\right\}}{\sum_{p=1}^{P} \sum_{j=1}^{4} \mathbf{1}\left\{\zeta_{p, j} \geq \lambda\right\}+\prod_{p=1}^{P} \prod_{j=1}^{4} \mathbf{1}\left\{\zeta_{p, j}<\lambda\right\}} \leq \alpha\right\}
$$

This method for selecting $\lambda$ allows for the classification of as many observations as possible while ensuring that the rate of false positives does not exceed a reasonable level.

This finite mixture model with concomitant variables was fit using the flexmix package in R (Grün and Leisch 2008, R Development Core Team 2012). The model was fit in two stages. First, the Stochastic EM (SEM) algorithm was used to explore the cluster space. The SEM samples the $Z_{p}$ at each iteration of the EM algorithm. Second, the standard EM algorithm was applied beginning at the solution given by the SEM (which is the set of clusters that maximized the log likelihood). This approach was taken in order to prevent the EM algorithm from getting stuck in a local (rather than global) mode.

# Content Analysis Dictionary Capturing Attention to Women on Political Parties' Electoral Manifestos ${ }^{1}$ 

| Abortion | Flextime | Pay Equity |
| :--- | :--- | :--- |
| Alimony | Gender | Pay Inequity |
| Antenatal | Genital | Pay Inequality |
| Birth Control | Gir$^{2}$ | Platform for Action |
| Breast | Gynecologic | Pornography |
| Burqa | Her | Postnatal |
| CEDAW | Hijab | Postpartum |
| Cervix | Historically Male | Pregnancy |
| Chador | Homemaker | Prenatal |
| Childbearing | Housewife | Prostitute |
| Childbirth | Incest | Rape |
| Childcare | Lactate | Reproductive |
| Child Maintenance | Lady | Scarf |
| Child Minder | Lesbian | Sex |
| Child Support | Lone parent | Sexism |
| Contraception | Male-dominated | Sexist |
| Crèche | Mammogram | Single Parent |
| Daughter | Maternal | Spousal Violence |
| Daycare | Maternity | Stay-at-home |
| Domestic Violence | Menopause | Traditionally Male |
| Domestic Worker | Midwife | Trimester |
| Dominated by Men | Miscarriage | UNIFEM |
| Dowry | Mother | Uterine |
| Equal Pay | Niqab | Uterus |
| Family Maintenance | Nursery | Veil |
| Family Planning | Obstetrics | Wage Discrimination |
| Female | Osteoporosis | Wage Gap |
| Feminine | Ovary | Widow |
| Feminism | Pap Smear | Wife |
| Fertility | Parental Leave | Woman² |
|  |  |  |

${ }^{1}$ The text analysis accounts for plural words and variation. For example, in addition to "mother," the outcome variable also includes mentions of "mothers," "motherhood," and "mothering." The analysis also sought to capture spelling variations, for example recording both "flextime" and "flexitime."
${ }^{2}$ As the text analysis sought to exclude statements that do not specifically address the position of women, words in this subset were included in the final count only if they occurred independently from their "masculine" counterpart. For example, claims for both "men and women" (as well as "sons and daughters," "girls and boys," etc.) are excluded from the analysis.

## Outcome Variable

The outcome variable is summarized in Figure 1. As the plot illustrates, there is significant variation in attention to women both across parties and within parties over time. Among the 289 observations, there are 25 in which no words for women were used. At the same time, there are two instances of parties dedicating over one percent of words on their manifesto to women. These are the Green Party in Austria and the Vänsterpartiet, a socialist and feminist political party in Sweden.

Figure 1: Percentage of Words for Women on Parties' Manifestos


Notes: The plot depicts five-number summaries of the proportion of female-oriented framing words on the manifestos of 58 parties across 12 Western European democracies over multiple elections.

Across all manifestos, the most frequently occurring female framing word is "women" (and its variants), which appears 3,124 times. ${ }^{1}$ The use of this word far outpaces that of all other

[^6]terms included in the dictionary. The next most frequently occurring word-"gender"-is found only 665 times across all platforms. Similarly, if we consider the number of documents on which each word appears at least once, the term "women" remains dominant. Of the 289 manifestos, 214 (or $75 \%$ ) use the word "women" one or more times.

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[^0]:    ${ }^{1}$ Examining manifestos from Spanish parties illustrates that gender politics is not simply the purview of the Left. In keeping with its communist and eco-socialist heritage, the Spanish United Left used the word "feminist" over five times in its 2000 electoral manifesto. The conservative Spanish People's Party, in contrast, does not use language that references far left women's concerns but does address women in its platforms. Before the 2004 election, for example, the party made over 15 references to mothers. It also mentioned issues that are particularly relevant to older (and traditionally more conservative) female voters, including osteoporosis and menopause. As the Spanish case demonstrates, parties with starkly different ideological stances can both advance "women's issues" without betraying their overarching policy positions.

[^1]:    ${ }^{2}$ Relying on issue framing does have some limitations. It can lead to the omission of women's interests that are not explicitly articulated as such or the inclusion of issues that are framed as women's concerns but that do not reflect the interests of most women (or women's advocacy organizations). Nonetheless, this operationalization clearly captures variation in parties' attention to the female electorate, while permitting for spatiotemporal and ideological variation in women's policy representation.
    ${ }^{3}$ See the appendix for the full dictionary and more information about the outcome variable.
    ${ }^{4}$ The platforms are available at Benoit, Brauninger, and Debus' 2009 Political Documents Archive.

[^2]:    ${ }^{5}$ An additional advantage of automating the text analysis is that it is easier to replicate than manually coded data. The manifestos and code will be made freely available, so scholars wishing to use narrower or broader definitions of women's policy representation will be able to do so.
    ${ }^{6}$ Special thanks are due to [redacted], who generously shared her data on women in parties.
    ${ }^{7}$ An alternative operationalization could focus on women in parties' National Executive Committees (NECs) (Kittilson 2011). This measure was rejected for two reasons. First, the role and position of NECs varies across par-

[^3]:    ties, as well as within parties across time. This variability makes this measure difficult to interpret. Second, NEC data are difficult to acquire and including this variable would introduce substantial missingness into the dataset.
    ${ }^{8}$ For those parties included across multiple surveys, the measure was calculated based on the pooled data.

[^4]:    ${ }^{9}$ To build intuition for the model, consider an example from research on market segmentation. Markets are comprised of groups (or subpopulations) of customers with different needs from one another. These groups can be identified by variables that are often costly to obtain, such as survey responses. It is possible, however, to simultaneously profile groups based on behavior and to use concomitant variables-such as measures capturing demographic information-to predict group membership based on characteristics like sex, race, and age. Once these groups are identified, new subjects can be classified using only their demographic information. In the model here, groups of parties are identified based on measures capturing the direct, intervening, vote-seeking, and policystability hypotheses. Membership in these groups is predicted based on organizational characteristics.
    ${ }^{10}$ The assumption that word frequencies are generated by a Poisson process is consistent with existing research (see, for example, Slapin and Proksch 2008).

[^5]:    ${ }^{11}$ Additional information about the model is available in the appendix.
    ${ }^{12}$ Based on a misclassification rate of $\alpha=0.05$ (see appendix for details).

[^6]:    ${ }^{1}$ The text analysis accounts for singular and plural words, as well as common variants. I also sought to exclude statements that do not specifically address the position of women. Consequently, words were counted only if they

