RESEARCH ARTICLE

The Gender Gap in Issue Attention and Language Use within a Legislative Setting: An Application to the Italian Parliament (1948–2020)

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Abstract

We investigate the gender gap in issue attention among members of parliament (MPs) by applying automated text analytic techniques to a novel data set on Italian parliamentary speeches over a remarkably long period (1948–2020). We detect a gendered specialization across issues that tends to disappear as women's shares in parliamentary groups increase. We then investigate whether women's access to previously male-owned issues brings with it a different agenda, operationalized as a different vocabulary. We detect a U-shaped pattern: language gender specificity is high when female MPs are tokens in parliamentary groups with a large preponderance of men; it decreases when their shares start increasing and grows again when they constitute a considerable minority. We argue that this pattern is consistent with the theory of tokenism, and it is produced by the interlinkage of commitment to shared norms and the distribution of "activation thresholds" among female MPs.

Keywords: gender gap; issue attention; parliamentary debates; text analysis; Italy

Women's presence in parliament has significantly increased over the last decades in most advanced democracies, and, according to normative accounts, this is expected to increase the capacity of female members of parliament (MPs) to act responsively to women's needs and preferences (Pitkin 1967; Saward 2008). However, the crude reality is that descriptive representation does not

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automatically translate into substantive representation (Wahman, Frantzeskakis, and Yildirim 2021; Waylen et al. 2013) because gender gaps in politics, and in society, are rooted in value systems, cultural norms, and traditions that cannot be easily erased. Indeed, several studies have demonstrated that formal and informal rules concerning the way political institutions operate tend to be gendered to women's detriment in most advanced democracies (Childs 2004). Just to mention a few, female politicians are likely to face a more demanding set of expectations and conditions in recruitment processes (Lawless 2015) and more electorally challenging circumstances (O'Brien 2015). Moreover, women are likely to be appointed to posts with lower prestige in both parliamentary committees (Heath, Schwindt-Bayer, and Taylor-Robinson 2005), and cabinets (Baumann, Bäck, and Davidsson 2019; Krook and O'Brien 2012). If we focus our attention on parliamentary debates, female MPs tend to deliver fewer and shorter speeches, to be more frequently interrupted, and to be more harshly addressed by their male colleagues (Bäck, Debus, and Fernandes 2021). Moreover, and crucially for this article, several studies have highlighted that female MPs are likely to specialize in low-profile, soft, communal issues (e.g., education and culture, health and social policies), leaving high-profile, hard, agentic issues (e.g., economy and finance and internal affairs) to their male colleagues (Blumenau 2021; Escobar-Lemmon and Taylor-Robinson 2009) because of gender roles that are crystallized in social norms and stereotypes.

To make sense of this biased starting condition, as well as its possible developments, we construct an original theoretical framework by bridging Kanter's (1977a, 1977b) and Dahlerup's (1998, 2006) seminal contributions to the literature on (1) the process of socialization to shared norms in legislative assemblies (Asher 1973; Bowler, Farrell, and Katz 1999) and (2) collective action and "activation thresholds" (Granovetter 1978; Kuran 1991). In our analysis, we focus on changes in female MPs' issue attention (i.e., how much they talk about specific issues) and language usage (i.e., how they do it) as they grow from a few tokens into a considerable minority in the legislature. First, we test whether women's increased institutional presence helps them overcome the specialization of female MPs in communal issues, granting them access to agentic issues (H_1) . Second, we investigate the extent to which women's access to previously male-owned agentic issues is coupled with the use of gender-specific language, seen as a proxy for female MPs' capability to draw attention to new stances, priorities, and subpolicy fields (H_2 and H_3). We test our claims by running a longitudinal study on a novel data set on Italian parliamentary speeches that spans the entire history of the Italian republic (1948-2020). The choice is promising as Italy has been rarely covered in studies on gender gaps in issue attention in parliamentary debates, and over this long period, it has witnessed dramatic changes in its political landscape, institutional functioning, and women's descriptive representation.

Our results confirm the existence of an overall gender gap in issue attention, whereby female MPs tend to focus more on communal issues (i.e., environment, education and culture, and labor and social policy) and less on agentic ones (i.e., economy and finance, productive activities, internal affairs and defense). However, we find that this gendered specialization across issues tends to

disappear as women become a considerable minority. Moving on to female MPs' capability to draw attention to specific stances, perspectives, and subpolicy fields —proxied by their lexical choices—our analysis sketches a more complex picture. Indeed, we detect a U-shaped pattern: gender specificity in the vocabulary employed by female MPs is high when they occupy token positions in parliamentary groups with a large preponderance of men; it decreases until women constitute a considerable minority, past which it starts increasing again. We argue that this U-shaped pattern is consistent with the theory of tokenism and can be reconnected to the interlinkage between two different dynamics: the process of learning and commitment to shared norms within a parliamentary group and the distribution of what we call "activation thresholds" among female MPs.

The article is structured as follows: The first section sets the theoretical argument and formulates the hypotheses. The second section describes the research design, the data set, and the techniques used. The third examines the relationship between women's descriptive representation and the gender gap in issue attention. The fourth assesses whether there are systematic differences in the language employed by female and male MPs to address a given issue.

Theoretical Framework: How Relative Numbers May Affect the Gender Gap in Issue Attention and Language Usage

Why Women's Sidelining from Debates Dealing with "Masculine" Topics Is Detrimental to Representative Democracy

For women, holding more seats in parliament and being actively involved in legislative decision-making is important for symbolic, substantial, and strategic reasons. It is an opportunity to counteract preexisting social and systemic barriers by signaling their skills and expertise (Fernandes, Debus, and Bäck 2021) and acting as role models (Catalano 2009; Wolbrecht and Campbell 2007). More substantially, it is expected to empower female MPs, enabling them to "make a difference" for women as a group. Depending on the explanandum of choice, "to make a difference" may refer to a range of desirable outcomes, including policy decisions (e.g., Atchison and Down 2009; Atkinson 2020), offices (Krook and O'Brien 2012), and "politics as a workplace perspective" more generally (Dahlerup 1988, 2006). Lastly, parliamentary debates may be exploited by parties and MPs for strategic purposes (Slapin and Proksch 2014). Taking the floor increases MPs' chances to express their positions for inter- and intraparty purposes and to gain visibility in the eyes of the media and voters (Maltzman and Sigelman 1996). Considering this, it is therefore important to assess gendered speech patterns, given that who has access to the floor may ultimately affect the legitimacy of the democratic system (Bäck and Debus 2019).

Scholars committed to assessing the presence of a gender gap in legislative debates have focused mainly on speechmaking. Previous research on developed countries suggests that female MPs tend to speak less, though imbalances decrease or vanish when focusing on issues that are canonically associated with women (Bäck, Debus, and Müller 2014). Moreover, even when no differences in

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speechmaking are detected, female MPs tend to deliver shorter speeches (Bäck, Debus, and Fernandes 2021). In this study, we focus on the gender gap in issue attention (H_1) and language usage (H_2) and H_3 , as we think these two dimensions may shed light on gendered speech patterns in legislative settings, fruitfully complementing studies on speechmaking. In detail, we aim to detect the existence—if any—of a gender gap in issue attention and language usage among female and male MPs and to investigate how things change as female MPs grow from a few tokens into a considerable minority. To pursue these goals, we take as our point of departure the social role theory of sex differences and similarities (Eagly 1987; Eagly and Wood 1999, 2011), according to which men and women behave differently in many circumstances because of societal gender stereotypes. Gender stereotypes, in turn, form as people observe women and men enacting specific social roles in the contingent society in which they live and infer that the sexes possess the corresponding dispositions. These dispositions are (wrongly) thought to be stable and natural, rather than contingent and cultural. For example, in postindustrial societies, men are more likely than women to be employed in fatigue-based roles, while women are more likely than men to fill caretaking roles at home and at work. This division of labor is the outcome of the interaction between physical sex differences (men's greater strength and women's reproductive abilities) and the context-dependent and over-time changing demands of the social and economic environment. Gender stereotypes arise when people observe these contingent social roles and assume that they reflect men's and women's intrinsic traits (a process known as "correspondence inference"; see Gilbert and Malone 1995). Eagly and Wood (2011) maintain that gender stereotypes influence behavior in role-appropriate directions through gender identity and others' stereotypical expectations. The authors explain that gender stereotypes may influence people's self-concepts by becoming gender identities that activate self-regulatory processes. Moreover, gender stereotypes influence behavior by shaping others' expectations. In this sense, they act as self-fulfilling prophecies: as people tend to sanction women and men for deviating from gender stereotypes, they tend to perpetuate those stereotypes by exacting costs from men and women who deviate from the norm. This expectation is supported by recent research showing that candidates' conformity to gender stereotypes plays a role in voter turnout and election results (Anzia and Bernhard 2022).

In this respect, the social role theory typically contrasts "agentic" and "communal" attributes: men, more than women, are thought to be agentic—namely, masterful, assertive, competitive, and dominant—and they are rewarded for behaving in accordance with these perceived characteristics. Women, more than men, are thought to be communal—namely, friendly, unselfish, concerned with others, and emotionally expressive and, again, they are rewarded if they behave in accordance with these stereotypical traits. Crucially for our study, in the legislative setting, this logic should induce female MPs to specialize in the "communal issues" that are perceived to be linked to care activities and to the private sphere of the home and family, such as welfare, health care, and education. Male MPs, instead, are induced to specialize in the "agentic issues" that are perceived to be tied to the public sphere, such as

economic planning, national security, and technological issues. Alternative labels used by the literature in the field are "low-profile," "soft," or "feminine" issues versus "high-profile," "hard," or "masculine" issues (e.g., Fernandes, Debus, and Bäck 2021). In what follows, we keep the communal versus agentic opposition.

We start from the assumption that women's sidelining from debates dealing with agentic issues is detrimental to the functioning of representative democracy, as women deserve equal opportunities to have their say in all policy domains (Fernandes, Debus, and Bäck 2021; Greene and O'Brien 2016). Thus, in the following sections, we discuss whether and how contextual changes occurring in parliament may overcome systematic differences in issue attention among MPs, and how female MPs may behave—that is, how they may <code>speak</code>—when they enter a previously male-owned issue.

The Naive Adaptation of the "Critical Mass" Concept from Physics to Politics

In this regard, interesting insights come from the use of the "critical mass" concept in gender and politics research, which can be traced back to the seminal contributions of Kanter (1977a, 1977b) and Dahlerup (1988). As Dahlerup explains (2006, 512), "Originally, the term *critical mass* was borrowed from nuclear physics, where it refers to the quantity needed to start a chain reaction, an *irreversible turning point*, a take-off into a new situation or process." By analogy, the critical mass concept has been metaphorically applied to the political realm to refer to the proportion of women needed to trigger an irreversible qualitative shift in a legislative assembly.

The baseline prediction derived from this naive adaptation of the critical mass concept from physics to politics reads roughly as follows: women in parliament are unlikely to have an impact on political and policy outcomes until they overcome a certain threshold, whose value is around 30%, after which they are able and willing to reveal their sincere preferences and coalesce. Since the 1980s, this version of the original contributions by Kanter and Dahlerup has been reframed in more deterministic and normative terms by feminist movements, activists, politicians, the media, and international organizations to convey the message not only that "numbers, or rather percentages, count" (Dahlerup 1988, 275–76), but also that numbers *alone* may be enough to empower women in legislative assemblies. Accordingly, this condensed version of the so-called critical mass theory (CMT) has been widely and successfully used to theoretically justify and practically support the adoption of measures to bring more women into political office.

Although acknowledging the positive effect that this rendering of the CMT has achieved around the world, many scholars have criticized it on various grounds, increasingly questioning its relevance for studying women's political representation (e.g., Beckwith 2007). The first discarded element is the idea that a single percentage—this esoteric-flavored 30%—holds the key to all women's representation needs. Indeed, already in the late 1970s, empirical investigations highlighted that "thresholds are situation-specific" (Granovetter 1978) as they result from the configuration of costs and benefits associated by female MPs with

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different actions in specific situations. More recently, machine-learning-based research has identified critical mass intervals for different policy areas, rather than a single critical mass point (Funk, Paul, and Philips 2022). Other discarded elements are the ideas of irreversibility and unceasing progress, which were challenged and falsified by the backlash against women's representation in Eastern and Central European countries. Indeed, rising numbers of women in powerful positions may generate hostile reactions among male legislators (e.g., Hawkesworth 2003).

Still, these critiques do not imply that the (relative) number of women in legislative assemblies is totally meaningless. They ask, instead, for a closer and more exhaustive reading of the two founding authors—Kanter and Dahlerup—to uncover ambiguities and shortcomings in their original formulations without neglecting their theoretical richness. Moreover, they suggest a more guarded approach, one that allows for multiple possibilities in the relationship between women's (relative) numerical presence in legislative assemblies and womenfriendly outcomes (Childs and Krook 2006, 2008, 2009).

Why We Apply the Critical Mass Argument to Parliamentary Groups Rather than to the Plenary Assembly

Besides the magic 30% tipping point and the idea of irreversibility, key aspects of this rendering of the CMT that have aroused criticism are its simplified account of legislatures inner workings and its underestimation of the ideological differences that exist among female MPs. Building on these critiques, we investigate the relationship between women's descriptive representation and the gender gap in issue attention (i.e., gendered specialization of MPs across issues according to gender stereotypes) by looking at the parliamentary group level rather than at the plenary assembly level, thus differentiating our approach from that traditionally employed in the CMT literature. In detail, our first hypothesis reads as follows:

 H_1 : The gender gap in issue attention is likely to decrease as the share of women in parliamentary groups increases.

We justify the choice to test H_1 at the parliamentary group level on both theoretical and empirical grounds. As for the theory, it allows us to better account for the constraining and enabling characteristics of legislative contexts and their inner workings (Childs and Krook 2006). Legislative studies have explained how newcomers in a legislative assembly are pushed to learn and conform to relevant formal and informal norms of conduct through a process of socialization with the veteran members of their parliamentary group (Asher 1973). While this holds for every new MP, gender and politics scholars added that these norms tend to reflect a bias toward men's experiences and authority (Hawkesworth 2003). Accordingly, this process of socialization is likely to compel female newcomers to conform to existing legislative practices in ways that undermine their ability to work for women-friendly outcomes.

Moreover, parliamentary groups differ in their party culture and inner organization, and these differences may affect women members' legislative

behavior. Different mechanisms of candidate selection and enforcement of party discipline across parliamentary groups may affect the kinds of women who are elected, their behavior in the legislative process, and the policy positions they advocate (Cowley and Childs 2003). It is well known that MPs achieve the ability to challenge the party line—if they want to—the more they can count on strong local ties and individual support bases, and the more they gain seniority and material and immaterial resources (Tavits 2009). Usually being newcomers, and having fewer resources on average, distancing themselves from the party line is likely to be a harder choice for female MPs, and even harder if they are affiliated with parties in which candidate selection is strongly centralized and there is strong internal discipline. Empirical evidence sustaining this line of thought has been uncovered in different European countries, from the United Kingdom to Italy (Cowley and Childs 2003; Papavero and Zucchini 2018). Furthermore, in multiparty systems like the Italian one, cross-party cooperation is uncommon and usually considered suspicious. Accordingly, women MPs are more likely to affect decision-making processes first by trying to build consensus among their male colleagues in the parliamentary group (Dahlerup 2006).

Lastly, the focus on parliamentary groups helps us avoiding the risk of "essentializing women," namely, treating them as a monolithic entity with a shared set of interests and beliefs because of their biological nature and down-playing their ideological differences in the name of their shared experience of marginalization (Catalano 2009). Indeed, women display crosscutting identities (e.g., ethnicity, income, party affiliation, feminist identity) that, in turn, affect their worldviews and policy preferences. Among these identities, party affiliation and ideology are crucial: for example, being affiliated with a party that has a more (less) progressive ideology is likely to aid (hinder) the substantive representation of women by providing female MPs with a more (less) supportive environment (Grey 2006).

As for the empirics, the choice to test \mathbf{H}_1 at the parliamentary group level allows us to better address the main inferential difficulty that any analysis of the effect of women presence in legislative bodies on political and policy outcomes faces: the fact that women's institutional presence is increasing almost monotonically over time, which makes it hard to disentangle its effect from that of the social climate and value system, which are also changing over time. This empirical problem, however, is less salient when working at the parliamentary group level because there is generally a large variability in the share of women among parliamentary groups. This means that we can still compare the behavior of MPs who belong to parliamentary groups having higher or lower shares of women within the same legislature and time period (the correlation between the standard deviation of the average women's share in parliamentary groups by legislature and year is indeed a reassuring 0.35). We will return to this point later.

Women's Language Usage as Proxy for Their Capability to Put Forward a Different Agenda

Note, however, that finding empirical support for H_1 is not sufficient to say that as women become more numerous, they will form strategic coalitions with one

another and promote legislation in line with women's concerns. Indeed, observing a decreasing gender gap in issue attention when women increase their institutional presence would simply tell us that female MPs have been able to (partially) overcome the segregation of topics by gender, accessing previously male-owned agentic issues. Notwithstanding the desirability of such an outcome, one could still reconnect it to a mere mechanical consequence of women increased institutional presence: given that plenary time is finite and parliamentary activities need to cover a wide range of issues, for example, smaller parliamentary groups with a large share of women could be "forced" to leave them the floor on agentic issues as well. In short, observing a decreasing gender gap in issue attention would tell us nothing about how female MPs behave and what they substantially stand for when they take the floor in previously maleowned issues.

To address this point, we engage in a close reading of the original contributions by Kanter (1977a, 1977b) and Dahlerup (1988) and integrate their theorizations with two other prolific research streams in political science. Following Childs and Krook's (2009) suggestion, we formulate H_2 and H_3 by bridging Kanter's theory of tokenism, as enriched and extended by Dahlerup to the study of women in politics, with the literature on (1) the process of socialization to shared norms in legislative assemblies (Asher 1973; Bowler, Farrell, and Katz 1999), and (2) collective action and "activation thresholds" (to reclaim the jargon employed in Granovetter 1978 and Kuran 1991). H_2 regards how women are expected to speak when they are in minority situations and pushed to conform to gender stereotypes; H_3 regards how this may change as they grow more numerous.

Let us start from the conjectures made by Kanter when describing what happens to women who occupy the position of tokens within a "skewed group" with a large preponderance of men. Willingly or not, the proportional rarity of tokens makes them likely to be treated as symbols rather than individuals. Tokenism generates the perceptual phenomenon of higher visibility within the group, which, in turn, generates pressure on tokens' performance. Kanter explains that tokens may react to performance pressure in two ways.

First and most commonly, tokens seek to reduce their exposure by conforming. In this respect, we maintain that tokens act exactly like the newcomers entering a legislative body mentioned in the previous subsection, who are pushed to conform to relevant norms through a process of socialization with veteran members (the first stream of literature). As we discussed, as these norms are gendered to women's detriment, this socialization process is likely to undermine female MPs' involvement in legislative decision-making processes. Notably for this study, it has been shown that newcomers also conform in their speech style (Decadri and Boussalis 2020). When the presence of female MPs in parliamentary groups is scarce, the standard and shared language will be that of men, who are the "dominants." Following this logic, when a female MP enters a parliamentary group and takes the floor on a previously male-owned agentic issue, she might be induced to adapt her language to that of her male colleagues, to show that she is conforming.

However, Kanter speculates about a second, less common, reaction to heightened visibility: *overachievement*. Aware of the performance pressures, some tokens are likely to stand out vividly, "to promote themselves and their work at every opportunity and let those around them know how well they were doing" (Kanter 1977a, 974). We maintain such a different reaction resonates with the second stream of literature. Indeed, female MPs can be characterized by different "activation thresholds," where a threshold is simply "that point where the perceived benefits to an individual of doing the thing in question exceed the perceived costs" (Granovetter 1978). The few females within a parliamentary group mostly dominated by males are likely to present activation thresholds much lower than the average. After all, they had to break the glass ceiling to get elected in a very unfavorable environment—thus, it seems safe to assume they have an extraordinary passion for politics and very strong commitments and policy preferences. These female newcomers are expected to be strong enough not to silence their policy preferences, and thus not to adapt their language to that of their male colleagues.

The idea that a few highly motivated individuals may be sufficient to achieve women-friendly outcomes—that "numbers may matter less than the presence of 'women-identified-women'" (Childs and Krook 2009, 137)—is not new in gender politics research. Notably, Kanter (1977b, 987) specifies that the problems of tokenism might be overcome also by tokens who are highly identified with their own social group. Moreover, Dahlerup draws attention to "critical acts" that can empower minority members (e.g., the recruitment of other women, the introduction of quotas). The adoption of these critical acts relies, again, on the existence of minority members willing to mobilize the resources of the organization or institution to improve the situation for themselves and the whole minority group (Dahlerup 1988, 296). Childs and Krook (2006) label these highly motivated minority members "critical actors": namely, legislators (not necessarily women) who initiate policy proposals on their own and/or play a central role in mobilizing others for women-friendly policy change, regardless of the number of female representatives (Childs and Withey 2006). Moreover, the literature on collective action adds that in smaller groups, coordination among individuals is easier, while free-riding is harder (Olson 1971). This explains why smaller groups of women may be more effective than larger ones in achieving common goals. Indeed, these small, cohesive, and well-coordinated groups of female MPs may specialize in women's concerns without appearing to undermine male domination (Crowley 2004).

Considering this discussion, we formulate two alternative hypotheses regarding women's language usage, when they occupy the position of tokens in parliamentary groups with a large preponderance of men:

 $H_{2\alpha}$ (conformity): In parliamentary groups with a large preponderance of men, female MPs are expected to conform their language usage to that of men when talking about a given agentic issue.

 H_{2b} (overachievement): In parliamentary groups with a large preponderance of men, female MPs are expected to use a different language from that of men when talking about a given agentic issue.

But what can we expect when the share of women increases—that is, when we move from "skewed" to "tilted" groups? Here as well, we can depict two alternative

(but not necessarily mutually exclusive) hypotheses. On one hand, we would expect to observe an increasing convergence between female and male MPs' policy priorities, and thus in the lexical choices they make to communicate them. Indeed, when the percentage of female MPs increases, we expect a "regression to the mean effect" in terms of activation thresholds, as it is unrealistic to think that large groups consist of a majority of highly motivated critical actors. Consequently, female MPs conform to masculine practices and adapt their vocabulary to that of male colleagues, undermining their ability to integrate their own stances into policy making.

This process of convergence between female and male language usage may happen for several reasons. Starting from "pessimistic" explanations, the process of learning and commitment to shared norms may activate itself, thus pushing women to conform to the positions taken by men on several issues. Worse, backlash effects may manifest: male MPs may enact several tactics to silence women and blocking their opportunities to freely articulate their own views (Hawkesworth 2003; Heath, Schwindt-Bayer, and Taylor-Robinson 2005). For example, in the case of New Zealand, Grey (2006) found that male politicians reacted to the growing presence of female MPs by increasing their statements against feminist ideals. Such a backlash seems to have made female MPs more hesitant to advocate for women as a group in parliamentary debates. Kathlene (1995) found similar results in the case of United States.

Moreover, as theorized by Kanter (1977b, 966), with an increase in their relative numbers, minority members start to become individuals differentiated from each other. This may result in the election of a more internally heterogeneous group of female MPs, which may include women wanting to consolidate traditional gender roles (Tremblay and Pelletier 2001) or willing to represent constituents other than women (Grey 2006). Indeed, in larger groups coordination among individuals becomes harder, while free-riding becomes easier: in our case, thinking that enough female colleagues will continue to lobby on behalf of women as a group, some female MP owning less pronounced women-friendly preferences may decide to free-ride to foster her own priorities (Childs and Krook 2009; Schwindt-Bayer 2006).

Lastly, there is also an "optimistic" explanation behind the convergence between female and male language usage. When female MPs increase their relative numbers, they may influence the behavior of their male colleagues, modifying the overall political culture in a more women-friendly direction (Dahlerup 2006) and thus leading male MPs to show more interest in women's concerns (Bratton 2005). However, it is worth noting that male MPs may also decide to embed women's concerns in their agenda for less noble strategic reasons: to occupying previously female-owned issues or restricting the margin of maneuver of female colleagues (Reingold 2008). Considering this discussion, no matter which of these mechanisms are in place, they all lead to the same expectation regarding women's language usage as their share in parliamentary groups increases:

 H_{3a} (convergence): As their share in parliamentary groups increases, female MPs are expected to conform their language usage to that of men when talking about a given agentic issue.

On the other hand, Kanter's most cited conjecture about how tokens' behavior may change when their distribution becomes less extreme (i.e., in "tilted" groups)—namely, that "with an increase in relative numbers, minority members are potentially allies, can form coalitions, and can affect the culture of the group" (Kanter 1977b, 966)—points to an alternative to the scenario depicted in H_{3a} . It suggests that the convergence trend (H_{3a}) , if present, ceases when female MPs become a considerable minority. At this point, they are in fact capable of forming strategic coalitions with other women to stand out, introducing their stances and constructing new standards of communication that they can now share with a more conspicuous group of peers. Moreover, larger numbers may enhance critical actors' opportunities for critical acts as formerly passive legislators may positively respond to their calls to action, lending important momentum to women-friendly outcomes (Childs and Krook 2009). Accordingly, we can also expect the vocabulary used by female and male MPs when addressing the same agentic issue to become more and more dissimilar as women's numbers in parliamentary groups increase:

 H_{3b} (convergence): As their share in parliamentary groups increases, female MPs are expected to use a different language from that of men when talking about a given agentic issue.

Note that, contrary to H_1 , which suggests a straightforward linear relationship connecting women share in parliamentary groups with the outcome (i.e., issue attention), when we consider how female MPs speak about a given agentic issue, a more complex (i.e., nonlinear) pattern may arise from the hypotheses just discussed. Indeed, by combining H_{2b} , with H_{3a} and H_{3b} , a U-shaped pattern may manifest, with women using a different language from men when talking about an agentic issue within a parliamentary group at the two possible "extremes": when they are either few or relatively a lot.

Data and Methods

The Italian Case

We test our hypotheses by running a longitudinal case study on Italy (1948–2020). Both theoretical and empirical reasons justify our choice. Italy evolved from being one of the countries in Europe with the lowest female presence in parliament to overcoming, over the past 15 years, the 30% threshold for female representation in parliaments set by international standards. Moreover, in this long time frame, the Italian political scenario witnessed dramatic changes in the parties represented in parliament and in their ideological positions, in the electoral law (with the introduction of legislative quotas in 2017), and in the formal and informal rules concerning the way political institutions operate (Russo and Verzichelli 2016).

Lastly, Italy constitutes an interesting case to test our expectations as, despite legislative quotas and the equality promotion rhetoric, the obstacles that women must face to access the political arena still outnumber the opportunities (Guadagnini 2005). Regulations for balancing women's representation partially

failed because of their inaccurate design, strategic choices operated by party leaders (Sampugnaro and Montemagno 2020), and voters' electoral behavior. Female candidates must still fight in very competitive elections to win seats and discount a notorious "gender penalty" (Pansaldi and Pinto 2020) which seems reinforced by media still promoting a collective imaginary of women as sexual objects or as mothers and housewives (Belluati, Piccio, and Sampugnaro 2020).

A Novel Data Set on the Italian Chamber of Deputies

We collect all parliamentary speeches in the Italian Chamber of Deputies from the first legislature of the Italian Republic after the Constituent Assembly (1948) until February of the last republican legislature (2020). This provides information on more than 7,000 MPs over a period of 72 years. Such a long time frame allows us to evaluate the static snapshot suggested by the social role theory in its dynamic evolution, assessing whether women's presence in parliamentary groups moderates gender gaps in issue attention (H_1) and increases female MPs' chances of drawing attention to specific stances (H_2 and H_3). Indeed, if the average percentage of women within parliamentary groups has increased markedly over time, its variance across parliamentary groups has increased as well (see Figure 1). This represents an ideal scenario for testing our hypotheses.

Our data set is the result of a process that involved data acquisition, data cleaning, and speech association with MPs. We collected plenary sessions transcripts from the Italian Parliament website, which are only available as PDF files in the considered time frame.² We performed a data-cleaning step to recognize and isolate each MP's speech throughout the transcripts and to drop speeches

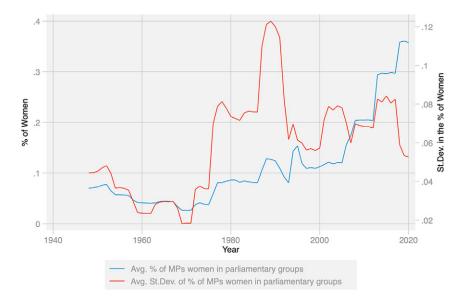


Figure 1. Average percentage and standard deviation of women in parliamentary groups over time.

deemed not relevant because of their purely procedural content. Finally, given that session transcripts are not published with a systematic association between MPs and their speeches, we applied a data-matching algorithm to appropriately recognize each deputy's name in the transcripts and associate it to their metadata. The data set contains almost 1.3 million speeches associated with Italian deputies.

Measuring Issue Attention

Our dependent variable is MPs' attention across issues when they speak in plenary sessions, which we operationalize using a newly developed keyword-assisted topic model, keyATM (Eshima, Imai, and Sasaki 2023). One of the main advantages of using keyword-assisted classification is that researchers can label keyword topics before fitting the model. As Eshima, Imai, and Sasaki (2023) explain, researchers must rely on their substantive knowledge of the context under scrutiny to exogenously define the topics and the corresponding keywords. When choosing each topic and topic's keywords, is thus essential to select a reliable source.

In our case, the identification and labeling of our topics are guided by the list of standing committees of the Italian Chamber of Deputies as defined by the Rules of Procedure of the Chamber of Deputies (Rule 22).3 The procedure generates a concise but nonetheless comprehensive list of 11 policy issues typically discussed in democratic national assemblies.⁴ Then, to define the relevant set of keywords for each topic, we refer to the official description of each standing committee's scope of competence, as specified by the circular issued by the president of the Chamber of Deputies on October 16, 1996, and select the most salient words. This documentation provides an official exogenous source, which remains unaffected by the authors' post hoc interpretation. Given the nature of the documentation used to define topics labels and keywords, topic keywords remain fixed. Still, to guarantee that our topic model can efficiently embed over-time changes in words meaning and usage, we estimate a dynamic version of keyATM in which the association between words and topic can change over time. The complete list of keywords, as well as the official committee descriptions, are available in Appendix A and Appendix B, respectively.

Table 1 presents the 11 labeled topics together with the base form of the respective sets of keywords and their classification as communal versus agentic issues according to the literature in the field (see Bäck and Debus 2019; Chaqués-Bonafont and Cristancho 2022 for a similar classification). Among the issues considered, Productive Activities stands out as typical of the Italian definition of parliamentary committees, which separates it from the Labor and Social Policy Committee. The area of competence of the Productive Activities Committee includes industrial policy, trade, consumer protection, and business development cooperation. The Labor and Social Policy Committee has competence over social security, income support, and vocational training policies, as well as health care and protection of family, children, and the elderly.

Table 1. Labeled topics and keywords

Topic label	Keywords	Agentic	Communal	Unclassified o debated
Agriculture	agriculture agricultural hunting hunt fishing fish zootechny wildlife forestry	1		
Defense	defense force weapon soldier army military navy air force policeman guard	✓		
Economy and Finance	ecofinance budget treasury planning economy financial money monetary budget spending privatization tax taxation bank stock exchange insurance commercial trade state property	√		
Education and Culture	culture cultural science scientific school university academic university research professor teacher entertainment sports publishing information		/	
Environment	environment environmental territory protection calamity disaster nature park reserve soil air water forest forestal woods landscape protection safeguard		√	
Foreign Affairs	foreign affairs country union community Europe agreement treaty standard member emigration partnership diplomatic diplomacy international relations community ambassador consular consulate	√		
Internal Affairs	constitution domestic law legislative law administrative law court order public executive region local authority citizenship immigration security police cult	√		
Justice	justice judicial judiciary magistrate judicial process procedural litigation			✓

(Continued)

Table 1. Continued

Topic label	Keywords	Agentic	Communal	Unclassified or debated
	code criminal crime prevention law order			
Labor and Social Policy	employment welfare pension retirement pensioner income contract contractual welfare occupation active passive trade union unemployment unemployed integration social allowance protection family childhood child elderly old sick disabled assistance welfare health support help protection health care socio-medical		✓	
Productive Activities	business production peat bog quarry trade trading consumer tourism crafts craft industry industry patent trademark	✓		
Transport	transport postal mail telecommunication communication communicate infrastructure railway road motorway motorway aeroplane ship ship route shipyard shipbuilding			√

Note: A complete list of keywords is reported in Table 2A of Appendix B.

Before estimating our semisupervised model, we apply standard preprocessing techniques like text tokenization and removal of punctuation, symbols, and stop words. We then collapse every utterance by MP and by year. This results in 33,500 observations, each representing the totality of an MP's oral communication over the course of a year. We train the keyATM model on the yearly MPs' speeches and obtain our main quantity of interests: per document topic proportions across all the 11 labeled topics, which reflect the main themes covered in each document.

Following best practices in automated content analysis, we propose a few validation exercises of our model to gauge its internal, external, and face validity (Grimmer and Stewart 2013). As for internal validity, we scrutinize the 20 terms with the highest membership weighting for each keyword topic and assess their consistency with their respective topic label. Our review concludes that the top 20 terms are all consistent with their respective topic labels except for the topic *Transport*, whose top words include many procedural terms. As for external validity, we estimate the correlation of our topics with those produced by the Italian Legislative Speech Dataset, a validated

expert-based manual content analysis of Italian Parliament investiture speeches (Ceron, Curini, and Negri 2019; Curini 2011). In this case as well, we obtain good levels of correlation except for the topic *Transport*. Finally, we gauge the compatibility of the over-time evolution of our topics' saliency with the historical evolution of these same topics in the public debate. All our topics, except for *Transport*, exhibit a dynamic that is coherent with historical evolution. Based on these three validation exercises, we opt to gauge valid all our topics except for *Transport*, which we remove from our analysis (see Appendix D).⁶

Variables and Model Specification

The 10 topics' proportions constitute our dependent variables, each measuring an MP's issue attention to different policy areas on a yearly basis. This allows us to directly test H_1 . Moving to explanatory variables, we include a dummy variable called Female that equals 1 for females MPs and 0 for males, 7 and a variable called Women Group that measures the share of women in each parliamentary group. As far as control variables are concerned, we consider time shocks that could alter MPs' tendency to talk about a certain topic during a specific historical moment, each MP's committee assignment, seniority, and, finally, her party's left-right ideology. We capture time shocks using year fixed effects; MPs' committee assignment using a dummy variable equal to 1 if the MP belongs to the committee in charge of the topic under scrutiny and 0 otherwise (e.g., when Y is Defense, this variable is equal to 1 for MPs in the Defense Committee, 0 for the others); seniority using the total number of terms served by an MP; and the MP's party's left-right ideology using a dummy variable that distinguishes between left- and right-wing parliamentary groups (see Curini and Pinto 2017 for a similar operationalization).

Given the nature of our 10 dependent variables, we estimate a series of Zellner's seemingly unrelated regressions with robust standard errors clustered at the MP level, which allow us to jointly estimate a set of regressions that exhibit a contemporaneous correlation between error terms and dependent variables (Cameron and Trivedi 2010). The first model specification is the most parsimonious and simply checks whether the Italian case conforms to the gendered specialization of MPs across issues suggested by the social role theory through the variable *Female* (Model 1). The second model tests H_1 by interacting *Female* with *Women Group* (Model 2). Control variables are embedded in every model specification. Notice also that several alternative model specifications with additional control variables have been run to assess the robustness of our findings (see the Robustness Checks section and Appendix G).

The Moderating Effect of Institutional Presence on the Gender Gap in Issue Attention

We begin our analysis with the first institutionally blind and static picture provided by Model 1 (see Table 6A in Appendix F for the full table of empirical results), whose

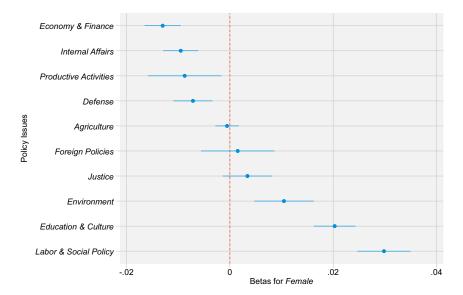


Figure 2. Gender gap in issue attention in the Italian parliament: Model 1.

outcome confirms the existence of a gender gap in issue attention in the Italian parliament. Results for the variable of interest Female are reported in Figure 2. In line with social role theory, over the entire period, female MPs focus their attention on Education and Culture, Labor and Social Policy, and the Environment more than their male colleagues do, while Economy and Finance, Productive Activities, Internal Affairs, and Defense are more salient in male MPs' speeches. Non–statistically significant differences are detected for Agriculture, Foreign Affairs, and Justice. Notice also that coefficients' magnitude suggests that Economy and Finance is the most male-owned issue, while Labor and Social Policy is the most female-owned one. Except for Agriculture and Foreign Affairs, which are usually described as male-owned policy domains, these results are largely consistent with the classification proposed in Table 1 and the literature in the field (e.g., Bäck, Debus, and Müller 2014).

Once provided this first static picture, in what follows, we focus on the issues identified as male-owned by Model 1 9 (i.e., *Economy and Finance, Productive Activities, Internal Affairs, Defense*) to see whether a wider presence of women in parliamentary groups moderates the gender gap in issue attention, thus granting female MPs access to these agentic issues as well (H_1). Considering the years from 1948 to 2020, in Model 2, we regress each topic's saliency on *Female* and its interaction with *Women Group*, again including the previous highlighted control variables (see also Table 7A in Appendix F). Figure 3 reports the marginal effect of *Female* on each topic saliency for different values of *Women Group*. The figure shows that as the percentage of women in parliament increases, the saliency of three out of four agentic topics in women' discourse increases. H_1 is thus supported for three agentic issues out of four.

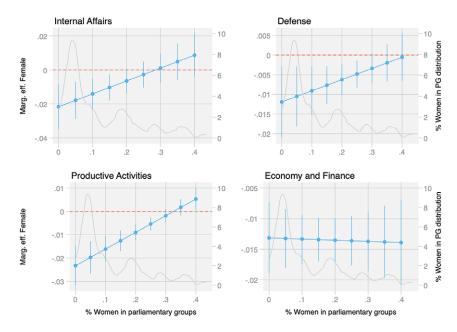


Figure 3. Marginal effect of *Female* on topic saliency, conditional on *Women Group*: Model 2. *Note*: Marginsplots representing the effect of *Female* on topics' saliency, conditional on *Women Group*. Marginal effect of *Female* on the left-side y-axes, kernel distribution of *Women Group* on right-side y-axes, *Women Group* average values on x-axes. Marginal effects with 95% confidence interval in light blue, kernel distribution in gray.

The average marginal effects in Figure 3 show that the gender gap in issue attention is overcome for *Internal Affairs* when the share of women in parliamentary groups reaches 20%, and for *Defense* and for *Productive Activities* when it reaches 30%. These thresholds are quite close to the 30% threshold set by normative accounts for women to be able to substantively affect decision-making processes. ¹⁰ Instead, and quite interestingly, women's increased institutional presence in parliamentary groups is unable to condition the negative effect played by being a woman on the probability to talk about the most male-owned topic, *Economy and Finance*. A wider women's representation in parliament thus seems to trigger a mechanism of progressive overcoming of the segregation of topics by gender, except for *Economy and Finance*, in which the gender divide sticks.

Robustness Checks

As anticipated in the theoretical section, the fact that women's institutional presence is increasing almost monotonically over time makes it hard to disentangle its effect from that of the social climate and value system, which are also changing over time. This is less relevant when focusing, as we do, on MPs' behavior at the parliamentary group—rather than at the plenary—level. Still,

in this latter case, it cannot be lightly dismissed, especially once the observational nature of our data is acknowledged.

We support our main argument (H_1) in three distinct ways. First, we propose a first-difference version of Model 2 focused on female parliamentarians only, whereby we collapse our observations by parliamentary group and legislature. In this model, the dependent variable is the (by-legislature) first-differenced average saliency of each agentic topic in the speeches of all women belonging to a given parliamentary group. Accordingly, our main explanatory variable is now the (by-legislature) first-differenced share of women in a given parliamentary group. We control for each topic saliency's lagged value and for group size, and we add dummies indicating the passage of the divorce and referendum laws. Assuming that value systems and culture are relatively stable from on legislature to the next, this approach allows us to keep temporal dynamics under control, although at the expense of granularity. Results are in line with those of Model 2 (see Figure 4 and Table 8A in Appendix F).

Second, we estimate Model 2 on a subsample of our original data set spanning 1975 to 2020, to test \mathbf{H}_1 on a period that is culturally more homogeneous with respect to gender roles, stereotypes, and social norms. Indeed, since the late 1960s, Italy has experienced a gradual but constant change in the customs of its society and family organization, which used to place women in a subordinate position. Such a change achieved a pivotal point with the approval of the divorce law in 1974, and it has been described as "the anthropological change of the Italian middle classes" (Pasolini 1974, 35). As shown in Figure 5, the results that

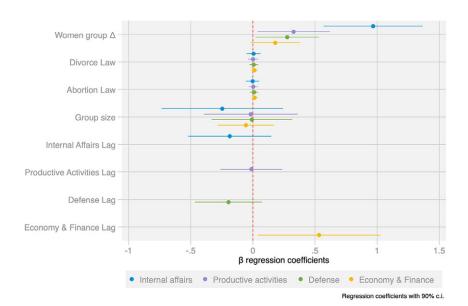


Figure 4. First-difference version of Model 2: Women only (Model 4).

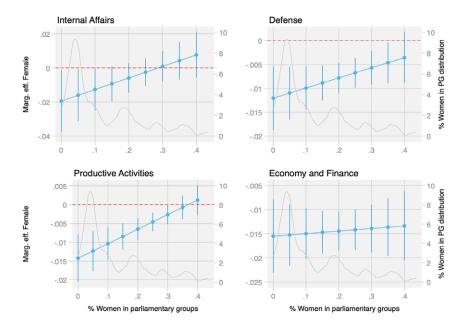


Figure 5. Marginal effect of *Female* on topic saliency, conditional on *Women Group* (kernel distribution in blue): Speeches from 1975 to 2020 (Model 3). *Note:* Marginsplots representing the effect of *Female* on topics' saliency, conditional on *Women Group*. Marginal effect of *Female* on the left-side y-axes, kernel distribution of *Women Group* on right-side y-axes, *Women Group* average values on x-axes. Marginal effects with 95% confidence interval in light blue, kernel distribution in gray.

we obtain are again in line with those we get when we focus on the whole sample (1948–2020) (see Table 9A in Appendix F).

Third, we run our analysis controlling for a linear time trend, which should plausibly capture over-time changes in all other features—for example, society's values and cultural norms—that are likely to covary with the increase in women's representation but are not captured by our controls. Figure 6 and Table 10A in Appendix F show that our results hold. While not completely solving the issues related to an over-time evolving value system, we believe the empirical evidence provided by our robustness checks increases our confidence in H_I 's plausibility.

Gender Specificity in the Vocabulary Used by Female and Male MPs

We now move to H_2 and H_3 , to investigate whether female MPs who succeed in taking the floor on previously male-owned agentic issues systematically draw the attention to issues that differ from those emphasized by their male colleagues, as a function of their share in a parliamentary group. To this end, we built what we called a "gender specificity index" that distinguishes, within each topic, words that are more frequently used by female MPs from those more

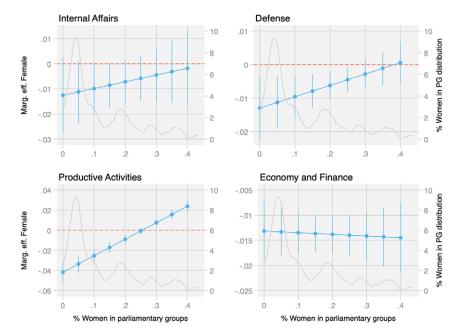


Figure 6. Marginal effect of *Female* on topic saliency, conditional on *Women Group* (kernel distribution in blue): Controlling for a linear time trend. *Note*: Marginsplots representing the effect of *Female* on topics' saliency, conditional on *Women Group*. Marginal effect of *Female* on the left-side y-axes, kernel distribution of *Women Group* on right-side y-axes, *Women Group* average values on x-axes. Marginal effects with 95% confidence interval in light blue, Kernel distribution in gray.

frequently used by men. We then inspect changes in the degree of specificity as the share of women in parliamentary groups increases.

The Gender Specificity Index

Our gender specificity index is built as follows. First, for each topic, we computed a vocabulary that includes all the terms that are most frequently used when talking about it, starting from our initial set of topic keywords, augmented by other words whose scope of meaning can be considered semantically close to the topic keywords. For each topic, we selected the top 500 of these "closest-in-meaning words." Second, we ranked vocabularies' keywords, for each topic, according to their usage by male and female MPs. Based on these rankings, we then defined the set of words that is gender-specific for each topic. More in details, given a topic, a gender-specific word is a topic keyword whose position in female and male rankings differs more than a fixed threshold (i.e., 100 positions). For example, "patriarchal" is a female-specific word since it is ranked 248th in the female-topic ranking and 425th in the male-topic ranking, while "mechanical-engineering" is a male-specific word since it is ranked 65th in the male-topic ranking and 560th in the female-topic ranking.

However, "modernize" is not gender specific since it is ranked 311st in the male-topic ranking and 339th in the female-topic ranking.

Finally, for each topic, we calculated the gender specificity index as the ratio between the number of gender-specific words and the size of the topic vocabulary: for instance, a value of 0.2 for the topic *Productive Activities* would imply that 20% of the vocabulary of that topic is gender specific. As a result, any increase in the gender specificity index corresponds to an increase in the gender-specific language used when discussing that topic. Given our theoretical interest, we selected those speeches whose speaker belongs to a parliamentary group with a percentage of women ranging between 5% and 35%. Indeed, for the Italian case, groups with these percentages of women represent the whole spectrum of theoretically relevant women-to-men proportions.

How Language Changes as Women's Presence Increases: The U-Shaped Pattern

Figure 7 reports the levels of gender-specific language among parliamentary groups characterized by a different share of women. What we show in figure is the average value of the index for all parliamentary groups with a certain percentage of women: for example, for the 5% case, we calculate the index value for all parliamentary groups with up to 5% women, and then we take the average. For the period 1948–2020, the graphs show a curvilinear relationship between the increasing proportion of women in a parliamentary group and the level of language specificity exhibited in said group. Replicating our analysis for the period following 1975 does not change, once again, any of our conclusions (see Figure 9A in Appendix I). Property of the period following 1975 does not change, once again, any of our conclusions (see

Starting from the "skewed groups," we notice that MPs' language exhibits a high degree of specificity. This dynamic is in line with H_{2h} —thus, in contrast with H_{2a} —and suggests women accessing political groups with a strong preponderance of men tend to navigate role expectations based on gender stereotypes by overachieving. As the shares of women start increasing, though, the degree of language specificity decreases, too. This dynamic is in line with H_{3a} : as we move from "skewed" to "tilted" groups, we observe a decrease in language specificity. Whether for more pessimistic reasons—like a smaller proportion of womenidentified-as-women—or more optimistic ones—like men changing their attitudes to express more women-friendly behavior—what we observe is in line with the idea of women and men converging in their attitudes and behavior. This dynamic only seems to be interrupted when the percentage of women is finally high enough to empower and enable female MPs to coalesce. In line with H_{3b} , we find empirical evidence supporting the idea that once women constitute a consistent minority, they stop acting as tokens and they stand out—diverge to construct new standards of communication.

To give a more concrete idea of what variation in language polarization means in terms of words' usage, we provide some examples on how the vocabulary employed by male and female MPs to talk about *Productive Activities* changes as the percentage of women in parliamentary group varies. In the examples, we specify proportions for transparency and clarity of presentation. Still, we point out that these percentages are not to be considered generalizable tipping points,

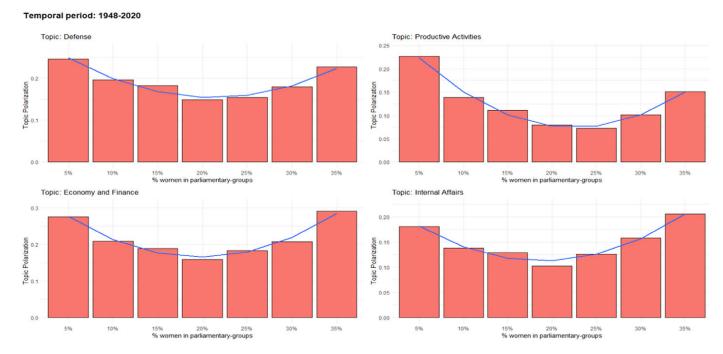


Figure 7. Gender language specificity within topics: Speeches from 1975 to 2020.

but rather context-dependent thresholds (Funk, Paul, and Philips 2022; Grey 2006).

In parliamentary groups with a female presence equal or lower than 5% skewed groups—there is a strong polarization of language: overall, words with a strong gender connotation are over 50%. When we look at these gender-specific words, women's propensity to push forward specific subtopics in the more general Productive Activities domain emerges clearly. Indeed, women more often than men use words referring to occupational sectors characterized by a strong female presence (e.g., "paddy field," "textile sector"), social welfare and assistance (e.g., "aging"), or the third sector more broadly. Moreover, they point to labor market contracts largely used for women (e.g., "seasonal workers") or to negative social and labor market conditions (e.g., "illiteracy," "pauperization," "underemployment"), often using feminine nouns and adjectives (e.g., "fired women," "unemployed women"). Lastly, they refer more often to productive activities linked to entertainment (e.g., "cinema," "editorial," "theatre"). Men, on the other hand, seem more interested in the metallurgical and raw materials sectors (e.g., "mechanical-engineering," "Fincantieri," 14, "oil") and to the agriculture and livestock sectors (e.g., "granary," "dairy industry").

When we switch to groups with a female presence of around 20%, language polarization decreases remarkably: we reach the lowest point in the language polarization curve, with the percentage of gender-specific words decreasing to about 20% of the total. In this case, we observe how words, or synonyms of words, that were male-specific in groups with 5% of women, like "Fincantieri," "female-farmer," and "breeding farms," are now equally employed by men and women.

Finally, when we switch to groups with a share of women between 30% and 35%—tilted groups—we observe a sharp increase in language polarization, with a percentage of words with a gender connotation that is higher than 60%. Men and women belonging to these groups talk similarly to those in groups with 5% women about their favorite subissues. Men more often use words related to the primary and secondary sectors (e.g., "horticulture," "dairy," "fishing"); women more frequently employ words related to the third sector and to welfare (e.g., "artistic," "pauperization," "schooling," "marginalization"), with the notable inclusion of terms referring to women's issues and health care (e.g., "gynecology"), maternity (e.g., "infants"), and equal opportunities (e.g., "patriarchal," "female-citizen").

Conclusion

In this study, we use text analytic techniques to assess the impact of increased women's institutional presence in parliamentary groups on two related outcomes: female MPs' access to previously male-owned agentic issues (H_1), and female MPs' capability to develop, on these issues, distinct legislative agendas (H_2 and H_3). To test our hypotheses, we create a novel dataset on parliamentary debates and MPs in the Italian Chamber of Deputies spanning 1948–2020. Such a long time span makes our study—to our knowledge—the longest single-country systematic analysis on the impact of gender on issue attention and language

specificity, and the most comprehensive one on the Italian case. In line with social role theory, we find evidence of a gendered specialization of MPs across issues. No matter MPs' seniority, party's left-right ideology, committee assignment, and time shocks, *Economy and Finance, Internal Affairs*, *Productive Activities*, and *Defense* are men-owned issues, while *Environment*, *Education and Culture*, and *Labor and Social Policy* are women-owned issues.

Given this biased starting condition, consistent with \mathbf{H}_1 , we observe that as the share of female MPs in parliamentary groups increases, the gender gap in issue attention to the agentic issues *Internal Affairs*, *Defense*, and *Productive Activities* narrows. An important exception in this regard is *Economy and Finance*, which remains men owned. Notably, the shares of women in parliamentary groups necessary to fill the gender gap are quite close to 30%, but they vary across issues. This evidence carries two messages. First, thresholds are indeed "situation-specific" (Granovetter 1978); second, this evidence is indicative of a critical mass interval rather than one critical mass point (Funk, Paul, and Philips 2022).

We then investigate whether women's access to previously male-owned agentic issues brings with it a women-specific agenda, operationalized as a women-specific vocabulary (H_2 and H_3). We employ word embedding techniques and show the relationship between women' presence in parliamentary groups and their capability to draw attention to specific stances is U-shaped, thus more complex than the naive adaptation of the critical mass concept from physics to politics would have hypothesized. We explain this pattern by integrating the original formulation of Kanter's theory of tokenism with the literature on the process of socialization to shared norms in legislative assemblies and that on collective action and "activation thresholds." Specifically, Kanter's exposure reduction response would explain the process of socialization of female newcomers to the speech style of the dominant male veteran members; while her overachievement response would sustain the existence of lower agenda-setting activation thresholds for the first few women entering mostly male-dominated parliamentary groups, followed by a "regression to the mean" of such activation thresholds as women's share increases.

Of course, our results come with caveats. First, we tested H_2 and H_3 on women's capability to put forward their own agenda by using word embedding. This technique allowed us to perform a systematic and comprehensive longitudinal comparison between women and men's language; however, it implied a cost in terms of deepness of our findings. Indeed, while we systematically assessed whether female MPs' language differs from that of their male colleagues, this technique only provides us crude lexical hints on how it differs. Thus, it seems promising to combine in future analyzes our large-N longitudinal quantitative text analysis with more fine-grained qualitative examinations of microlevel interactions among legislators to analyze successful and unsuccessful policy proposals on women's concerns, identify critical actors and describe their behavior and interactions with colleagues, and study the reactions generated by such behaviors within the legislative context. Second, and relatedly, while in this study we focused on female legislators, future analysis could examine how male legislators' issue attention and language change as the share of female MPs grows. Third, our results are based on the study of a single country. Though the comparative study of parliamentary debates poses significant challenges to researchers, especially those resorting to computer-assisted text analytic techniques due to grammatical differences across languages (Fernandes, Debus, and Bäck 2021), future research embracing a comparative perspective seems promising to fully disentangle the role played by women's increased institutional presence from that of time-changing value systems and culture.

Acknowledging these limitations, our study suggests that (relative) numbers count in granting female MPs the access to previously male-owned agentic issues. Moreover, our results suggest having women speaking about a previously male-owned agentic issue does not necessarily mean that these women will be able—or willing—to put on the agenda different subissues from those already emphasized by men. To this end, (relative) numbers are meaningless without the presence of "critical actors," whose role is detectable in the language used by female MPs both when they are few tokens and when their distribution becomes less extreme. Accordingly, (relative) number count, but together with the agency and policy entrepreneurship of highly motivated female legislators.

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Supplementary material. The supplementary material for this article can be found at http://doi.org/10.1017/S1743923X2300051X.

Notes

- 1. Tokenism is also associated with polarization and assimilation.
- 2. See https://dati.camera.it/it/.
- 3. See https://en.camera.it/4?scheda_informazioni=11.
- 4. See also Table 1A in Appendix A.
- **5.** We include only words that are representative of a topic, thus excluding stopwords or procedural terms
- 6. Our results remain largely unaffected by the inclusion of the Transport issue.
- 7. We have to use sex as a proxy for gender and we thus operationalize it as a dummy.
- 8. Diagnostics support the choice of Zellner's regressions.
- **9.** Results hold when considering women's share in the plenary assembly (see Appendix G).
- 10. One could argue the relationship found to be affected by a parliamentary group size due to the presence of a mechanical division of labor. Our results hold when we control for group size (see Appendix G).
- 11. To compute words semantically close to the topic keywords, we employed word embeddings techniques (Mikolov et al. 2013). See Appendix $\rm H$ for a detailed explanation.

- 12. To further corroborate our reasoning, we provide a more formal approach via a Monte Carlo simulation in Appendix L.
- 13. In Appendix I, we propose an alternative method to investigate H_2 and H_3 , which is based on the embedding-regression approach recently advanced in Rodriguez and Spirling (2022) and Rodriguez, Spirling, and Stewart (2023). Also in that case, we observe a U-shaped relationship, which further supports the robustness of our results.
- 14. The main Italian shipbuilding company.

References

- Anzia, Sarah, and Rachel Bernhard. 2022. "Gender Stereotyping and the Electoral Success of Women Candidates: New Evidence from Local Elections in the United States." *British Journal of Political Science* 52 (4): 1544–63. https://doi.org/10.1017/S0007123421000570.
- Asher, Herbert B. 1973. "The Learning of Legislative Norms." *American Political Science Review* 67 (2): 499–513.
- Atchison, Amy, and Ian Down. 2009. "Women Cabinet Ministers and Female-Friendly Social Policy." *Poverty & Public Policy* 1 (2): 1–23.
- Atkinson, Mary Layton. 2020. "Gender and Policy Agendas in the Post-war House." *Policy Studies Journal* 48 (1): 133–56.
- Bäck, Hanna, and Marc Debus. 2019. "When Do Women Speak? A Comparative Analysis of the Role of Gender in Legislative Debates." *Political Studies* 67 (3): 576–96.
- Bäck, Hanna, Marc Debus, and Jorge M. Fernandes, eds. 2021. The Politics of Legislative Debates. Oxford: Oxford University Press.
- Bäck, Hanna, Marc Debus, and Jochen Müller. 2014. "Who Takes the Parliamentary Floor? The Role of Gender in Speech-Making in the Swedish Riksdag." *Political Research Quarterly* 67 (3): 504–18.
- Baumann, Markus, Hanna Bäck, and Johan Bo Davidsson. 2019. "Double Standards: The Role of Gender and Intraparty Politics in Swedish Cabinet Appointments." *Politics & Gender* 15 (4): 882–911.
- Beckwith, Karen. 2007. "Numbers and Newness: The Descriptive and Substantive Representation of Women." Canadian Journal of Political Science/Revue canadienne de science politique 40 (1): 27–49.
- Belluati, Marinella, Daniela R. Piccio, and Rossana Sampugnaro. 2020. "Women's Access to the Political Sphere in Italy: When Obstacles Outdo Opportunities." *Contemporary Italian Politics* 12 (3): 278–86
- Blumenau, Jack. 2021. "The Effects of Female Leadership on Women's Voice in Political Debate." British Journal of Political Science 51 (2): 750–71. https://doi.org/10.1017/S0007123419000334.
- Bowler, Shaun, David M. Farrell, and Richard S. Katz, eds. 1999. Party Discipline and Parliamentary Government. Columbus: Ohio State University Press.
- Bratton, Kathleen A. 2005. "Critical Mass Theory Revisited: The Behavior and Success of Token Women in State Legislatures." *Politics & Gender* 1 (1): 97–125.
- Cameron, Adrian Colin, and Pravin K. Trivedi. 2010. Microeconometrics Using Stata. Vol. 2. College Station, TX: Stata Press.
- Catalano, Ana. 2009. "Women Acting for Women? An Analysis of Gender and Debate Participation in the British House of Commons 2005–2007." *Politics & Gender* 5 (1): 45–68.
- Ceron, Andrea, Luigi Curini, and Fedra Negri. 2019. "Intra-party Politics and Interest Groups: Missing Links in Explaining Government Effectiveness." *Public Choice* 180 (3): 407–27.
- Chaqués-Bonafont, Laura, and Camilo Cristancho. 2022. "The Gender Divide in Issue Attention." European Journal of Political Research 61 (1): 3–20.
- Childs, Sarah 2004. New Labour's Women MPs: Women Representing Women. New York: Routledge.
- Childs, Sarah, and Mona Lena Krook. 2006. "Should Feminists Give Up on Critical Mass? A Contingent Yes." *Politics & Gender* 2 (4): 522–30.
- Childs, Sarah, and Mona Lena Krook. 2008. "Theorizing Women's Political Representation: Debates and Innovations in Empirical Research." Femina Politica—Zeitschrift für feministische Politikwissenschaft 17 (2): 7–8.

- Childs, Sarah, and Mona Lena Krook. 2009. "Analysing Women's Substantive Representation: From Critical Mass to Critical Actors." *Government and Opposition* 44 (2): 125–45.
- Childs, Sarah, and Julie Withey. 2006. "The Substantive Representation of Women: The Case of the Reduction of VAT on Sanitary Products." *Parliamentary Affairs* 59 (1): 10–23.
- Crowley, Jocelyn E. 2004. "When Tokens Matter." Legislative Studies Quarterly 29 (1): 109-36.
- Cowley, Philip, and Sarah Childs. 2003. "Too Spineless to Rebel? New Labour's Women MPs." *British Journal of Political Science* 33 (3): 345–65.
- Curini, Luigi. 2011. "Government Survival the Italian Way: The Core and the Advantages of Policy Immobilism during the First Republic." European Journal of Political Research 50 (1): 110–42.
- Curini, Luigi, and Luca Pinto. 2017. L'arte di fare (e disfare) i governi: Da De Gasperi a Renzi, 70 anni di politica italiana. Milan: EGEA spa.
- Dahlerup, Drude. 1988. "From a Small to a Large Minority: Women in Scandinavian Politics." Scandinavian Political Studies 11 (4): 275–98.
- Dahlerup, Drude. 2006. "The Story of the Theory of Critical Mass." Politics & Gender 2 (4): 511–22.
- Decadri, Silvia, and Constantine Boussalis. 2020. "Populism, Party Membership, and Language Complexity in the Italian Chamber of Deputies." *Journal of Elections, Public Opinion and Parties* 30 (4): 484–503.
- Eagly, Alice H. 1987. Sex Differences in Social Behaviour: A Social-Role Interpretation. Hillsdale, NJ: Lawrence Erlbaum.
- Eagly, Alice H., and Wendy Wood. 1999. "The Origins of Sex Differences in Human Behavior: Evolved Dispositions versus Social Roles." *American Psychologist* 54 (6): 408–23.
- Eagly, Alice H., and Wendy Wood. 2011. "Social Role Theory: A Biosocial Analysis of Sex Differences and Similarities." In *Handbook of Theories of Social Psychology 2*, eds. Paul A. M. Van Lange, Arie W. Kruglanski, and E. Tory Higgins. London: Sage, 458–76.
- Escobar-Lemmon, Maria, and Michelle M. Taylor-Robinson. 2009. "Getting to the Top: Career Paths of Women in Latin American Cabinets." *Political Research Quarterly* 62 (4): 685–99.
- Eshima, Shusei, Kosuke Imai, and Tomoya Sasaki. 2023. "Keyword-Assisted Topic Models." *American Journal of Political Science*. Published online April 1. https://doi.org/10.1111/ajps.12779.
- Fernandes, Jorge M., Marc Debus, and Hanna Bäck. 2021. "Unpacking the Politics of Legislative Debates." European Journal of Political Research 60 (4): 1032–45.
- Funk, Kendall D., Hannah L. Paul, and Andrew Q. Philips. 2022. "Point Break: Using Machine Learning to Uncover a Critical Mass in Women's Representation." Political Science Research and Methods 10 (2): 372–90.
- Gilbert, Daniel T., and Patrick S. Malone. 1995. "The Correspondence Bias." *Psychological Bulletin* 117 (1): 21–38.
- Granovetter, Mark. 1978. "Threshold Models of Collective Behaviour." American Journal of Sociology 83 (6): 1420–43.
- Greene, Zachary, and Diana Z. O'Brien. 2016. "Diverse Parties, Diverse Agendas? Female Politicians and the Parliamentary Party's Role in Platform Formation." European Journal of Political Research 55 (3): 435–53.
- Grey, Sandra. 2006. "Numbers and Beyond: The Relevance of Critical Mass in Gender Research." Politics & Gender 2 (4): 492–502.
- Grimmer, Justin, and Brandon M. Stewart. 2013. "Text as Data: The Promise and Pitfalls of Automatic Content Analysis Methods for Political Texts." *Political Analysis* 21 (3): 267–97.
- Guadagnini, Marila. 2005. "Gendering the Debate on Political Representation in Italy: A Difficult Challenge." In State Feminism and Political Representation, ed. Joni Lovenduski. Cambridge: Cambridge University Press, 130–52.
- Hawkesworth, Mary. 2003. "Congressional Enactments of Race—Gender: Toward a Theory of Raced—Gendered Institutions." *American Political Science Review* 97 (4): 529–50.
- Heath, Michelle, Roseanna, Leslie A. Schwindt-Bayer, and Michelle M. Taylor-Robinson. 2005. "Women on the Sidelines: Women's Representation on Committees in Latin American Legislatures." *American Journal of Political Science* 49 (2): 420–36.

- Kathlene, Lyn 1995. "Position Power versus Gender Power: Who Holds the Floor?" In *Gender Power, Leadership, and Governance*, eds. Georgia Duerst-Lahti and Rita Mae Kelly. Ann Arbor: University of Michigan Press, 167–94.
- Kanter, Rosabeth Moss. 1977a. Men and Women of the Corporation. New York: Basic Books.
- Kanter, Rosabeth Moss. 1977b. "Some Effects of Proportions on Group Life." American Journal of Sociology 82 (5): 965–90.
- Krook, Mona Lena, and Diana Z. O'Brien. 2012. "All the President's Men? The Appointment of Female Cabinet Ministers Worldwide." *The Journal of Politics* 74 (3): 840–55.
- Kuran, Timur. 1991. "The East European Revolution of 1989: Is It Surprising That We Were Surprised?" American Economic Review 81 (2): 121–25.
- Lawless, Jennifer L. 2015. "Female Candidates and Legislators." *Annual Review of Political Science* 18: 349–66.
- Maltzman, Forrest, and Lee Sigelman. 1996. "The Politics of Talk: Unconstrained Floor Time in the US House of Representatives." *The Journal of Politics* 58 (3): 819–30.
- Mikolov, Tomas, Kai Chen, Greg Corrado, and Jeffrey Dean. 2013. "Efficient Estimation of Word Representations in Vector Space." https://arxiv.org/abs/1301.3781.
- O'Brien, Diana Z. 2015. "Rising to the Top: Gender, Political Performance, and Party Leadership in Parliamentary Democracies." *American Journal of Political Science* 59 (4): 1022–39.
- Olson, Mancur, Jr. 1971. The Logic of Collective Action: Public Goods and the Theory of Groups, with a New Preface and Appendix. Cambridge, MA: Harvard University Press.
- Pansaldi, Pamela, and Luca Pinto. 2020. "Gender Penalty and Electoral Outcomes in the 2018 Italian Elections." *Contemporary Italian Politics* 12 (3): 300–313.
- Papavero, Licia C., and Francesco Zucchini. 2018. "Gender and Party Cohesion in the Italian Parliament: A Spatial Analysis." Italian Political Science Review/Rivista Italiana di Scienza Politica 48 (2): 243–64.
- Pasolini, Pier Paolo. 1974. "Gli italiani non sono più quelli." Corriere della sera 10: 35–39.
- Pitkin, Hanna Fenichel. 1967. The Concept of Representation. Berkeley: University of California Press.
- Reingold, Beth. 2008. "Women as Office Holders: Linking Descriptive and Substantive Representation." In *Political Women and American Democracy*, eds. Christina Wolbrecht, Karen Beckwith, and Lisa Baldez. Cambridge: Cambridge University Press, 128–47.
- Rodriguez, Pedro L., and Arthur Spirling. 2022. "Word Embeddings: What Works, What Doesn't, and How to Tell the Difference for Applied Research." *The Journal of Politics* 84 (1): 101–15.
- Rodriguez, Pedro L., Arthur Spirling, and Brandon M. Stewart. 2023. "Embedding Regression: Models for Context-Specific Description and Inference." *American Political Science Review.* Published online January 19. https://doi.org/10.1017/S0003055422001228.
- Russo, Federico, and Luca Verzichelli. 2016. "Government Ideology and Party Priorities: The Determinants of Public Spending Changes in Italy." *Italian Political Science Review/Rivista Italiana di Scienza Politica* 46 (3): 269–90.
- Sampugnaro, Rossana, and Francesca Montemagno. 2020. "Women and the Italian General Election of 2018: Selection, Constraints and Resources in the Definition of Candidate Profiles." *Contemporary Italian Politics* 12 (3): 329–49.
- Saward, Michael. 2008. "Representation and Democracy: Revisions and Possibilities." *Sociology Compass* 2 (3): 1000–1013.
- Schwindt-Bayer, Leslie A. 2006. "Still Supermadres? Gender and the Policy Priorities of Latin American Legislators." *American Journal of Political Science* 50 (3): 570–85.
- Slapin, Jonathan B., and Sven-Oliver Proksch. 2014. "Words as Data: Content Analysis in Legislative Studies." In *The Oxford Handbook of Legislative Studies*, eds. Shane Martin, Thomas Saalfeld, and Kaare W. Strøm. Oxford: Oxford University Press, 126–44.
- Tavits, Margit. 2009. "The Making of Mavericks: Local Loyalties and Party Defection." *Comparative Political Studies* 42: 793–815.
- Tremblay, Manon, and Réjean Pelletier. 2001. "More Women Constituency Party Presidents: A Strategy for Increasing the Number of Women Candidates in Canada?" Party Politics 7 (2): 157–90.

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Wahman, Michael, Nikolaos Frantzeskakis, and Tevfik Murat Yildirim. 2021. "From Thin to Thick Representation: How a Female President Shapes Female Parliamentary Behavior." *American Political Science Review* 115 (2): 360–78.

Waylen, Georgina, Karen Celis, Johanna Kantola, and S. Laurel Weldon, eds. 2013. *The Oxford Handbook of Gender and Politics*. Oxford: Oxford University Press.

Wolbrecht, Christina, and David E. Campbell. 2007. "Leading by Example: Female Members of Parliament as Political Role Models." *American Journal of Political Science* 51 (4): 921–39.

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