Women's Representation in Parliament: A Qualitative Comparative Analysis

Mona Lena Krook

Washington University in St Louis

In recent years, statistical and case study research has increasingly reached conflicting findings in terms of the factors explaining cross-national variations in the percentage of women elected to national parliaments. To reconcile the conclusions of large-*n* and small-*n* research, this article employs qualitative comparative analysis (QCA), a medium-*n* technique, to study two populations of cases, Western and sub-Saharan African countries. In contrast to work predicated on assumptions of causal homogeneity and causal competition, the study reveals that multiple combinations of conditions lead to higher and lower levels of female representation. This finding corroborates the two guiding principles of QCA, causal combination and equifinality, suggesting that these methods may offer greater leverage than traditional techniques in discerning the various factors facilitating and hindering women's access to political office.

Women form more than half of the population, but constitute only 18 per cent of all members of parliament worldwide (Inter-Parliamentary Union, 2009b). Yet this global average masks substantial cross-national variations: Rwanda and Sweden have roughly equal numbers of women and men in their national assemblies, while Belize and Saudi Arabia have no female members at all (Inter-Parliamentary Union, 2009a). Initial research largely converged on explanations for these patterns, employing both quantitative and qualitative methods to test and explore relations between women's representation and various political, social, economic and cultural factors. Over the last several years, however, this implicit consensus has been challenged by new data, stemming from dramatic shifts in patterns of female representation around the globe. More specifically, the nine countries with the highest proportions of women in 1987 came from two recognizable groups, the Nordic region and the Communist bloc (United Nations Office at Vienna, 1992, p. 12). By 2009, however, this group had grown much more diverse to include two African countries, three Nordic countries, two Latin American countries, one continental European country and one Communist country (Inter-Parliamentary Union, 2009a). Statistical researchers have been slow to theorize these changes (but see Tripp and Kang, 2008), while case experts have responded by observing more and more 'exceptions' to the conventional wisdom (Bruhn, 2003; Russell *et al.*, 2002).

Growing contradictions between quantitative and qualitative findings – and, more generally, between research and the 'real world' – suggest the need to re-examine what might explain differing levels of female political representation. A closer look at the existing literature provides some clues as to how to devise an alternative approach. Despite their universalizing claims, many large-*n* studies do not in fact analyze global trends, but generalize on the basis of region-specific samples (Caul, 1999; Rosenbluth *et al.*, 2006; Yoon, 2004). Similarly, most

small-*n* studies offer detailed insights into individual cases, but almost always situate their findings in relation to analyses conducted on specific regions of the world (Bruhn, 2003; Dahlerup and Freidenvall, 2005). These tendencies signal the potential of qualitative comparative analysis (QCA) for explaining cross-national variations in women's representation. This approach seeks to bridge quantitative and qualitative methods by developing a set of techniques for studying medium-*n* populations, which involve formalizing comparisons as a means to incorporate information from a larger sample while retaining the integrity of individual cases. Analytically, this approach relies on two core ideas: (1) causal combination, in the sense that the effects of individual conditions may depend on the presence or absence of other conditions; and (2) equifinality, or the notion that there may be multiple causal paths to the same outcome (Ragin, 1987; 2000).

To explore whether qualitative comparative analysis offers greater leverage than traditional methods, this article maps and compares the findings of large-*n*, small-*n* and medium-*n* approaches to the study of women in parliament. The first section provides an overview of existing research on women's representation and offers some insights as to why statistical analyses and case studies might reach conflicting conclusions with regard to the dynamics at work across the larger universe of countries. To offer a means forward, the next section introduces QCA as an alternative set of methods for analyzing causal effects. Recent work suggests that this may be a fruitful approach, because the main tenets of QCA – that is, the presence of causal combination and equifinality – are in fact implicit in most other studies of women in parliament. For this reason, QCA may offer greater insight into how diverse factors combine to produce variations in female representation. At the same time, applying it to this question provides an opportunity to explore the utility of this approach more generally in explaining complex political dynamics. To probe the potential of this method, the third and fourth sections carry out a QCA analysis of two medium-*n* populations of cases, the West and sub-Saharan Africa. In both instances, the investigation reveals – when analyzing the factors that lead to higher and lower numbers of women elected to national parliaments – that the causal effects of certain factors may depend on the presence or absence of other conditions, at the same time that there may be multiple paths to the same outcome. Crucially, these findings approximate empirical developments more closely than traditional methods, resolving important contradictions between the findings of existing statistical and case study work. Attention to causal diversity thus appears to improve the accuracy of scholarly analyses. Consequently, while medium-*n* populations and methods are often overlooked in political science, they may offer important new insights for comparing and explaining political outcomes in countries around the world.

Explaining Women's Representation: Statistics and Case Studies

Since the publication of Maurice Duverger's *The Political Role of Women* (Duverger, 1955), scholars have sought to explain cross-national variations in the numbers of women elected to parliament. Through repeated statistical and case study analysis, they have largely converged around three sets of factors: institutional variables, including electoral systems and gender quotas; social and economic variables, like indicators of women's status and levels of national development; and cultural variables, such as religion and attitudes towards

women in leadership positions. Despite a striking degree of consensus earlier among researchers as to the causal importance of these variables, however, a recent wave of studies has begun to contradict this received wisdom. In addition, numerous countries have seen dramatic shifts in the percentage of women elected to national parliaments, often in the absence of major changes in institutional, social and economic, and cultural variables. These patterns challenge existing methods and assumptions, signaling the need to revisit conventional explanations with an eye to untangling the causal processes behind women's under-representation in politics.

Research employing statistics finds that the proportion of women in parliament tends to be higher in countries with proportional representation (PR) electoral systems, as opposed to those with majoritarian electoral arrangements (McAllister and Studlar, 2002). This is because these systems often have higher district magnitudes, which open the way for women to be included as the total number of members elected per district increases (Welch and Studlar, 1990), and closed party lists, which enable parties to place women in electable positions on party slates (Caul, 1999). Recent work also points to the importance of PR in enabling the effective implementation of gender quota policies aimed at increasing the number of female candidates (Tripp and Kang, 2008). In terms of socio-economic factors, a wide range of studies observes strong correlations between women's overall rates of education and labor force participation (Rosenbluth *et al.*, 2006), as well as levels of national development (Matland, 1998), whose effects they attribute to modernization processes that enable women to move into higher social and economic roles which lead to greater influence in politics (Inglehart and Norris, 2003). Lastly, statistical analyses discover close connections with cultural attitudes towards equality, noting that the number of women in politics is typically higher in Protestant countries (Kaiser, 2001) and in countries where citizens are more open to women in leadership positions (Inglehart and Norris, 2003).

Despite the care taken to increase sample size, however, a closer look at the range of cases examined in this literature suggests that these findings are more likely to be specific to the countries included in each data set. Most notably, the conventional wisdom derives almost exclusively from studies of advanced Western democracies. While some confirm these findings in non-Western cases (Paxton, 1997; Yoon, 2004), other work discovers that these same factors play little or no role in developing countries (Matland, 1998). Further, the collection of more complete data reveals important nuances in the relationship between certain factors and outcomes. A central example is the electoral system, which most work identifies as one of the – if not *the* most – important factors explaining cross-national variations. Yet, before 1970, women's representation was roughly the same in PR and majoritarian systems (Matland, 1998), with differences emerging only after women inside parties began mobilizing for change (Kittilson, 2006). Moreover, while it is true that most countries with large numbers of women do have some form of PR electoral arrangement, not all states with PR have high levels of female representation (McAllister and Studlar, 2002). At the same time, several countries with majoritarian systems have seen dramatic increases in recent years, including in the single-member district aspect of mixed electoral systems (Russell *et al.*, 2002). These patterns suggest that political, social, economic and

cultural factors may operate in more diverse ways than can be captured through traditional statistical analysis.

Case studies on this topic present more tempered conclusions regarding the factors shaping patterns of political representation. Tracing events over time, they observe how the electoral system influences women's strategies, as well as elite reactions, concerning the nomination of more female candidates. Although many still find that PR provides greater opportunities for women, some point out that women's representation has increased in some cases without a change in the electoral system (Sainsbury, 1993), while it has remained relatively stable in others even as the electoral system has undergone reform (Beckwith, 1992). They point out that low district magnitudes and open party lists do not always block access to women, but may instead create opportunities for women to run for and win elected office (Russell *et al.*, 2002). Similarly, the adoption of quotas may produce increases, but also stagnation and even decreases in the numbers of women elected, depending upon how these reforms interact with existing party selection practices (Dahlerup, 2006; Krook, 2009). In terms of women's education and labor force participation, some work notes how practices of sex segregation channel women into female-dominated, low-paying occupations, which prevent them from achieving the higher socio-economic standing associated with the eligibility pool for elective office (Lawless and Fox, 2005). Yet, other research reveals that social and economic changes may evolve separately from changes in the political arena (Krook, 2009). Many developed countries, like France and the United States, continue to see low numbers of women in parliament. At the same time, developing countries like Mexico, South Africa and Uganda have witnessed dramatic increases in recent years. Finally, while some case studies verify that egalitarian political cultures favor women's representation (Bystydzienski, 1995), others observe that women can assume prominent political positions in countries with strongly patriarchal religious and cultural norms. In these instances, women typically accede to office as a result of family connections or as a form of political patronage by powerful male leaders (Katzenstein, 1978). These multiple possibilities indicate that while case studies offer nuanced insights into individual cases, they are limited in the degree to which they, on their own, may shed light on dynamics at work within the broader universe of cases.

Rethinking Political Analysis: Qualitative-Comparative Methods

In political science, there has been extensive debate over the relative merits of quantitative vs. qualitative methods (Mahoney and Goertz, 2006). While the difference between these approaches is often framed as one between large-*n* and small-*n* techniques, a more useful contrast is between what Charles Ragin (1987) describes as 'variable-oriented' and 'case-oriented' analyses. The former disaggregate cases into a collection of scores, which are placed in the context of general patterns of covariation within a population of comparable units. This approach is premised on powerful homogenizing assumptions: factors exert independent effects on outcomes (causal competition, in the sense that variables are evaluated against each other in relation to the average amount of variation they explain) and work the same way in all cases (causal homogeneity). Case-oriented methods, in contrast, view cases in a more holistic fashion, situating individual features within the case as a whole.

They are open to the possibility that the effects of single factors may depend on the presence or absence of other conditions (causal combination, also known as conjunctural causation), and the possibility that there may be multiple paths to the same outcome (equifinality). In other words, they recognize and seek to analyze causal diversity. The main difficulty with these methods, as they have primarily been used by political scientists, is that they are largely restricted to the analysis of a small number of cases.

The advantage and contribution of qualitative comparative analysis, or QCA, is that it seeks to formalize qualitative insights such that they can be employed to study a broader range of cases. In other words, it seeks to distil elements from the in-depth study of individual countries in order to derive key features whose role can be systematically examined across a larger population. Thus it is rooted in the case-oriented philosophy of traditional qualitative research, but aims to explore what additional leverage might be gained by juxtaposing trends in similar contexts. It does so by using the basic principles of Boolean algebra, developed in mathematics to analyze set-theoretic relationships, to identify, simplify and compare the combinations of conditions leading to a particular outcome. While developed initially by Ragin (1987; 2000), a growing number of scholars have contributed to further elaboration of these techniques.[1] The crucial first step is to constitute the population to be studied. This also derives from the origins of QCA in case-oriented research, which – in contrast to variable-oriented analysis, which requires fully formed populations that are taken to exist outside the realm of analysis – tends to problematize populations and emphasize their constructed nature, treating them as hypotheses to be revised as necessary over the course of the investigation (Ragin, 2000, p. 45). The size of each population, in turn, has consequences for statements about the generality of conclusions derived from its study.

Once the population is constituted, researchers assume maximum causal complexity and use their existing knowledge of cases to construct a 'truth table' that records the values of conditions and outcomes, which are sorted into combinations of input and output values. In early versions of these techniques, variables were simply dichotomized to capture the presence and absence of each condition. Later refinements, known as fuzzy-set QCA, substituted dichotomization for degrees of set membership, which acknowledges qualitative distinctions among cases by exploring the interval between full set membership and full set non-membership among both conditions and outcomes. The choice between these two possibilities depends on the nature of the factors examined, as well as theoretical justifications for coding them as dichotomous vs. multi-valued. Whichever approach is chosen, the next step is to apply the principles of Boolean algebra to reduce this causal complexity to determine: (1) whether conditions exist in relationships of logical 'and' or logical 'or'; (2) whether they join together with other conditions in causal combinations; and (3) whether some redundancies can be minimized and some conditions and combinations subsumed into others. In a dichotomous analysis, the result is a relatively parsimonious explanation of causal combinations that accounts for multiple causal paths and establishes necessary and sufficient conditions (Ragin, 1987). In a fuzzy-set analysis, it is possible to identify probabilistic and partial necessary and sufficient conditions, and as such, generate greater insight into the broader universe of cases than with QCA alone (Ragin, 2000).

Some criticize these techniques on the grounds that they exhibit a high degree of sensitivity to coding, ignore the relative strengths of independent variables and are logical in nature and thus exposed to greater distortion in selection bias and data problems than statistical methods (Lieberson, 2004). These types of objections, along with several others, derive from misunderstandings of some of the core features of QCA. First, coding decisions using this method require in-depth knowledge of each case, a constraint that QCA analysts openly admit and constantly seek to overcome through careful dialogue between theory and evidence. As such, coding decisions are not arbitrary but instead grounded in case expertise, which should increase rather than devalue their use for better knowledge of various kinds of political phenomena. Second, there has been some confusion as to the definition of causal combination, which those who are not familiar with these techniques tend to equate with statistical interaction. While causal conjunctures can be represented as interaction terms, distinct claims underlie these two concepts: the former asserts that some causes are effective only in the presence of others, while the latter tests whether the effects of one variable depend on the value of another (Ragin, 1987, p. 65). Discovering the former requires inductive theory building; analyzing the latter is more appropriate and, indeed, works well only for analyzing well-specified theories (Ragin, 2000, p. 260). Third, the notion of equifinality is often not well understood. At its core is the idea of causal equivalence in the sense that several different conditions – or combinations of conditions – may satisfy a general causal requirement. This does not mean that there is infinite variation; rather, causal diversity is limited to a range of different causal paths, which are the focus of investigation in QCA. As such, recognizing causal heterogeneity does not make it impossible to falsify a theory. In fact, it offers a means for more accurately capturing the dynamics at work across a middle range of cases. These concerns intersect with a related critique, which is that QCA entails deterministic rather than probabilistic reasoning. This links back again to the assumptions and goals of statistical analysis, which require studies to be able to predict and generalize. The ambition of QCA, in contrast, is to gain a better understanding of dynamics within a well-defined population of cases.

For those interested in the potential of QCA for political analysis, there are several different software packages available.[2] The one chosen for the analysis below is TOSMANA, which is among the most user friendly and includes features that enable cases to be 'visualized' for up to five conditions, although more factors can be included in the analysis, and which plots the distribution of values for each condition through a 'thresholdsetter'. The possibility to visualize cases allows analysts to see whether there are any contradictions across configu-rations and outcomes (i.e. the same combination leads to the outcome and lack of outcome), prompting further reflection on the cases and specification of the theory. The threshold function is activated when the raw data are not dichotomous and enables the user to see how values are concentrated across the population. The program itself generates a suggested threshold; however, scholars should use their case-specific knowledge, as well as the broad distribution of values, to reset the threshold as needed. Once these values are converted – usually to values of 1 and 0, although TOSMANA can accommodate multiple values on each condition – it is possible to analyze, based on the existing data, which conditions lead to the outcome and the lack of the outcome across the population of cases. The analyst can also enhance the parsimony of solution by incorporating 'logical remain-

ders', which are cases that do not exist but can be incorporated into the analysis, following certain suppositions, to perform additional logical reductions.

These techniques have never been applied to research on women in politics. A recent review indicates, however, that ideas central to QCA are implicit in much of this work (Krook, 2009). This suggests that QCA may offer an opportunity to make sense of the conflicting findings of large-*n* and small-*n* research, by exploring the possibilities that the causal effects of one variable may depend on the presence or absence of other factors (causal combination), at the same time that different groups of conditions may produce similar outcomes (equifinality). Employing these tools requires careful attention to defining populations of cases that can be meaningfully compared, obliging scholars to draw on in-depth case knowledge to consider which factors might be most salient to each group. To explore the potential of this approach for women and politics research, the next two sections use QCA to analyze determinants of women's access to parliament in Western and sub-Saharan African countries, respectively. These two populations were selected on two grounds. First, countries in each group share important features in common, like similar levels of democracy, historical backgrounds and economic challenges. Second, juxtaposing these populations highlights the analytical importance of identifying conditions and measures relevant to each group, viewed on its own terms. To ensure valid comparisons, therefore, the analysis in each section begins from the main findings of large-*n* and small-*n* studies on each set of countries. As a result, slightly distinct factors are identified that might account for higher and lower levels of female representation within each population. These coding decisions are not uniform across the two groups, but are intended to contextualize the significance of conditions and outcomes in each set of countries, as a means to make sense of apparent contradictions and lend greater nuance to cross-case findings. The goal as such is not to generalize or predict, but rather to offer a more accurate account of the developments at work within each group of countries. The 'added-value' of the analysis is thus to explain the dynamics at work across these larger sets of cases by formalizing their main features for systematic comparison while also taking causal combination and equifinality into account, objectives that cannot be realized through traditional statistical and case study techniques.

Women in Parliament: A QCA Analysis of the West

Most of the conventional wisdom on women's representation derives from statistical and case study analyses of the West. As such, these cases are an appropriate place to start in probing the utility of QCA in offering greater insight into trends across this group of cases. The population is defined to include eighteen countries in Western Europe and four countries elsewhere in the world, namely the United States, Canada, Australia and New Zealand.[3] The five most common factors emerging from the literature on these cases are the electoral system, gender quotas, women's status, women's movements and left parties. To gauge how these conditions might combine with others to produce higher and lower levels of female representation, raw data are assembled for all 22 countries (see Table 1). Following the categories put forward by International IDEA (2005), each *electoral system* is classified as proportional, mixed or majority, on the grounds that there are often significant variations across these types in terms of the proportion of women elected to parliament. The presence

Table 1: Raw Data Table for 'The West'

Country	Electoral system	Quotas	Women's status	Women's movement	Left party strength	% Women in national parliament
Sweden	PR	Yes	Soc Dem	Non	5	47.3
Finland	PR	No	Soc Dem	Non	5	42.0
Norway	PR	Yes	Soc Dem	Autonomous	14	37.9
Denmark	PR	No	Soc Dem	Autonomous	7	36.9
Netherlands	PR	Yes	Conservative	Autonomous	7	36.7
Spain	PR	Yes	Conservative	Autonomous	0	36.0
Belgium	PR	Yes	Conservative	Autonomous	13	34.7
Austria	PR	Yes	Conservative	Non	8	32.2
New Zealand	Mixed	No	Liberal	Autonomous	9	32.2
Iceland	PR	Yes	Soc Dem	Autonomous	9	31.7
Germany	Mixed	Yes	Conservative	Autonomous	7	31.6
Switzerland	PR	Yes	Conservative	Non	4	25.0
Australia	Majority	Yes	Liberal	Autonomous	0	24.7
Luxembourg	PR	No	Conservative	Non	7	23.3
Portugal	PR	Yes	Conservative	Non	0	21.3
Canada	Majority	No	Liberal	Autonomous	0	20.8
United Kingdom	Majority	Yes	Liberal	Autonomous	0	19.7
France	Majority	Yes	Conservative	Autonomous	0	18.5
Italy	Mixed	Yes	Conservative	Non	3	17.3
United States	Majority	No	Liberal	Autonomous	0	16.3
Greece	PR	Yes	Conservative	Non	0	13.0
Ireland	Majority	Yes	Liberal	Autonomous	2	13.3

of *quotas* is recorded as yes or no, using data from the Global Database of Quotas for Women (International IDEA, 2007). However, a qualification is added that these policies be decreed by legislation or a major political party, as scholars find that trends in small parties often fail to have much effect on the overall number of women in parliament (Krook, 2009).[4]

Capturing distinctions in *women's status* is more difficult, as all Western countries have gender development indexes categorized as high by the United Nations Development Programme (UNDP) (2006, pp. 283–6). Therefore, an alternative indicator is devised to capture qualitative distinctions in women's social and economic opportunities across these countries, drawing on the three models of welfare states – social democratic, conservative and liberal – that more than twenty years of research has shown to play a crucial role in shaping women's position in society. These models differ as ideal types with regard to how they use state policy to change or reinforce current patterns of gender stratification: social democratic welfare states[5] encourage women to combine motherhood and paid employ-ment, while conservative welfare states promote women's traditional status in the family, and liberal welfare states adopt strict policies of non-intervention that often reinforce

existing inequalities (Esping–Andersen, 1999). *Women's movements* are notoriously difficult to define and measure, but are classified here according to their degree of autonomy from the state and political parties, following S. Laurel Weldon (2002, p. 77). This measure is admittedly imperfect, given that in some countries the main locus of women's movement activity is inside political parties. However, because debates over autonomy vs. integration have been a central concern in feminist organizing, this choice enables a look into whether women's groups have a stronger impact on the number of women in parliament when they mobilize outside or inside the existing party system.

The role of *left parties* is established using data from Duane Swank (2007) to record the percentage of seats held by left-libertarian parties in 2002, the most recent elections for which data are available. The logic behind this choice is that while leftist parties tend to be associated with higher proportions of women, this relationship typically springs from competition between 'new' left and 'old' left parties. More specifically, while new left parties typically take the first steps to nominate more women (Caul, 1999), these efforts often do not have a broader impact on women's representation until they lead established left parties to promote female candidates as well (Matland and Studlar, 1996). However, the latter are not likely to change their policies unless they anticipate losing votes to the former. For the lack of a better measure, therefore, the ability of left-libertarian parties like the Greens to win seats in parliament – or not – presents a reasonable proxy for capturing the presence or absence of this dynamic. *Outcomes*, finally, are registered using information from the Inter–Parliamentary Union (2007) regarding the proportion of women in the single or lower house of parliament.

The data are next imported into TOSMANA (Cronqvist, 2008). Although the software can analyze multiple values, each condition is dichotomized based on theoretical criteria and – where necessary – the visual representation of distributions available through the thresholdsetter. When this function was used, however, the threshold suggested by the program was adjusted on the basis of case-specific knowledge. The decision to dichotomize all five conditions followed from careful consideration of the data and previous theory in relation to women in politics, which is explained below in reference to each condition. Transformed into a truth table (see Table 2), electoral systems are divided into proportional and non–proportional systems, with mixed systems placed in the latter category, and assigned the values of 1 and 0, respectively. Although there are important variations across PR systems in terms of how seats are allocated through open and closed lists, the reason for this simplification here derives from the focus in the literature on PR vs. other types of electoral system. Women's status is coded in a similar way, marking 1 for social democratic and 0 for non–social democratic. This is because research on gender and welfare states offers compelling quantitative and qualitative evidence for the 'women-friendliness' of social democratic as opposed to other types of welfare regime. Women in social democratic countries are thus more likely to enjoy a high social and economic status, promoted in and through the state.

The measures for quotas and women's movements are already dichotomous, and as such, yes and autonomous are translated as 1 and no and non-autonomous as 0. The strength of new left parties is more complicated, but the distribution of values across the sample – as viewed

Table 2: Dichotomized Truth Table for 'The West'

Country	Electoral system	Quotas	Women's status	Women's movement	Left party strength	% Women in national parliament
Sweden	1	1	1	0	0	1
Finland	1	0	1	0	0	1
Norway	1	1	1	1	1	1
Denmark	1	0	1	1	1	1
Netherlands	1	1	0	1	1	1
Spain	1	1	0	1	0	1
Belgium	1	1	0	1	1	1
Austria	1	1	0	0	1	1
New Zealand	0	0	0	1	1	1
Iceland	1	1	1	1	1	1
Germany	0	1	0	1	1	1
Switzerland	1	1	0	0	0	0
Australia	0	1	0	1	0	0
Luxembourg	1	0	0	0	1	0
Portugal	1	1	0	0	0	0
Canada	0	0	0	1	0	0
United Kingdom	0	1	0	1	0	0
France	0	1	0	1	0	0
Italy	0	1	0	0	0	0
United States	0	0	0	1	0	0
Greece	1	1	0	0	0	0
Ireland	0	1	0	1	0	0

through the thresholdsetter function – points to a 7 per cent cut-off point. This percentage has theoretical value as well, given that it coincides roughly with the electoral thresholds in place in many Western countries that require parties to win a certain proportion of votes before they can gain seats in parliament. Thus, countries where left-libertarian parties occupy more than 7 per cent of all seats are assigned 1, while those where they hold less than 7 per cent of all seats are coded 0. The same process is used to dichotomize outcomes in terms of a 30 per cent threshold. This matches a distinction made by scholars, activists, politicians and international organizations, all of whom tend to point to 30 per cent as a measure of high female representation (Krook, 2009). Consequently, 1 is applied to cases where women's proportion is higher than 30 per cent, while 0 is assigned to those where it is lower than 30 per cent.

The subsequent QCA analysis reveals multiple paths to both high and low levels of female representation in Western countries. When the analysis includes only actually existing cases, high representation results from five distinct combinations of conditions: PR electoral systems, women's high status, non-autonomous women's movements and weak new left parties (Finland, Sweden); PR electoral systems, women's high status, autonomous women's

movements and strong new left parties (Denmark, Iceland, Norway); PR electoral systems, quotas, women's low status and autonomous women's movements (Belgium, the Netherlands, Spain); PR electoral systems, quotas, women's low status and strong new left parties (Austria, Belgium, the Netherlands); and non-PR electoral systems, women's low status, autonomous women's movements and strong new left parties (Germany, New Zealand).[6] These combinations are annotated by the following equation, where upper-case letters denote 1 conditions and outcomes and lower-case letters 0 conditions and outcomes, and plus signs are read as logical 'or' and multiplication signs as logical 'and':

$$\text{OUTCOME} = PR * WS * wm * l + PR * WS * WM * L + PR * QU * ws * WM + PR * QU * ws * L + pr * ws * WM * L$$

Perhaps the most striking feature of this equation is that four of the five conditions analyzed can take opposite values, yet still result in high levels of female representation due to the presence and absence of other conditions. The only exception is quotas, but they appear in only two formulas in conjunction with other factors, and are thus neither necessary nor sufficient for the outcome under investigation.

When logical remainders are incorporated, two formulas emerge:[7] high representation follows from women's high status (Denmark, Finland, Iceland, Norway, Sweden), PR electoral systems and autonomous women's movements (Belgium, Denmark, Iceland, the Netherlands, Norway, Spain), quotas and strong new left parties (Austria, Belgium, Germany, Iceland, the Netherlands, Norway) and non-PR electoral systems and strong new left parties (Germany, New Zealand), *or* from women's high status, PR electoral systems and autonomous women's movements, quotas and strong new left parties, and autonomous women's movements and strong new left parties (Belgium, Denmark, Germany, Iceland, the Netherlands, New Zealand, Norway). These combinations are represented by the following equations:

$$\text{OUTCOME (L)} = WS + PR * WM + QU * L + pr * L$$

$$\text{OUTCOME (L)} = WS + PR * WM + QU * L + WM * L$$

These solutions are identical but for their fourth terms, which suggest that strong left parties may combine with either non-PR electoral systems or autonomous women's movements to lead to high levels of female representation.

The other terms are equally if not more intriguing. First, women's high status is a sufficient condition for high representation. A second look at the original data reveals that all countries with social democratic welfare states also have high numbers of women in politics. The direction of causality is not entirely clear, as social democratic welfare policies may increase the number of female representatives, creating a more auspicious environment for women to be recruited as political candidates, but the number of female office holders may also increase the passage of women-friendly public policies, enabling a greater number of other women to contemplate running for political office. Whatever the causal link, the fact that all of these cases are located in the Nordic region corroborates – at the very least

– the intuitions of scholars who have explored the possibility of 'Scandinavian exception-alism' in their quantitative (Kaiser, 2001) and qualitative analyses (Bystydzienski, 1995).

Second, PR electoral systems and quota policies do not on their own lead to higher levels of female representation: PR systems must combine with autonomous women's move-ments, while quotas must operate in conjunction with strong new left parties. The first pattern squares with the observation in some statistical (Kittilson, 2006) and case study work (Sainsbury, 1993) that differences between PR and non-PR electoral systems started to emerge only after women began to mobilize for the increased selection of female candi-dates. The second captures the dynamic outlined above with regard to left-wing parties: in many cases in Western Europe, women's representation often rose dramatically following the emergence of new left parties, but only when it inspired established left parties to appeal to female voters by adopting gender quota policies. Third, contrary to the many studies that point to the electoral system as one of the most important factors in explaining cross-national variations, the first equation suggests that PR *and* non-PR electoral systems may lead to high levels of female representation, depending on how they combine with other conditions. This pattern makes sense of conflicting findings across the case study literature in particular, which notes that adopting PR does not always translate into gains for women, at the same time that facing a non-PR system does not always prevent upward changes in women's representation. However, it is also important to introduce some caution in interpreting these results: the two non-PR systems with high numbers of women are Germany and New Zealand, whose electoral systems are mixed ones that tend to produce highly proportional results.

Turning to the configurations that generate low levels of representation, it becomes apparent that some of the same factor values are involved but lead to different results. Looking at existing cases, low representation results from three distinct combinations of conditions: quotas, women's low status, non-autonomous women's movements and weak new left parties (Greece, Italy, Portugal, Switzerland); non-PR electoral systems, women's low status, autonomous women's movements and weak new left parties (Australia, Canada, France, Ireland, United Kingdom, United States); and PR electoral systems, no quotas, women's low status, non-autonomous women's movements and strong new left parties (Luxembourg). The equation is:

$$\text{outcome} = QU * ws * wm * l + pr * ws * WM * l + PR * qu * ws * wm * L$$

As in the initial solution above, these configurations indicate that four of the five conditions can take opposite values, yet still result in low female representation. The only exception is women's low status which, because it appears in all three formulas, suggests it is a necessary although not sufficient condition for low numbers of women in political office. Another interesting pattern to observe here is that, despite statistical evidence to the contrary, the presence of PR, quotas, autonomous women's movements and strong new left parties still leads in some circumstances to low levels of female representation, depending on how they combine with other features of the political context.

The inclusion of logical remainders, however, shifts some of these findings somewhat, and presents three sets of equations to account for low levels of female representation. The first

identifies non–PR electoral systems and weak new left parties (Australia, Canada, France, Ireland, Italy, UK, US); women's low status, non–autonomous women's movements and weak new left parties (Greece, Italy, Portugal, Switzerland); and PR electoral systems, no quotas and women's low status (Luxembourg). The second points to non–PR electoral systems and weak new left parties; women's low status, non–autonomous women's movements and weak new left parties; and no quotas, women's low status and non–autonomous women's movements (Luxembourg). The third, finally, combines non–PR electoral systems and weak new left parties; women's low status, non–autonomous women's movements and weak new left parties; and no quotas, non–autonomous women's movements and strong new left parties (Luxembourg). These three equations are thus identical but for their final terms:

$$outcome\,(L) = pr*l + ws*wm*l + PR*qu*ws$$

$$outcome\,(L) = pr*l + ws*wm*l + qu*ws*wm$$

$$outcome\,(L) = pr*l + ws*wm*l + qu*wm*L$$

Across all three equations, the case of Luxembourg is the only one characterized by a different combination of conditions from the rest. Traditional quantitative analyses might therefore discount the experience of this case, on the grounds that it is an outlier to more general trends. Qualitative researchers, in contrast, might choose to focus on it in order to understand why it appears to be distinct from others with similar outcomes. In QCA, however, all cases are equally important to the final solution, regardless of the frequency of each combination, as the goal is to capture as accurately as possible the degree of causal diversity at work within a particular population. In this instance, including Luxembourg in the analysis adds an important nuance to arguments associating negative values on these various factors with reasons for low numbers of women in politics. As the first and third solutions reveal, the country still has relatively few women in parliament, despite the presence of a PR electoral system and a strong set of new left parties, because of the lack of quotas and women's low status (solution 1) or the lack of quotas and a non–autonomous women's movement (solution 3). Taken together, all four sets of equations point to the utility of exploring causal diversity and causal combination in efforts to explain why some countries elect more women to parliament than others, as well as to account for why scholars employing different kinds of methods reach conflicting conclusions regarding the relative role of these factors.

Women in Parliament: A QCA Analysis of Sub-Saharan Africa

Research on women in politics in sub-Saharan Africa is much more recent, but thus far appears to pose a strong challenge to findings emerging from studies focused on the West. For this reason, a medium-*n* analysis presents a crucial opportunity to establish the factors shaping women's access to political office in this region of the world. In order to construct a meaningful population of cases, the sub-Saharan African countries included in this analysis are limited to the 26 that guarantee some degree of political rights and civil liberties, as

defined by the Freedom House (2005) indicators of 'free' and 'partly free'.[8] Of the five factors that are typically signaled as important in the existing statistical and case study literature, three are the same as in the West: the electoral system, quotas and women's status. However, two are more specific to economic and political conditions of Africa, namely levels of national development and presence of post–conflict situations. Similar to the analysis of the West, the raw data on sub-Saharan Africa (see Table 3) are put together by categorizing each *electoral system* as proportional, mixed or majority. The presence of *quotas* is recorded as yes or no, but given the greater diversity of quota measures across Africa, quotas are coded as yes only when they are adopted by a major political party, or when they involve a constitutional or legislative requirement of at least 25 per cent.[9]

The measure for *women's status*, however, is constructed using a different indicator than for the West: rather than welfare state type, the data collected refer to the combined gross

Table 3: Raw Data Table for Sub-Saharan Africa

Country	Electoral system	Quotas	Women's status	Level of human development	Post-conflict situation	% Women in national parliament
Mozambique	PR	Yes	44	0.39	Yes	34.8
South Africa	PR	Yes	77	0.65	Yes	32.8
Burundi	PR	Yes	32	0.38	Yes	30.5
Tanzania	Majority	Yes	47	0.43	No	30.4
Uganda	Majority	Yes	65	0.50	Yes	29.8
Namibia	PR	Yes	69	0.63	Yes	26.9
Lesotho	Majority	No	66	0.50	Yes	23.5
Senegal	Mixed	Yes	36	0.46	No	22.0
Ethiopia	Majority	Yes	30	0.37	Yes	21.9
Zambia	Majority	No	52	0.41	No	14.6
Sierra Leone	PR	No	55	0.34	Yes	14.5
Guinea-Bissau	PR	No	29	0.35	Yes	14.0
Malawi	Majority	Yes	64	0.40	No	13.6
Gabon	Majority	No	68	0.63	No	12.5
Niger	Mixed	Yes	18	0.31	No	12.4
Burkina Faso	PR	No	23	0.34	Yes	11.7
Botswana	Majority	Yes	72	0.57	No	11.1
Ghana	Majority	No	44	0.53	No	10.9
Djibouti	Majority	No	21	0.50	Yes	10.8
Mali	Majority	Yes	30	0.34	No	10.2
Gambia	Majority	No	50	0.48	No	9.4
Congo	Majority	No	49	0.52	Yes	8.5
Benin	PR	No	41	0.43	No	8.4
Kenya	Majority	No	58	0.50	No	7.3
Madagascar	Mixed	No	55	0.51	No	6.9
Nigeria	Majority	No	50	0.45	No	6.4

enrolment ratio for female students in primary, secondary and tertiary schools, according to the UNDP (2006, pp. 363–6). The logic behind this choice is that it captures – however imperfectly – the extent to which societies enable women to, and women choose to, pursue some degree of education, which reflects and can in turn improve women's broader social and economic prospects. It contrasts, importantly, with a proxy that has been used in other studies, namely the prevalence of female genital mutilation (FGM). While Mi Yung Yoon (2004) finds this to be a strong negative predictor of women's representation, it has been rejected by other scholars on the grounds that a focus on FGM ignores other structural features of gender oppression, differences in the sizes of groups that practice FGM, and beliefs among many Africans that FGM is an initiation rite rather than a patriarchal practice per se. Level of female education, on the other hand, is a less controversial – and many would argue, more accurate – measure of female empowerment.[10]

Level of national development is determined with reference to the human development index devised by the UNDP (2006, pp. 283–66), which combines statistics on life expectancy at birth, adult literacy rate, gross enrolment in education and gross domestic product (GDP) per capita. This measure offers greater nuance than GDP alone, which measures levels of wealth rather than levels of development per se. As such, it enables a better test of the argument that development influences opportunities, as well as general attitudes, regarding women's participation in electoral politics (compare Inglehart and Norris, 2003). *Post-conflict situation* is indicated as conflicts ended since 1985 as listed by the World Bank (2005) and the UNDP (2005). This factor has received growing attention in recent years, as more and more research has uncovered connections between the end of war and changes in women's access to political office (Bauer and Britton, 2006; Hughes, 2009). Crucially, however, this link holds only for countries whose conflicts ended after 1986, as new international norms promoting women in politics – combined with greater possibilities of transnational learning among women's groups – have brought guarantees for women's representation into focus (Tripp, 2007). *Outcomes*, finally, are noted using data from the Inter-Parliamentary Union (2007) to list the proportion of women in the single or lower house of parliament.

This information is next entered into TOSMANA, using the same procedures as outlined above. In the truth table (see Table 4), proportional, mixed and majority electoral systems are again divided into proportional and non-proportional systems, assigned the values of 1 and 0. Measures for quotas and post-conflict situations are already dichotomous, so yes is translated as 1 and no as 0 in both instances. Given the continuous nature of the indicators for women's status, development and outcomes, distributions are analyzed with the help of the thresholdsetter to see if particular groupings emerge. For women's status, cases clearly gather at different parts of the spectrum, suggesting a 60 per cent threshold. Consequently, countries with more than 60 per cent female enrolment are coded as 1 while those with lower than 60 per cent enrolment are coded as 0. Given similar clustering in the case of national development, the value of 1 is assigned to countries with indexes above 0.40 and 0 to those with indexes of 0.40 and below. Lastly, in terms of outcomes, the distributions point to a 17 per cent cut-off point. Outcomes are subsequently dichotomized as 1 where women's representation is higher than 17 per cent and 0 where women's representation is

Table 4: Dichotomized Truth Table for Sub-Saharan Africa

Country	Electoral system	Quotas	Women's status	Level of human development	Post-conflict situation	% Women in national parliament
Mozambique	1	1	0	0	1	1
South Africa	1	1	1	1	1	1
Burundi	1	1	0	0	1	1
Tanzania	0	1	0	1	0	1
Uganda	0	1	1	1	1	1
Namibia	1	1	1	1	1	1
Lesotho	0	0	1	1	1	1
Senegal	0	1	0	1	0	1
Ethiopia	0	1	0	0	1	1
Zambia	0	0	0	1	0	0
Sierra Leone	1	0	0	0	1	0
Guinea-Bissau	1	0	0	0	1	0
Malawi	0	1	1	0	0	0
Gabon	0	0	1	1	0	0
Niger	0	1	0	0	0	0
Burkina Faso	1	0	0	0	1	0
Botswana	0	1	1	1	0	0
Ghana	0	0	0	1	0	0
Djibouti	0	0	0	1	1	0
Mali	0	1	0	0	0	0
Gambia	0	0	0	1	0	0
Congo	0	0	0	1	1	0
Benin	1	0	0	1	0	0
Kenya	0	0	0	1	0	0
Madagascar	0	0	0	1	0	0
Nigeria	0	0	0	1	0	0

lower than 17 per cent. Although distinct from the marker applied to the West, this threshold can be justified on the grounds that it more faithfully captures the meaning of high and low representation within this population of cases. Moreover, it coincides closely with the average proportion of women in parliament around the world. As such, it reflects a global distinction while remaining sensitive to trends within this region of the world.

As was the case with the West, the resulting QCA analysis discerns multiple paths to both high and low levels of female representation in sub-Saharan Africa. When the program analyzes actually existing cases, high representation results from four configurations of conditions: quotas, women's low status, low levels of development and post-conflict situations (Burundi, Ethiopia, Mozambique); quotas, women's high status, high levels of development and post-conflict situations (Namibia, South Africa, Uganda); non-PR electoral systems, women's high status, high levels of development and post-conflict situations

(Lesotho, Uganda); and non-PR electoral systems, quotas, women's low status, high levels of development and non-post-conflict situations (Senegal, Tanzania). These combinations are represented by the following equation:

$$OUTCOME = QU * ws * de * PC + QU * WS * DE * PC + \\ pr * WS * DE * PC + pr * QU * ws * DE * pc$$

Three things stand out among these findings. First, three of the five conditions – women's status, levels of development and post-conflict situations – may take either value yet still lead to high numbers of women in politics. Second, three of the four configurations involve the presence of quota policies, signaling the importance of these measures in Africa. Third, the electoral system – to the degree that it plays a role in these countries – is more favorable to women's representation when it does *not* entail PR, a finding that directly contradicts much of the established literature.

These findings change slightly with the inclusion of logical remainders, which reduce the formulas to quotas and post-conflict situations (Burundi, Ethiopia, Mozambique, Namibia, South Africa, Uganda); women's high status and post-conflict situations (Lesotho, Namibia, South Africa, Uganda); and quotas, women's low status and high levels of development (Senegal, Tanzania). The equation is:

$$OUTCOME \, (L) = QU * PC + WS * PC + QU * ws * DE$$

Confirming the insights from the longer solution, these configurations indicate that no factors are necessary or sufficient conditions for high levels of female representation in sub-Saharan Africa. In this context, the electoral system is notable by its absence: none of the combinations finds PR or the lack of PR to have any effect in shaping women's access to political office.

What is more striking, however, is the fact that all the configurations point to the role of both contingent and stable factors, largely in line with the core insights of the quantitative and qualitative literature on Africa. The first configuration, for example, highlights the importance of quotas in post-conflict situations. As many scholars have noted, post-conflict transitions have provided numerous opportunities for the introduction of quota measures, as countries have been subject to greater intervention by international actors (Krook, 2006) and/or look to the experiences of their neighbors (Powley, 2003) in their efforts to rebuild their societies. The second combination, in turn, corroborates the work of researchers who argue – on the basis of evidence gathered from many countries (Tripp, 2007), as well as from in-depth fieldwork on single cases (Bauer and Britton, 2006) – that post-conflict situations only translate into gains for women when women themselves organize to ensure the inclusion of their demands in new constitutions. The third configuration, finally, suggests that in the absence of women's high status, quotas combined with high levels of development may still lead to greater numbers of women in politics. Together therefore these solutions paint a complex, yet relatively parsimonious, picture of the agents and structures behind recent improvements in women's access to politics in Africa.

Conditions leading to low levels of representation are similarly diverse. Looking only at existing cases, the analysis reveals that low levels of female representation stem from five

possible combinations: non-PR electoral systems, quotas, low levels of development and non–post–conflict situations (Malawi, Mali, Niger); non-PR electoral systems, no quotas, women's low status and high levels of development (Congo, Djibouti, Gambia, Ghana, Kenya, Madagascar, Nigeria, Zambia); no quotas, women's low status, high levels of development and non–post–conflict situations (Benin, Gambia, Ghana, Kenya, Madagascar, Nigeria, Zambia); non-PR electoral systems, women's high status, high levels of develop-ment and non–post–conflict situations (Botswana, Gabon); and PR electoral systems, no quotas, women's low status, low levels of development and post–conflict situations (Burkina Faso, Guinea–Bissau, Sierra Leone). The resulting equation reads:

$$outcome = pr*QU*de*pc + pr*qu*ws*DE + qu*ws*DE*pc + \\ pr*WS*DE*pc + PR*qu*ws*de*PC$$

This solution – more than any others so far – highlights the crucial role of causal combination: all five factors may take either value, yet still generate low levels of female representation, depending on the presence or absence of other factors. Further, the equation strengthens the case for causal diversity when viewed in conjunction with the analysis above, as the exact same factors may lead to entirely opposite results.

Incorporating logical cases reduces this solution to three pairs of configurations: no quotas and women's low status (Benin, Burkina Faso, Congo, Djibouti, Gambia, Ghana, Guinea–Bissau, Kenya, Madagascar, Nigeria, Sierra Leone, Zambia); women's high status and non–post–conflict situations (Botswana, Gabon, Malawi); and low levels of development and non–post–conflict situations (Malawi, Mali, Niger). These combinations are represented by the following equation:

$$outcome\,(L) = qu*ws + WS*pc + de*pc$$

Again, the electoral system is notable by its absence, as none of the combinations finds PR or the lack of PR to have any effect in preventing women's access to political office. In addition, three other aspects of this solution stand out for further consideration. First, when women's high status intersects with a non–post–conflict situation, as it does here, it leads to low numbers of women in politics. However, when it combines with a post–conflict situation, as in the analysis above, it leads to high levels of female representation. This pattern finds interesting parallels in research that emphasizes the crucial role of 'windows of opportunity' for policy change. It also provides an important corrective to the belief that changes in women's status will automatically translate into greater numbers of women in elected office.

Second, the first and third configurations – no quotas and women's low status, and low levels of development and non–post–conflict situations – speak to the possibility of 'vicious cycles', whereby the lack of favorable structural conditions combined with few opportu-nities for dramatic change prevent major breakthroughs in women's representation. Third, women's status takes both values yet still leads to low numbers of women in politics in both instances. This suggests, again, that the role of women's status in shaping women's access to political office depends centrally on other conditions, whether these are more fluid or stable

aspects of the political environment. All four sets of configurations therefore reinforce the need to take the possibility of causal diversity and causal combination into account in order to establish the many ways in which factors may come together to produce higher and lower levels of female representation, and to formalize the intuitions of quantitative and qualitative researchers on Africa who, up until this point, have largely agreed with each other but disagreed with many of the conclusions reached by scholars of the West.

Conclusions: Configurations, Causal Diversity and Comparative Research

This article began from the observation that research on women's representation in national parliaments, both quantitative and qualitative, initially produced complementary findings, but given recent shifts in women's access to political office, reflects a lesser degree of consensus on the factors behind cross-national variations. Using this as a point of departure, the article explored the potential of QCA for explaining these dynamics across two medium-*n* populations, the West and sub-Saharan Africa. The focus was on discerning whether the conflicting results of other studies might be rooted in the presence of multiple combinations of causal conditions. Treating each group as a separate universe of cases, the analysis drew on statistical and case study work to identify factors that might shape women's access to parliament in each population: electoral systems, quotas, women's status, women's movements and left parties in the West, and electoral systems, quotas, women's status, levels of national development and presence of post-conflict situations in sub-Saharan Africa. On the basis of distributions, it also imposed two distinct measures of high representation: 30 per cent and 17 per cent, respectively. Conditions and outcomes were thus not consistent across samples, a feature that contradicts many of the traditional tenets of quantitative and qualitative research. However, in line with the philosophy of QCA, especially the need to acknowledge causal diversity and constitute meaningful populations, these choices recognize the common and unique features shaping patterns of political representation within each particular region. As such, they avoid a 'one-size-fits-all' model across the two groups in order to improve the theoretical and substantive leverage of the analysis.

Using TOSMANA, a QCA analysis was then run on each population to assess: (1) the role of single factors; (2) the presence of causal configurations; and (3) the possibility of equifinality. The analysis revealed, first, that no factors on their own accounted for levels of female representation. The exception was women's status in the West, but this relationship emerged only after logical remainders were included in the analysis for high representation. In contrast, both values with regard to women's status were associated with high and low numbers of women in politics in sub-Saharan Africa. Second, apart from this instance, all of the conditions relevant to both sets of outcomes worked in combination with other factors. In both populations, the solutions revealed that the causal effects of one factor did indeed depend upon the presence or absence of other factors. In the West, for example, non-PR electoral systems combined with strong new left parties fostered high levels of representation, but non-PR electoral systems combined with weak or non-existent new left parties produced low levels. Similarly, in sub-Saharan Africa, women's high status and post-conflict situations led to high numbers of women in politics, but women's high status and

non–post–conflict situations resulted in low numbers. Third, all four sets of outcomes were the product of multiple configurations of conditions, in the sense that distinct combinations led to similar outcomes. At the same time, some of the same factors – non-PR electoral systems in the West and women's high and low status in sub-Saharan Africa – in fact produced opposite outcomes. At a technical level, therefore, these findings lend important support to the theoretical assumptions underlying QCA.

The broader empirical validity of the analysis, in turn, can be seen in the fact that its findings go a long way in making sense of the growing body of conflicting conclusions that have emerged in recent years with regard to factors facilitating and hindering women's access to political office. The point of the exercise was to explore whether QCA techniques might render equations that pinpointed factors that combine with other conditions, as well as distinct routes to the same outcome of high or low levels of female representation. These Boolean calculations revealed, interestingly, a number of trends that have been noted, but rarely theorized, in existing quantitative and qualitative work, as signaled in the discussions above. The analysis thus indicates that future research on women and politics may gain greater theoretical leverage by explicitly considering how factors may combine in multiple ways to produce a given set of political outcomes. This insight will enable scholars to offer more nuanced interpretations of their results by requiring them to specify better the conditions of their theories. An excellent example of the need for this revised lens is the existing emphasis on the importance of a PR electoral system for dramatic gains in women's representation. As the analysis above demonstrates, PR plays a role in promoting women's access in the West to the degree that it combines with women's activism. At the same time, a non-PR system is not a barrier if it is present alongside strong left parties. In contrast, the electoral system appears to play little or no decisive role in sub-Saharan Africa, as compared with other factors like quotas or post-conflict situations. Such findings may in turn better serve the goals of activists interested in ascertaining the conditions under which change may – or may not – take place. Solving some of the puzzling aspects surrounding the rapid and varied shifts that have occurred since 1987, the results of this study call attention to both the dynamic and stable features of political contexts that may open the way for greater numbers of women to be elected.

(*Accepted*: 12 May 2009)

About the Author

Mona Lena Krook is Assistant Professor of Political Science and Women, Gender and Sexuality Studies at Washington University in St Louis. This article was completed while she was a Fellow at the Radcliffe Institute for Advanced Study at Harvard University and a Fellow in the Women and Public Policy Program at the Harvard Kennedy School. She is the author of *Quotas for Women in Politics: Gender and Candidate Selection Reform Worldwide* (Oxford University Press, 2009) and co-editor with Sarah Childs of *Women, Gender, and Politics: A Reader* (Oxford University Press, 2010).

Mona Lena Krook, Washington University in St Louis, Department of Political Science, Campus Box 1063, One Brookings Drive, St Louis, MO 63112, USA; email: *mlkrook@wustl.edu*

Notes

1 One of the best sources of this work, both published and in progress, is http://www.compasss.org.

2 All are available at no charge online at http://www.u.arizona.edu/~cragin/fsQCA/software.shtml, http://cran.r-project.org, and http://www.tosmana.net.

3 The population does not include Japan, which is often included together with these countries as part of the broader group of 'advanced industrialized democracies'. In contrast, the commonalities among the countries analyzed here are not limited to economic and political characteristics but also shared cultural traits.

4 This qualification eliminates Luxembourg among the countries with quotas, despite the fact that the Greens have a 50 per cent quota policy.

5 Following traditional usage of the term in the welfare state literature, the 'social democratic' model is distinguished not by the presence of social democratic parties in government, but by patterns and goals of social provision (Esping-Andersen, 1999). Iceland therefore fits into this category, despite having been governed primarily by the conservative Independence party.

6 The same countries may be characterized by multiple combinations.

7 When the data support it, the software reports more than one logically consistent conclusion.

8 The population was defined in this way in order to ensure a closer degree of commonality among the countries in the sample by focusing on the 'lived experiences' of citizens, rather than the more common institutional criteria of 'electoral democracies'. This measure results in a slight increase in the number of countries included in the population.

9 This requirement eliminates Djibouti among the countries with quotas, despite the fact that it adopted a 10 per cent reserved seat provision in 2002.

10 I would like to thank Aili Mari Tripp for several discussions on how best to operationalize 'women's status' in Africa.

References

Bauer, G. and Britton, H. (eds) (2006) *Women in African Parliaments*. Boulder CO: Lynne Rienner.

Beckwith, K. (1992) 'Comparative Research and Electoral Systems: Lessons from France and Italy', *Women & Politics*, 12 (2), 1–31.

Bruhn, K. (2003) 'Whores and Lesbians: Political Activism, Party Strategies, and Gender Quotas in Mexico', *Electoral Studies*, 22 (1), 101–19.

Bystydzienski, J. M. (1995) *Women in Electoral Politics: Lessons from Norway*. Westport CT: Praeger.

Caul, M. (1999) 'Women's Representation in Parliament: The Role of Political Parties', *Party Politics*, 5 (1), 79–98.

Cronqvist, L. (2008) 'TOSMANA – Tool for Small-N Analysis' [online]. Available from: http://www.tosmana.net [accessed 15 May 2008].

Dahlerup, D. (ed.) (2006) *Women, Quotas, and Politics*. New York: Routledge.

Dahlerup, D. and Freidenvall, L. (2005) 'Quotas as a Fast Track to Equal Representation for Women: Why Scandinavia is No Longer the Model', *International Feminist Journal of Politics*, 7 (1), 26–48.

Duverger, M. (1955) *The Political Role of Women*. Paris: UNESCO.

Esping-Andersen, G. (1999) *Social Foundations of Postindustrial Economies*. New York: Oxford University Press.

Freedom House (2005) *Freedom in the World*. Washington, DC: Freedom House.

Hughes, M. M. (2009) 'Armed Conflict, International Linkages, and Women's Parliamentary Representation in Developing Nations', *Social Problems*, 56 (1), 174–204.

Inglehart, R. and Norris, P. (2003) *Rising Tide: Gender Equality and Cultural Change around the World*. New York: Cambridge University Press.

International IDEA (2005) 'Table of Electoral Systems Worldwide' [online]. International IDEA. Available from: http://www.idea.int/esd/world.cfm [Accessed 2 August 2005].

International IDEA (2007) 'Global Database of Quotas for Women' [online]. International IDEA. Available from: http://www.quotaproject.org [Accessed 20 August 2007].

Inter-Parliamentary Union (2007) 'Women in National Parliaments: Situation as of 30 June 2007' [online]. Inter-Parliamentary Union. Available from: http://www.ipu.org/wmn-e/world.htm [Accessed 20 August 2007].

Inter-Parliamentary Union (2009a) 'Women in National Parliaments: Situation as of 31 March 2009' [online]. Inter-Parliamentary Union. Available from: http://www.ipu.org/wmn-e/classif.htm [Accessed 8 May 2009].

Inter-Parliamentary Union (2009b) 'Women in National Parliaments: Situation as of 31 March 2009' [online]. Inter-Parliamentary Union. Available from: http://www.ipu.org/wmn-e/world.htm [Accessed 8 May 2009].

Kaiser, P. (2001) *Strategic Predictors of Women's Parliamentary Participation: A Comparative Study of Twenty-Three Democracies*. Unpublished PhD thesis, Department of Political Science, University of California, Los Angeles.

Katzenstein, M. F. (1978) 'Towards Equality? Cause and Consequence of the Political Prominence of Women in India', *Asian Survey*, 18 (5), 473–86.

Kittilson, M. C. (2006) *Challenging Parties, Changing Parliaments: Women and Elected Office in Contemporary Western Europe*. Columbus OH: Ohio State University Press.

Krook, M. L. (2006) 'Reforming Representation: The Diffusion of Candidate Gender Quotas Worldwide', *Politics & Gender*, 2 (3), 303–27.

Krook, M. L. (2009) *Quotas for Women in Politics: Gender and Candidate Selection Reform Worldwide*. New York: Oxford University Press.

Lawless, J. L. and Fox, R. L. (2005) *It Takes a Candidate: Why Women Don't Run for Office*. New York: Cambridge University Press.

Lieberson, S. (2004) 'Comments on the Use and Utility of QCA', *Qualitative Methods*, 2 (2), 13–4.

McAllister, I. and Studlar, D. T. (2002) 'Electoral Systems and Women's Representation: A Long-Term Perspective', *Representation*, 39 (1), 3–14.

Mahoney, J. and Goertz, G. (2006) 'A Tale of Two Cultures: Contrasting Quantitative and Qualitative Research', *Political Analysis*, 14 (3), 227–49.

Matland, R. E. (1998) 'Women's Representation in National Legislatures: Developed and Developing Countries', *Legislative Studies Quarterly*, 23 (1), 109–25.

Matland, R. E. and Studlar, D. T. (1996) 'The Contagion of Women Candidates in Single-Member District and Proportional Representation Electoral Systems: Canada and Norway', *The Journal of Politics*, 58 (3), 707–33.

Paxton, P. (1997) 'Women in National Legislatures: A Cross-National Analysis', *Social Science Research*, 26 (4), 442–64.

Powley, E. (2003) *Strengthening Governance: The Role of Women in Rwanda's Transition*. Cambridge: Hunt Alternatives Fund.

Ragin, C. C. (1987) *The Comparative Method: Moving beyond Qualitative and Quantitative Strategies*. Berkeley CA: University of California Press.

Ragin, C. C. (2000) *Fuzzy-Set Social Science*. Chicago IL: University of Chicago Press.

Rosenbluth, F., Salmond, R. and Thies, M. F. (2006) 'Welfare Works: Explaining Female Legislative Representation', *Politics & Gender*, 2 (2), 165–92.

Russell, M., Mackay, F. and McAllister, L. (2002) 'Women's Representation in the Scottish Parliament and National Assembly for Wales: Party Dynamics for Achieving Critical Mass', *Journal of Legislative Studies*, 8 (2), 49–76.

Sainsbury, D. (1993) 'The Politics of Increased Women's Representation: The Swedish Case', in J. Lovenduski and P. Norris (eds), *Gender and Party Politics*. Thousand Oaks CA: Sage, pp. 263–90.

Swank, D. (2007) 'Comparative Parties Dataset' [online]. Available from: http://www.marquette.edu/polisci/Swank.htm [Accessed 20 August 2007].

Tripp, A. M. (2007) 'How Women Transformed the Face of Africa's Legislatures'. Unpublished manuscript.

Tripp, A. M. and Kang, A. (2008) 'The Global Impact of Quotas: The Fast Track to Female Representation', *Comparative Political Studies*, 41 (3), 338–61.

United Nations Office at Vienna (1992) *Women in Politics and Decision – Making in the Late Twentieth Century: A United Nations Study*. Boston, MA: Martinus Nijhoff Publishers.

UNDP (2005) 'Africa' [online]. UNDP. Available from: http://www.undp.org/regions/africa/ [Accessed 2 August 2005].

UNDP (2006) *Human Development Report 2006*. New York: United Nations.

Welch, S. and Studlar, D. T. (1990) 'Multi-Member Districts and the Representation of Women', *Journal of Politics*, 52 (2), 391–412.

Weldon, S. L. (2002) *Protest, Policy, and Problem of Violence against Women: A Cross-National Comparison*. Pittsburgh PA: University of Pittsburgh Press.

World Bank (2005) 'Conflict and Development' [online]. World Bank. Available from: http://lnweb18.worldbank.org/ESSD/ sdvext.nsf/67ByDocName/ConflictPreventionandReconstruction [Accessed 2 August 2005].

Yoon, M. Y. (2004) 'Explaining Women's Legislative Representation in Sub-Saharan Africa', *Legislative Studies Quarterly*, 29 (3), 447–66.