### Supplemental Appendix:

# The Political Geography of the Gender Gap

#### Dawn Langan Teele\*

## Contents

Appendix A: Dataset Information	1
Appendix B: Partisan Support, Urbanization, and Municipality Size	3
Appendix C: Male Expansion	5
Appendix D: Sensitivity Analyses	9

<sup>\*</sup>This appendix was successfully replicated by the Journal of Politics thanks to Nikolaos Frantzeskakis. The permanent home for the replication files is doi.org/10.7910/DVN/VZURJ6.

#### Appendix A: Dataset Information

The Swedish National Data Service Election (SND 0204-001) holds data by created by Berglund (1988) here. This data has been reshaped into a long format, and we fixed many errors, detailed in the replication files, using PDFs of the original electoral logs. We also draw on classifications of municipalities originally coded by Dorothy Swain Thomas in her 1941 text on Swedish demography, available in Riemer (1941, Appendix III). Most of the analyses refer to elections that happened before suffrage (1920 and 1917) and after suffrage (1924-1921).

- The Left includes all Liberal, Social Democratic, and Communist parties.
  - Swedish Social Democratic Party ('Socialdemocrater')
  - Liberals ('Liberala')
  - Prohibition Liberals ('Frisinnade' splits from Liberals in 1924)
  - 'Communists' refers to Social Democratic Left Party of Sweden in 1917 & 1920 ('Vänster Socialister in SND data set), to Communist Party of Sweden and Social Democratic Left in 1921 ('Vänster socialister och kommunister' in SND data set) and to offshoots that followed particular Communist leaders such as Höglund and Kilboms.
- The Right includes the Conservative and Agrarian parties
  - 'Conservatives' refers to a General Electoral League ('Moderata' 'Högern' )
  - 'Agrarians' refers to a Farmers' League ('Bondeförbundet' in SND data set).
  - 'Farmers', refer to National Association of Farmers ('Jordbrukarnas Riksförbund' in SND data set). Election data for Farmers are only available for 1920 in the SND data set.

Riemer, Sven. 1941. "Population Movements and Industrialization. Swedish Counties 1895–1930." Stockholm Economic Studies 10(2).

# Appendix B: Partisan Support, Urbanization, and Municipality Size

The figures below show how party-level support is related to municipality size across elections, and how there is a clear geography of leftist preferences in the 1921 election in urban municipalities, and in larger rural municipalities.

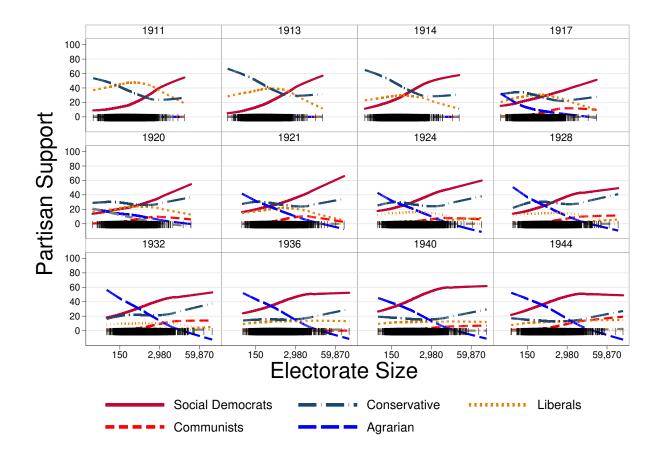


Figure A.1: Partisan Support in All Elections by Municipality Size

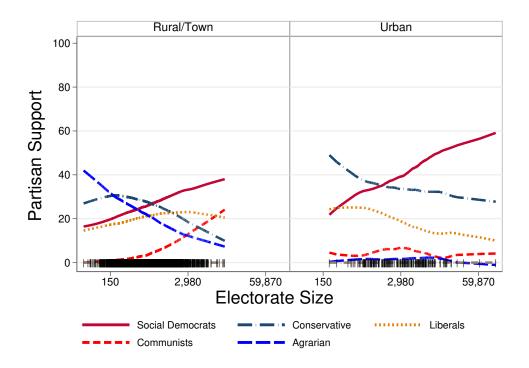


Figure A.2: Partisan Support in 1921 Election, Rural and City/Town parishes

#### Appendix C: Male Expansion

The figures below showcase the 1921 expansion in male voting eligibility, showing how the electorate expanded in the elections prior to 1921; how the change in the electorate was larger in places that already had larger electorates (e.g. the cities and larger urban municipalities had larger changes in eligibility in 1921); that the percentage change in the male elect-rate was uncorrelated with turnout among men and women in 1921; and that within-municipality there was a high degree of correlation in turnout across elections (correlation between .72 and .79 in prior elections). The last set of figures show that the share of total votes won by the left (Social Democrats, Liberals, and Communists) was uncorrelated with the growth in the male electorate. Finally, for the elections from 1914-1920 there were distinctive geographies of male turnout, where the rate of participation was much higher in urban districts than in small rural districts.

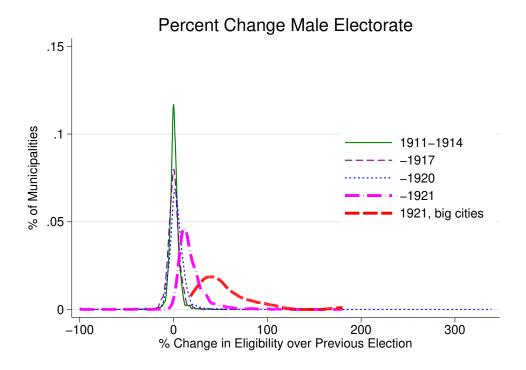


Figure A.3: The eligible male electorate grew considerably in the 1921 election, and the average growth rate was higher in large cities.

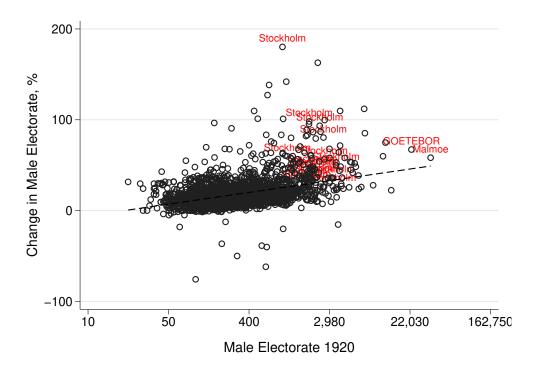


Figure A.4: Another way of showing that the male electorate changed by more where there were more men in 1920.

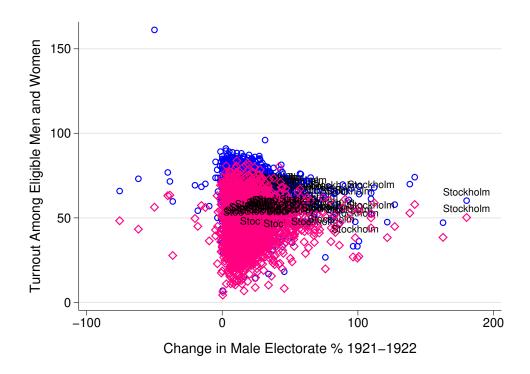


Figure A.5: Turnout for men and women was uncorrelated with the growth of the male electorate

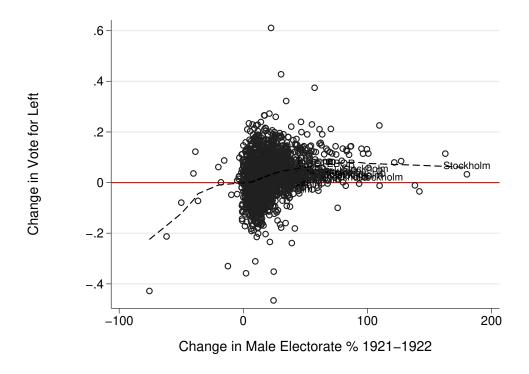


Figure A.6: The change in the left vote was uncorrelated with the change in male eligibility

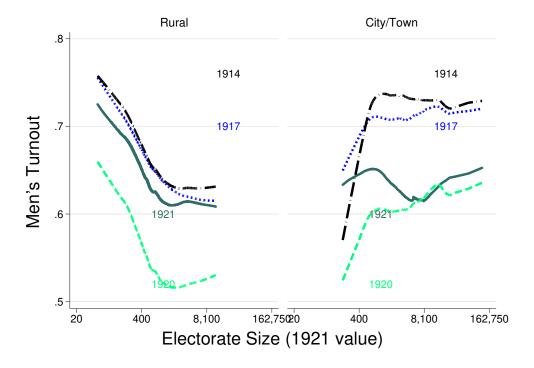


Figure A.7: Turnout was higher in small and large districts; 1920 was a year of low turnout in midsize districts

#### Appendix D: Sensitivity Analyses

One of the inferential threats to the findings of this paper relates to the large expansion in the male electorate that occurred simultaneously with women's suffrage in 1921. If the new men added to the electorate had different preferences from the old men, and specifically, if new male voters were more leftist than the old group of voters, we are at risk of attributing the left's success to women when in fact it was men. To evaluate this issue, the following simulations display the predictions for women's leftism across the distribution of electorate size, sometimes in urban and rural areas, if we assume that all old male voters vote like their most left year, and the new men are between 5 and 30 percentage points more left than the old male voters. (Since the average of leftist votes in the most left year was about 70 percent in rural and urban areas, at most new men be 30 points more supportive of the left.) We calculate the number of "new" male voters by taking the average number of voters in the prior three elections (1914, 1917, 1920) and then subtracting the total votes in 1921 from that number. Rarely, the total number of votes was less than the average, in which case we set the observation to zero. This is a simple procedure, but since turnout, and the total votes cast, were highly stable in prior elections, it might not be a terrible assumption.

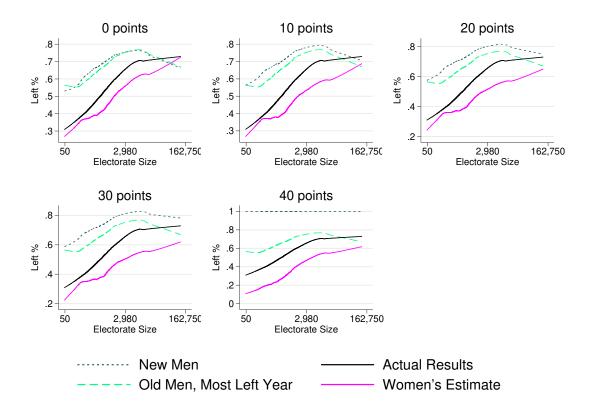


Figure A.8: Simulation of Women's Leftism under different assumptions of new men voters. The figure plots the estimated vote share of women for the left across the distribution of electorate size given different assumptions about men's behavior in 1921. The estimates assume that old male voters vote as in their most left election (from 1911-1920 there were five elections) and that new male voters were some percentage points more leftist than the old men. The steep gradient in the women's estimate across electorate size is obvious in all specifications.

Figure A.8 presents the complete results of the simulation exercise. The actual electoral results (smoothed using the lowess estimator) of the election across the distribution in electorate size is showed using the black line. The green lines show the old and new men's predicted votes supposing that new men are more left-leaning than the most left year in the district. The pink line then displays the estimated distribution of women's votes. As can be seen in the figure, even if new male voters were considerably more leftist than the old male voters, women in municipalities with more voters were much more supportive of the left than women in smaller municipalities, as indicated by the steep gradient of the pink line.

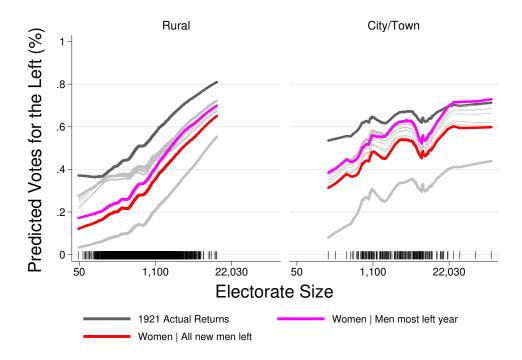


Figure A.9: Simulations of rural and urban women's leftism assuming that all men vote like the most left year, or the old men vote like their most left and the new men all support the left. The deterministic Duncan-Davis bounds are the thick grey lines on the top and bottom of the figures (assuming no men vote left or that all men vote left). The light grey lines show what happens if new men are assumed to be between 5 and 30 percentage points more left than men.

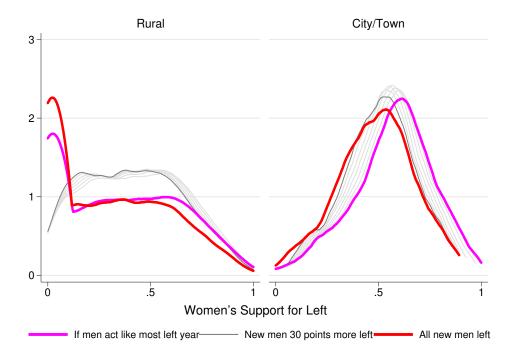


Figure A.10: Kernel Density plot of Women's Predicted leftism given simulations about old and new male voters. The kernel density plots show the distribution of these estimates of women's vote choice for the left separated for rural women (left) and urban women (right). The red line assumes that all male voters vote as in the municipality's most left election (from 1911-1920 there were five elections), while the pink line assumes that new male voters were some percentage points more leftist than the old men. The light lines show what happens if new men are assumed to be between 5 and 30 percentage points more left than men. The darkest grey line assumes new men are 30 points more left than old men.

Figure A.9 shows the Duncan-Davis style bounds, along with the predictions presented in the paper, if we assume all men vote like in the most left year (red line) or that old men vote like the most left year and new men all vote for the left. And figure A.10 shows the kernel density plot of municipal-level predictions in rural (left side) and urban (right side) municipalities. Again, the red lines show the main results if all men act like their most left year, the pink lines show if all old men are their most left and all new men vote left. And the grey lines show the simulations if we vary new male voters leftism between 5 and 30 percentage points. Here, the gradient stands out within geographic groupings. Women are predicted to be more leftist in urban areas – both in the average municipality, and when we

weight the municipal outcomes by women's turnout. In urban areas, the municipal average is between 56 percent (if all men behave like the most left year) and 67 percent (if all men behave like 1920), and the weighted urban average is between .32 (all men behave like most left year) and 70 (all men behave like 1920). In rural areas, the municipal average is between 30 percent (if old men act like their most left year and all new men vote left), and 54 percent (if men behave like in 1920). The weighted average of women's leftism in rural areas suggests that between 47 and 65 percent of all women voted for the left.