Milestone Six

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Contents

1 Extension

I have already been able to replicte all of the results from *Why Friends and Neighbors? Explaining the Electoral Appeal of Local Roots* by Rosie Campbell, Philip Cowley, Nick Vivyan, and Markus Wagner in the *The Journal of Politics*. The next step is to improve upon their methods and make suggests as to what to do next. My thoughts are below:

1. The first step is to suggest using stan_glm from the rstanarm package instead of the simple lm. This allows for the use of generalized linear modeling instead of linear modeling with optional prior distributions for the coefficients. It also works with a wider range of data due to not needing to be transformed like is sometimes required for lm. Granted that point may not apply to this cleaned data.

2. Instead of using external packages for the predictions, amongst other things, the current code relies heavily upon functions created within the code itself. While still easily replicated, such actions, unless thoroughly understood, make understanding the code much more difficult. I will look into different options to streamline the current process in which the models are created.

3. Both studies examine how the attributes of the Members of Parliament influence views on behavioral localism and local roots. Nevertheless, the data does not look within many demographic categories which are collected about the subjects. How do these views change based upon individual political views, gender, education level etc. I aim therefore to also use priors to maybe weight for these separate groups to create a better picture of the UK electorate.

4. Table 2 is currently more difficult to understand compared to the visualization such as figures 1 and 2. Therefore, I am to also plot the coefficients and their confidence intervals in order to present the information in a more intuitive format.

5. Study 2 uses F-tests to see if there is interactions between Members of Parliaments' local ties and each remaining attribute. Page 140 in the textbook cautions against the use of such tests, for noisey data can give rise to insignificance with hypothesis testing even if there is some. Therefore it would be better to scrap this point or revise it. I am still in the process of determining a better alternative.

6. In order to maybe make this study more reliable to extrapolate upon, we could delete all vignettes within the analysis where the Member of Parliament lives outside of the district which simply cannot occur with other legislators such as Congressmen in the United States which are required to live within their district.

These extensions will hopefully better the article as a whole and clarify its implications.

All analysis for this paper is available in my Github repository for this milestone is in the footnote below. [1]

[1] https://github.com/SamuelLowry/gov1006-milestone-6.git

A Appendix of Graphics

I was able to replicate table 2, figure 1, and figure 3. I was unable to replicate table 1 and figure 2 because they were not data related. They were merely visualizations displaying content about methods and experimental design. Table 1 depicts written descriptions of the hypothetical Members of Parliament present to subject. Figure 2 depicts a screenshot of the survey.

Table 2

% Table created by stargazer v.5.2.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harvard.edu
% Date and time: Fri, Apr 03, 2020 - 23:49:19

	(1)	(2)	(3)	(4)
Intercept	-0.412^{***}	-0.661^{***}	-0.412^{***}	-0.664^{***}
	(0.057)	(0.128)	(0.057)	(0.125)
Local roots	0.755^{***}	0.759^{***}	0.755^{***}	0.758^{***}
	(0.080)	(0.080)	(0.080)	(0.080)
Behavioral localism information	0.683^{***}	0.691^{***}		
	(0.078)	(0.079)		
Behavioral localism: High (vs. no info)			1.395^{***}	1.402^{***}
			(0.098)	(0.098)
Behavioral localism: Low (vs. no info)			-0.007	-0.0002
			(0.085)	(0.086)
Local roots X Behavioral info.	-0.253^{**}	-0.257^{**}		
	(0.110)	(0.110)		
Local roots X High behavioral localism			-0.311^{**}	-0.311^{**}
			(0.140)	(0.139)
Local roots X Low behavioral localism			-0.233^{*}	-0.238^{**}
			(0.119)	(0.119)
Controls for voter characteristics?	No	Yes	No	Yes
Observations	5,203	5,203	5,203	5,203
R^2	0.036	0.046	0.107	0.116
Adjusted R^2	0.036	0.044	0.106	0.114
Note:				*p<0.1; **p<0.05; ***p<0.01

Figure 1

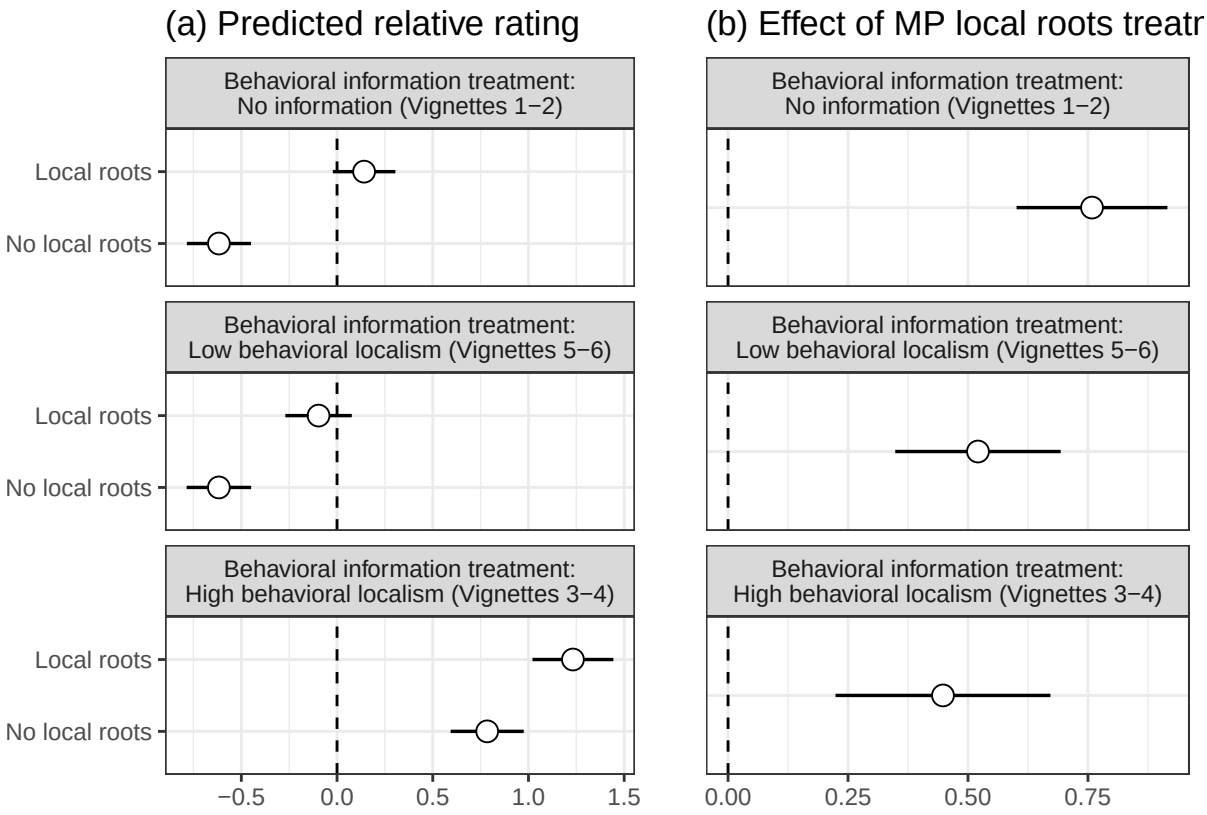
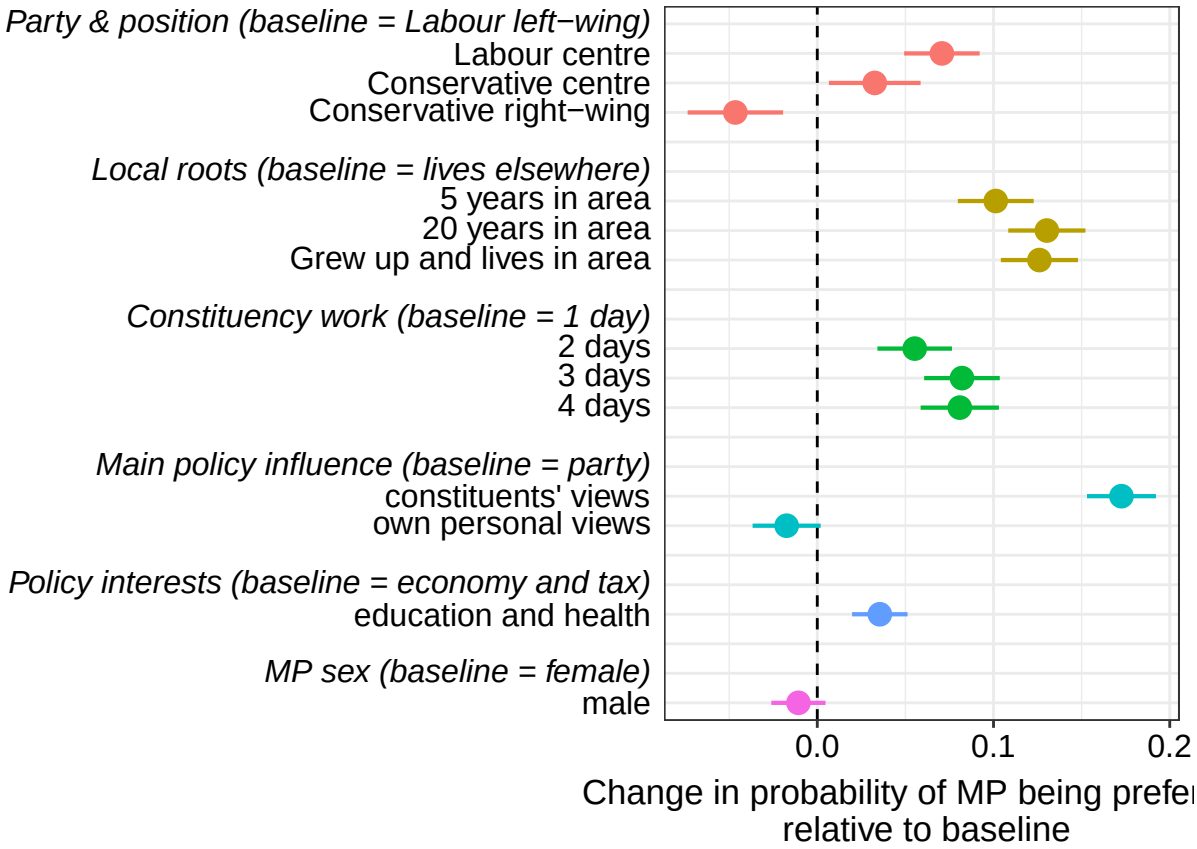

(a) Predicted relative rating
(b) Effect of MP local roots treatr
Behavioral information treatment:
No information (Vignettes 1−2)
Behavioral information treatment:
Low behavioral localism (Vignettes 5−6)
Behavioral information treatment:
High behavioral localism (Vignettes 3−4)
Local roots
No local roots
−0.5
0.0
0.5
1.0
1.5
0.00
0.25
0.50
0.75

Figure 3


Party & position (baseline = Labour left−wing)
Labour centre
Conservative centre
Conservative right−wing
Local roots (baseline = lives elsewhere)
5 years in area
20 years in area
Grew up and lives in area
Constituency work (baseline = 1 day)
2 days
3 days
4 days
Main policy influence (baseline = party)
constituents' views
own personal views
Policy interests (baseline = economy and tax)
education and health
MP sex (baseline = female)
male
0.0
0.1
0.2
Change in probability of MP being prefe
relative to baseline