Facial Dominance and Electoral Success in Times of War and Peace

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Do voters prefer dominant looking candidates in times of war? By replicating previous survey experiments, we find that respondents do prefer candidates with dominant facial features when war is salient. We then investigate whether these survey results generalize to the real world. Examining US Senate elections from 1990 to 2006, we test whether voters prefer candidates with dominant facial features in wartime elections more than in peacetime elections. In contrast with the survey studies, we find that dominant-looking candidates appear to gain a slight advantage in all elections but have no special advantage in wartime contexts. We discuss possible explanations for the discrepancy between the findings and conduct additional experiments to investigate one possible explanation: additional information about candidates may rapidly erode the wartime preference for dominant looking candidates. Overall, our findings suggest that the dominance-war findings may not generalize to the real world.

Recent studies have examined the tendency of voters to prefer dominant looking leaders in wartime versus peacetime (Lausten and Petersen 2015, 2016; Little et al. 2007; Re et al. 2013; Spisak et al. 2012). In wartime, voters may prefer a more dominant leader because they infer that he or she is better able to protect them (Little 2014; Little et al. 2007; van Vugt and Grabo 2015; von Rueden and van Vugt 2015) and better able to ensure the coordination and commitment necessary to win the conflict (Laustsen and Petersen 2015, 2017). They may also see voting for him or her as a signal of their own commitment to prevailing (Laustsen and Petersen 2015, 2017). In peacetime, by contrast, voters may prefer a less dominant leader to facilitate cooperation on domestic issues.

These dominance findings build on research about candidate appearance and voting, which has examined the role of competence, attractiveness, trustworthiness, and other traits visible in candidates' appearances (Berggren, Jordahl, and Poutvaara 2010; King and Leigh 2010; Lammers, Gordijn, and Otten 2009; Little et al. 2007; Rosar, Klein, and Beckers 2008; Todorov et al. 2005). Many of these studies have linked laboratory ratings of faces to real-world electoral outcomes around the globe.

Recent dominance findings suggest that simply looking dominant can benefit candidates in wartime elections. They are, however, based on survey experiments and may not bear on actual elections. In this article, we explore whether these survey findings translate to the real world of US Senate elections. Comparing elections during war and nonwar periods, we find little evidence that they do. We discuss explanations for and present experimental evidence on this lab versus real-world disparity. These experimental studies find that providing additional information to participants about candidates reduces the importance of candidate appearance to their voting decisions.

FACIAL DOMINANCE IN THE LAB: WARTIME VERSUS PEACETIME

We begin by replicating two survey experiments that show that respondents prefer more dominant faces during wartime and less dominant faces during peacetime. Lausten and Petersen (2015) presented American respondents with two versions of the same face that they modified to vary by 2 standard deviations on the dominance dimension from a neutral version of the face (see app. 1; apps. 1–5 are available online). We gave respondents either a high-conflict or low-conflict scenario and then asked to select either the low-dominance or high-dominance face as the best leader (app. 1 shows the text). The scenarios attempted to prime intergroup conflict or intragroup cooperation, while avoiding a modern, partisan setting.

Lausten and Petersen find that 50% of their respondents preferred the dominant face in the conflict condition, while only 32% preferred the dominant face in the no-conflict condition. We replicate these results among Amazon Mechanical Turk (AMT) respondents (see app. 3 for study details). We find that 73% preferred the dominant face in the conflict scenario as compared to 48% in the no-conflict condition (t-test for difference; $t = 6.27$, $p < .000$).

In a second study, Little et al. (2007) manipulated a computer-generated face to match the shape of either John Kerry or George W. Bush (treatments available in app. 2). Respondents rated the face modified to look more like Bush as more dominant than the Kerry look-alike. Little et al. then asked respondents which face they would vote for in a time of war or a time of peace. In the original study, 74% of respondents in the war condition chose the more dominant, "plus-Bush" face, but only 39% of respondents in the peace condition did so. We again replicate this result with an AMT sample (see app. 3 for study details). And 66% of respondents preferred the dominant face in the war condition as compared to 34% in the peace condition (t-test for difference: $t = 7.85$, $p < .000$).

Together, these results are in line with earlier studies and indicate that the context of war versus peace does matter when assessing the facial dominance of a potential leader. However, these results are thus far limited to survey settings where respondents choose among computer-generated face images without the added context of real-world candidates, campaigns, and international events.

FACIAL DOMINANCE IN SENATE ELECTIONS, 1990–2006

To test the impact of facial dominance in US elections in the real world, we examined the faces of Senate candidates in elections from 1990 to 2006. The US Senate plays an important role in foreign policy, and Senate candidates campaign on war issues with some frequency. We obtained candidate pictures from Atkinson, Enos, and Hill (2009) and by performing online searches of newspapers, political websites, and other online sources, yielding 210 races where we have photographs of both candidates (420 candidates), about 70% of Senate races. The number of races ranges from 18 in 1992 to 30 in 2002. We collected dominance ratings for these photos from AMT respondents (see app. 4 for the details of the rating task). Survey respondents rated the faces on a seven-point scale ranging from "Very Dominant" to "Very Submissive."[1] For analysis, we use the mean dominance rating for each candidate, which ranged from 1.4 to 5.0 on a 1–7 scale (mean = 3.5). Higher scores indicate more dominant faces.

We then examined the real-world electoral success of these Senate candidates, following the Todorov et al. (2005) approach. Specifically, we examine whether Senate candidates who look more dominant than their opponents obtain a greater vote share. Our dependent variable is the Republican share of the two-party vote in contested Senate elections from 1990 to 2006. We measure facial dominance as the difference between the dominance rating of the Republican candidate's face and the dominance rating of the Democratic candidate's face in each race, with positive numbers indicating a Republican dominance advantage. We measure wartime versus peacetime according to whether the United States was involved in a prolonged military engagement around the time of the election authorized by Congress (therefore, we code the War variable to 1 in 1990 for the Gulf War, and 2002, 2004, and 2006 for the wars in Afghanistan and Iraq, and 0 otherwise).

Figure 1 presents the relationship between facial dominance and Senate Republican vote share by year. We indicate war years with circles and peacetime years with diamonds. Positive numbers on the x-axis indicate a more dominant Republican candidate, while negative numbers indicate a more dominant Democratic candidate. The y-axis shows the Republican two-party vote share. The plots reveal a slight advantage for dominant faces overall, but no systematic differences between war years and peacetime years. Indeed, the stability of the relationship across the different years indicates that any more fine-grained measure of the severity or salience of a given wartime experience would not change the results. No matter how "wartime" is defined, there are no inter-year differences in the results. A wartime political context does not

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1. We replicated this task using a seven-point scale ranging from "Very Dominant" to "Very Non-Dominant" and replicated it with minimal instructions with no substantive changes to the results presented in table 1 (see app. 4).
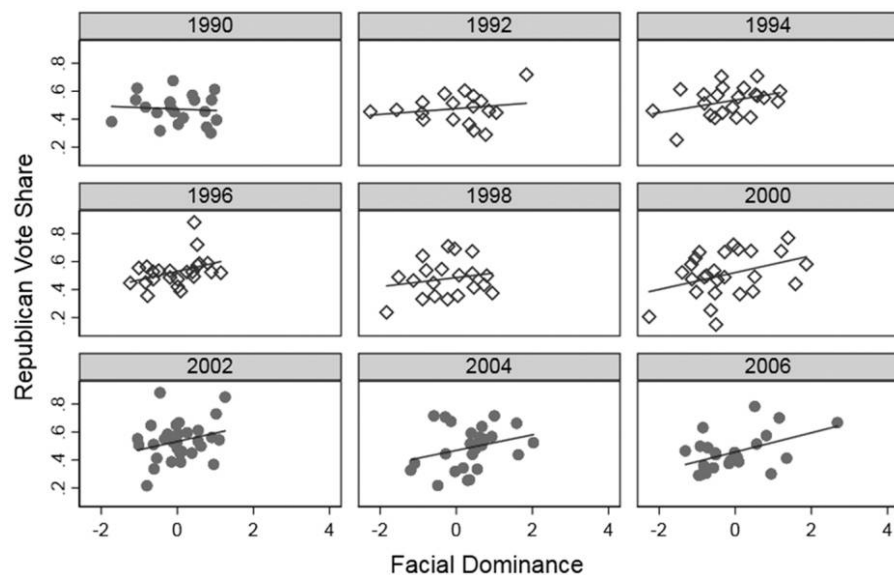
Figure 1. Facial dominance and Republican vote share by year. Negative values indicate a more dominant Republican

seem to change voter preferences over dominant and non-dominant faces.

The results remain similar when we control for several key variables. Table 1, model 1 presents the results for all

Table 1. Facial Dominance in Wartime versus Peacetime, Senate Elections 1990–2006, Contested Races

	All Races		Male Only Races	
	Model 1	Model 2	Model 1	Model 2
Dominance (R-D diff.)	.04*	.02*	.05*	.01
	(.01)	(.01)	(.02)	(.01)
War	−.03	. . .	−.03	. . .
	(.02)		(.02)	
Dominance × war	.003	−.005	.003	−.001
	(.02)	(.01)	(.02)	(.02)
Republican incumbent	. . .	.09*	. . .	.08*
		(.02)		(.02)
Democratic incumbent	. . .	−.10*	. . .	−.11*
		(.02)		(.02)
Prior Republican presidential vote	. . .	.53*	. . .	.62*
		(.09)		(.09)
R^2	.084	.655	.104	.700
SER	.127	.080	.127	.076
N	210	210	157	157

Note. Regression models with standard errors in parentheses. The dependent variable is Republican vote share. Constant included but not shown. Model 2 includes year fixed effects. SER = Standard error of the regression.
* $p < .05$.

contested elections; while candidates with dominant faces have a small electoral advantage, their advantage fails to increase in war elections (the coefficient on the dominance-war interaction term is close to 0, although imprecisely estimated). Model 2 adds incumbency, prior presidential vote, and year fixed effects. These controls do not change the results substantially. Given the complex relationship between facial dominance and gender (Johns and Shepard 2007; Lammers et al. 2009; Spisak et al. 2012), table 1 also shows that the results remain the same in contests between male candidates (we lack a sufficient number of female-female races to examine those). As in the previous models, the interaction between facial dominance and wartime is close to 0 (although imprecisely estimated).

RECONCILING EXPERIMENTAL RESULTS AND ELECTION RETURNS

Why might the experimental results and election returns lead to such different conclusions? We discussed two possible explanations. First, the military conflicts in our observational study may have been too low in salience compared to the previous experiments. Second, the survey experiments may fail to capture the wide range of factors that voters consider in real-world Senate elections. In such elections, voters will typically know a candidate's name and party identification, and may see or hear news coverage and campaign advertisements. This information may swamp the impact of facial dominance.

Assessing the first explanation is difficult, but war does seem likely to have been salient in at least two of our "war" elections campaigns: 1990 and 2002. The Gulf War escala-

tion and military buildup in 1990 began in the months be-
fore Election Day (see app. 5 for details). Likewise, in 2002,
George W. Bush began the buildup for the Iraq invasion in
mid-September 2002 with an address to the UN Security
Council. In both cases, the buildup to war was likely a part of
the midterm election strategy. Moreover, evidence from most-
important-problem poll questions imply that external rela-
tions and defense were salient in all of the "war" elections (see
app. 5). Finally, studies imply that foreign affairs can affect
Senate elections. Notably, war casualties impact congressio-
nal elections (Grose and Openheimer 2007; Kriner and Shen
2007).

To examine the second explanation, we gave survey re-
spondents additional information about the candidates. We
ran two survey experiments in which we asked some re-
spondents to choose among the computer-generated candi-
dates based only on facial appearance, while others saw both
faces and additional partisan and issue information. We
showed respondents both sets of faces from the two studies
we described above. Each set of faces appeared on a separate
slide paired with one of the following prompts:

> Please indicate which face you would vote for to
> run your country in a time of peace.
> Please indicate which face you would vote for to
> run your country in a time of war.

In the additional-information conditions, respondents also
saw the candidates' party and their positions on gay marriage
(in experiment 2) and information on party and gay marriage
or tax policy (in experiment 3; see app. 3 for study details). In
the party condition, one face was randomly labeled "Re-
publican," and the other face was labeled "Democrat." In the
party–gay marriage condition, each face received a random
party label as well as a random issue position: either "Sup-
ports gay marriage" or "Opposes gay marriage." In the party–
corporate tax condition, each face received a random party
label as well as a random position on corporate taxes: either
"Supports cutting taxes paid by businesses in the US" or
"Opposes cutting taxes paid by businesses in the US." Ex-
periment 2 used an AMT sample, and experiment 3 used a
Survey Sampling International (SSI) sample of adult US res-
idents. Across the two studies (AMT and SSI) and the two sets
of faces (Lausten and Petersen 2016 and Little et al. 2007), we
therefore have four faces-only conditions, four faces plus party
conditions, and six faces plus party and issue stance.

In both studies, the introduction of politically relevant
information about the candidates undermines the role of
facial dominance in voting decisions. Table 2 displays the
results. For each set of faces, the "Difference" column shows
the percent choosing the dominant face in the war condition
minus that percent in the peace condition. With even minimal
information—party identification and one issue position—

Table 2. Facial Dominance in Wartime versus Peacetime, with Additional Political Information

Condition	Lausten and Petersen Faces			Little et al. Faces		
	Difference	p	N	Difference	p	N
Experiment 2: Mechanical turk results ($n = 1,004$):						
Control	58.2 (8.6)	.000	120	39.5 (9.0)	.000	120
Party	30.0 (5.4)	.000	299	19.4 (5.7)	.001	299
Party–gay marriage	15.3 (3.9)	.000	585	5.7 (4.1)	.17	585
Experiment 3: Survey sampling international results ($n = 2,440; 2,646$):						
Control	21.5 (6.6)	.001	221	24.2 (6.7)	.000	221
Party	7.6 (4.5)	.090	481	11.4 (4.5)	.012	482
Party–gay marriage	4.7 (2.5)	.163	841	−0.4 (3.3)	.910	913
Party–corporate tax	3.9 (3.3)	.236	897	5.1 (3.1)	.101	1,030

Note. The "Difference" column presents the difference between the proportion of respondents who preferred the dominant face
in the war condition and the proportion of respondents who preferred the dominant face in the peace condition. In experiment 2,
all of the treatment-group differences are statistically significant compared to the control group, except the party condition for the
Little et al. faces, which just misses significance ($p = .06$). In experiment 3, the party-issue treatment group differences are statisti-
cally significant compared to the control group, but the party condition is not ($p = .08$ for the Lausten and Petersen faces and $p = .11$
for the Little et al. faces).

the difference between the war and peace conditions drops considerably for the Little et al. faces in the AMT sample and both sets of faces in the SSI sample. Compared to the faces only condition (control), the decreases are sometimes statistically significant in the party information conditions, and always statistically significant in the party-issue conditions (see the note to table 2 for details). The upper ends of the 95% confidence intervals for these party-issue conditions are between 23 and 10 percentage points, so we can be reasonably sure the dominance advantage is below those levels. Since Republicans have a pro-military reputation in this period, we checked whether the war condition favored candidates randomly labeled as Republicans but found no statistically significant differences.

CONCLUSION

On the whole, our findings suggest that the intriguing lab findings regarding war and facial dominance may not generalize to real-world elections. Our findings are instead broadly consistent with evidence that politically knowledgeable individuals—those who might know the candidates' positions on gay marriage or corporate taxation—appear to resist appearance-based voting in general elections (Ahler et al. 2017; Lenz and Lawson 2011).

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