The right look: Conservative politicians look better and voters reward it ☆

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ABSTRACT

Since good-looking politicians win more votes, a beauty advantage for politicians on the left or on the right is bound to have political consequences. We show that politicians on the right look more beautiful in Europe, the United States and Australia. Our explanation is that beautiful people earn more, which makes them less inclined to support redistribution. Our model of within-party competition predicts that voters use beauty as a cue for conservatism when they do not know much about candidates and that politicians on the right benefit more from beauty in low-information elections. Evidence from real and experimental elections confirms both predictions.

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1. Introduction

It is by now well established that politicians with an appealing appearance win more votes in elections (see, e.g., Todorov et al. 2005; Berggren et al. 2010; Lawson et al. 2010). After a number of studies demonstrating a relationship between appearance and electoral success, the challenge has been to establish causality and to determine what the political consequences are. Some studies have indeed provided evidence for the relationship being causal. Little et al. (2007) found that manipulation of facial photographs of real politicians can predict winners and losers in experimental elections. Lenz and Lawson (2011) showed that the positive relationship between votes and an appealing appearance is most pronounced among voters with low political knowledge who also watch a lot of TV. Such an interaction is exactly what one should expect from an underlying causal relationship. Ahler et al. (forthcoming) carried out a field experiment and found that voters in their treatment group, who received ballots that included photographs, were considerably more likely to vote for a candidate with an appearance advantage.

The political consequences of voters relying on candidates' looks are still largely unknown. If one side of the political spectrum has a beauty

advantage, it can expect greater electoral success and to have political decisions tilted in its favor.[1] We put forward the hypothesis that politicians on the right look better, and that voters on the right value beauty more in a low-information setting.[2] This is based on the observation that beautiful people earn more (Hamermesh and Biddle, 1994; Scholz and Sicinski, 2015) and that people with higher expected lifetime income are relatively more opposed to redistribution (Fong, 2001; Alesina and Giuliano, 2011). In accordance with this reasoning we show that politicians on the right are more beautiful than politicians on the left in Europe, the United States, and Australia.

The general pattern that politicians on the right look better than politicians on the left implies that beauty can be used as a cue for ideology in low-information elections. We present a theoretical model for within-party competition, which takes place in proportional electoral systems with open lists and in primary elections. In such competition between candidates, beauty is used as such a cue for a conservative ideology in addition to being generally appreciated among voters. In low-information elections, the model predicts that beauty will benefit politicians on the right more than politicians on the left, since the use of beauty as an ideological cue among voters on the right works in tandem with the general appreciation of beauty. In high-information elections, the use of beauty as an ideological cue becomes less relevant and we expect beauty to benefit politicians on the left about as much as politicians on the right. These predictions are supported by experimental and observational evidence.

To analyze the electoral effects of beauty for candidates representing the left and the right, we turn to Finland, which is suitable for our analysis because of its proportional electoral system with multi-member districts, personal votes and within-party competition. Such a system allows us to study whether beauty matters more for candidates on the left or for candidates on the right, since electoral "beauty premia" can be calculated separately for different parties. Plurality-vote systems, in contrast, tend to have two main candidates who compete with each other, and candidates' vote shares are either highly or perfectly negatively correlated, making it difficult or impossible to investigate whether the effect of candidate appearance differs between the left and the right.[3]

We study beauty premia in municipal and parliamentary elections. The former can be regarded as low-information and the latter as high-information elections, where voters know little and reasonably much, respectively, about candidates. We show that in municipal elections, a beauty increase of one standard deviation attracts about 20% more votes for the average non-incumbent candidate on the right and about 8% more votes for the average non-incumbent candidate on the left. In the parliamentary election, the corresponding figure is about 14% for non-incumbent candidates on the left and right alike. This makes clear that voters both on the left and on the right respond to beauty in both types of elections, but that voters on the right are more responsive in a low-information setting.

Experimental election results confirm the observational findings from real elections. When matching candidates of similar age, the same gender and the opposite ideology in a random manner and asking respondents whom they would vote for solely on the basis of facial photographs (i.e., with low information), we find that candidates on the right win more often because they look better on average. Candidates on the right get a higher vote share, both from voters on the right and voters on the left, but with larger success among the former. The average margin of victory of the more beautiful candidate is also larger among voters on the right, indicating that they respond more to beauty. The similar patterns in real and in experimental elections suggest that the results in real elections reflect causal mechanisms. It is hard to see how reverse causality or omitted variable bias related to the election campaigns of candidates could influence voting in experimental elections by respondents from other countries, none of whom recognized any of the candidates.

We proceed as follows. In Section 2, we use data from three continents and establish that politicians on the right look better. We then, in Section 3, present a model of how voters react to beauty in intra-party competition and where we separate elections with low and high information. In Section 4, we show that subjects in an experiment use beauty as a cue for conservatism, as predicted by our model. In Section 5, we use data from Finland and show that when candidates compete against others in the same party, the effect of beauty on votes is about the same for candidates on the right and on the left in high-information elections, but twice as large for candidates on the right in low-information elections. Experimental election results in Section 6 confirm that voters on the right react more strongly to beauty in an election with no information apart from facial photographs of the candidates. Section 7 concludes.

2. The appearance gap between politicians on the left and on the right

2.1. The appearance gap on three continents

In comparing beauty evaluations of politicians representing the left and the right, we make use of our own data from Europe (candidates in Finnish municipal and parliamentary elections; Members of the European Parliament, MEPs),[4] our own data on U.S. candidates in senatorial and gubernatorial elections, based on photos from Todorov et al. (2005) and Ballew and Todorov (2007), as well as data from Australia (candidates in an election to the House of Representatives), collected by King and Leigh (2009). These data are described in online Appendices A.1 and A.4.

Beauty evaluations of candidates from Finland and the United States as well as of MEPs are based on the following question[5]:

What is your evaluation of the physical appearance or attractiveness of this person compared to the average among people living in your country of residence?

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[1] Studies have documented a relationship between appearance and electoral success in Australia (King and Leigh, 2009), Brazil and Mexico (Lawson et al., 2010), Denmark (Laustsen, 2014), Finland (Poutvaara et al., 2009; Berggren et al., 2010), France (Antonakis and Dalgas, 2009), Germany (Rosar et al., 2008), Ireland (Buckley et al., 2007), Japan (Rule et al., 2010), Switzerland (Lutz, 2010), the United Kingdom (Banducci et al., 2008; Mattes and Milazzo, 2014) and the United States (Todorov et al., 2005; Ballew and Todorov, 2007; Atkinson et al., 2009; Benjamin and Shapiro, 2009; Olivola and Todorov, 2010).

[2] Budge and Robertson (1987, pp. 394–95) differentiate between left and right in terms of "economic-policy conflicts – government regulation of the economy through direct controls or takeover … as opposed to free enterprise, individual freedom, incentives and economic orthodoxy.". On the fruitful cross-national usage of left-right terminology, see Bobbio (1996) and Mair (2007).

[3] Most of the studies on the relationship between appearance and electoral success focus on between-party competition (see Todorov et al., 2005; Benjamin and Shapiro, 2009) and thus demonstrate that an appearance advantage has the potential to affect the political power balance and policy outcomes. Therefore, to take the U.S. case, our result that Republicans on average look better than Democrats suggests that the Republicans gain extra votes, due to this appearance advantage. Poutvaara et al. (2009), Berggren et al. (2010) and Lutz (2010) estimate beauty premia in within-party competition but do not study electoral benefits for left and right separately.

[4] MEPs were evaluated by two sets of respondents – see online Appendices A.1 and A.4 for details. The findings reported here are based on replies from American respondents who were recruited through Mechanical Turk ("MTurk"), while we provide findings based on replies from predominantly European respondents in Table B1 in online Appendix B.1. We use the American set as the main one in order to minimize the risk of recognition, and we see the latter as a sensitivity check. Reassuringly, the beauty advantage for the right is very similar (22% compared to 25% here). Each of the 296 American respondents evaluated 99 randomly chosen photographs, and none of them recognized any person. Lastly, with the American respondents we could check whether beauty evaluations of MEPs differed between young and old as well as between low- and high-educated respondents. We report the findings in Tables B2 and B3 in online Appendix B.2. We find that the results cannot really be differentiated: both age groups and both education groups evaluate MEPs on the right as more beautiful than MEPs on the left.

[5] For our data analysis, the replies were coded from 1 to 5, as indicated.

Table 1
Beauty advantages for politicians on the right.

	Beauty advantage (%)	Data source
Australia	32***	King and Leigh (2009)
European Union	25***	Own data
Finland	41***	Own data
United States	14**	Own data

Notes: "Beauty advantage" is defined as the difference between the average beauty rating of politicians on the right and the left, expressed as a percentage share of the standard deviation of all politicians' beauty ratings. *** and ** denote statistical significance at the 1% and 5% levels in one-sided *t*-tests of the null hypothesis that politicians on the right do not look better than politicians on the left. Australia: candidates for the House of Representatives; European Union: Members of the European Parliament; Finland: candidates in municipal and parliamentary elections; United States: candidates in Senate and gubernatorial elections. Respondents evaluating Australian candidates were Australian; respondents evaluating MEPs were American – for results using predominantly European respondents, see Table B1 in online Appendix B.1; respondents evaluating Finnish candidates were all non-Finns; and respondents evaluating American candidates were predominantly European.

Very unattractive (1)
Below average (2)
Average (3)
Above average (4)
Very handsome or beautiful (5)
Cannot say/Prefer not to answer

Beauty evaluations from Australia were collected using a 9-point scale and were then normalized. We find that politicians on the right are more beautiful in Europe, the United States and Australia. Table 1 summarizes our findings.[6]

2.2. Explaining left-right differences in beauty

A simple economic explanation of the appearance gap in favor of the right is that beautiful people earn more money (Hamermesh and Biddle, 1994; Mobius and Rosenblat, 2006; Scholz and Sicinski, 2015), and the more people earn, the more they are inclined to oppose redistribution (Alesina and Giuliano, 2011) and, arguably, to support, get active in and represent parties to the right. A more general psychological explanation could be that good-looking people are more likely to perceive the world as a just place, since they are treated better than others (Langlois et al. 2000), achieve higher status (Anderson et al. 2001) and are happier (Hamermesh and Abrevaya, 2013) – and a frequent reason for people to sympathize with the left is a perception of the world as unfair.[7] In line with this, it has been found that greater self-reported attractiveness is negatively related to a preference for egalitarianism, typically associated with the left: The more beautiful people consider themselves, the less they are in favor of redistribution (Price et al. 2011; Belmi and Neale, 2014).

We are able to address this hypothesis using the National Longitudinal Study of Adolescent Health (Harris and Udry, 2012), which includes interviewer evaluations of physical attractiveness and self-reported ideological position from very liberal (in the American sense of the term, i.e., left-oriented) to very conservative for 4789 American youths. We find that conservatism and beauty are positively correlated among men (see online Appendix B.4 for the detailed results). As most U.S. politicians are men, these findings suggest that Republicans have an advantage in recruiting good-looking politicians.

3. A model of voter responses to beauty in intra-party competition

We present a theoretical model of voters' reactions to beauty when choosing which political candidate to vote for within a given party. The model is stylized and tractable, and it can be directly applied to intra-party choice in proportional elections with open lists and to primary elections. We model two distinct voter reactions to beauty: a general appreciation of beauty and the use of beauty as a cue for conservatism.

Voters differ in their ideology i, which is distributed between 0 (furthest to the left) and 1 (furthest to the right), with density function $f(i)$ and cumulative distribution function $F(i)$. There are two political parties, L on the left and R on the right. The ideological position of party L, as expressed in its party platform, is i_L, and the ideological position of party R, as expressed in its party platform, is i_R, so that $0 \leq i_L < i_R \leq 1$.[8] We assume that candidates differ in their beauty (b) and ideological congruence (c). A candidate x with ideological congruence c_x, $0 < c_x \leq 1$, votes in line with the party ideology with probability c_x, and in line with the other party's ideology with probability $1 - c_x$.[9] It is plausible that $0.5 \leq c_x \leq 1$, meaning that all candidates are at least as likely to vote in line with the ideology of their own party, as opposed to that of the other party, but the model can be solved even when this is not the case.

In addition, the shares of voters who are informed and uninformed may differ between elections. The share of informed (uninformed) voters in election t is denoted by q_t $(1 - q_t)$. It is assumed to be constant across the ideological spectrum, but the model could be solved with any other distributional assumption. Informed voters observe the party affiliation, beauty and ideological congruence of political candidates. Uninformed voters observe only candidates' party affiliation and beauty. Voters vote for the party whose platform is closer to their ideology: those with $i \leq i\sim = \frac{i_L + i_R}{2}$ vote for L, and those with $i > i\sim$ vote for R.[10]

After choosing which party to vote for, voters choose a candidate to vote for within their preferred party. There are two candidates in each party: A and B in party L and G and H in party R. The candidates are identified by subscripts A, B, G and H. Without loss of generality, assume that $b_A \geq b_B$ and $b_G \geq b_H$. The beauty of candidates, b_X, $X \in \{A, B, G, H\}$, varies between 0 and 1, with 0 being very unattractive and 1 being very beautiful.

We first analyze the likelihood that voter m, who has decided to vote for party L, votes for candidate A. We denote a voter-specific popularity parameter in favor of candidate A by σ_m, with negative values implying a preference in favor of candidate B. The popularity parameter follows a uniform distribution on the interval $[-\frac{\Sigma}{2}, \frac{\Sigma}{2}]$, where Σ is assumed to be large enough so that the probability of voting for candidate A is always between 0 and 1. The voter-specific popularity parameter follows the same distribution among informed and uninformed voters, and may depend on the candidate's age, gender or any characteristic other than beauty or ideology that voters may care about. When voter m is informed, the expected utility if candidate A is elected is

$$EU(c_A, b_A) = -c_A|i_m - i_L| - (1 - c_A)|i_m - i_R| + \beta b_A + \sigma_m. \quad (1)$$

The expected utility if candidate B is elected is

$$EU(c_B, b_B) = -c_B|i_m - i_L| - (1 - c_B)|i_m - i_R| + \beta b_B. \quad (2)$$

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[6] In online Appendix B.3, we explore our Finnish data further, presenting first average beauty evaluations and then showing that the beauty advantage of candidates on the right is robust and cannot be explained by the ethnicity, age, style or clothing of candidates, by the age, country or ideology of respondents, or by the quality of photographs. We also report that voters on the right value presence and style more than voters on the left.

[7] In fact, Napier and Jost (2008) present results to the effect that people on the right are happier precisely because they do not see a need for egalitarianism, i.e., because they by and large perceive the world as a just place.

[8] We assume that party platforms are chosen by ideologically motivated party members or party leaders, but we do not model the choice explicitly. See Calvert (1985) for a model with exogenous party membership and Poutvaara (2003) for a model with endogenous party membership.

[9] The setting of the model is inspired by Besley (2004), who assumes that congruent politicians share voters' objectives, while dissonant politicians gain private utility from deviating from those objectives. In our model, congruence is defined relative to the ideological position of the party, rather than as a shared preference with the electorate at large.

[10] The assumption that voters with $i = i\sim$ vote for party L is inconsequential as there is a continuum of voters.

The term β reflects a general valuation of beauty.[11] Denoting the ideological distance between voter m and party K's platform by $d_{m,K} = |i_m - i_K|, K \in \{L, R\}$, we can write the condition that an informed voter m votes for A as

$$(c_A - c_B)(d_{m,R} - d_{m,L}) + \beta(b_A - b_B) + \sigma_m > 0. \tag{3}$$

An uninformed voter choosing between candidates in party L does not observe a candidate's ideological congruence, but forms an expectation of it, based on beauty:

$$c_x^E = \mu_0^L - \mu_1^L b_x, x \in \{A, B\}. \tag{4}$$

We assume that $0 < \mu_1^L \le \mu_0^L \le 1$, which corresponds both to the idea that beauty serves as a cue for conservatism (as demonstrated empirically in Section 4) and to our empirical findings of a beauty advantage on the right (as reported in Section 2.1). We also assume that the perceived congruence of a political candidate is always between 0 and 1. Note that the use of beauty as a cue for conservatism implies that uninformed party L voters expect that more beautiful candidates in party L have a lower likelihood of being congruent. The condition that an uninformed voter votes for A is found by replacing c_A and c_B in Eq. (3) by c_A^E and c_B^E in Eq. (4):

$$\mu_1^L(b_B - b_A)(d_{m,R} - d_{m,L}) + \beta(b_A - b_B) + \sigma_m > 0. \tag{5}$$

For future use, denote the average distance between the ideal points of uninformed voters voting for party L and party L's ideological position by $\bar{d}_L^L$ and the average distance between the ideal points of uninformed voters voting for party L and party R's ideological position by $\bar{d}_R^L$. The average distances are given by

$$\bar{d}_L^L = \int_{i=0}^{\tilde{i}} \frac{f(i)|i_L - i|}{F(\tilde{i})} di = \int_{i=0}^{i_L} \frac{f(i)(i_L - i)di}{F(\tilde{i})} + \int_{i=i_L}^{\tilde{i}} \frac{f(i)(i - i_L)di}{F(\tilde{i})} \tag{6}$$

$$\bar{d}_R^L = \int_{i=0}^{\tilde{i}} \frac{f(i)(i_R - i)}{F(\tilde{i})} di. \tag{7}$$

Next, we analyze the likelihood that voter n, who has decided to vote for party R, votes for candidate G. We denote an individual-specific popularity parameter in favor of candidate G by σ_n, with negative values implying a preference in favor of candidate H. As in party L, it follows a uniform distribution on the interval $[-\frac{\Sigma}{2}, \frac{\Sigma}{2}]$, where Σ is assumed to be large enough so that the probability of voting for G is always between 0 and 1. The individual-specific popularity parameter follows the same distribution among informed and uninformed voters. For an informed voter n, the utility in case candidate G is elected is

$$EU(c_G, b_G) = -c_G|i_n - i_R| - (1 - c_G)|i_n - i_L| + \beta b_G + \sigma_n. \tag{8}$$

The utility in case candidate H is elected is

$$EU(c_H, b_H) = -c_H|i_n - i_R| - (1 - c_H)|i_n - i_L| + \beta b_H. \tag{9}$$

Using the ideological distance between party K, $K \in \{L, R\}$, and voter n, we can write the condition that an informed voter n votes for candidate G as

$$(c_G - c_H)(d_{n,L} - d_{n,R}) + \beta(b_G - b_H) + \sigma_n > 0. \tag{10}$$

An uninformed voter does not observe a candidate's congruence, but forms an expectation of it based on beauty:

$$c_x^E = \mu_0^R + \mu_1^R b_x, x \in \{G, H\}. \tag{11}$$

For voters on the right, we assume that $\mu_0^R \ge 0, \mu_1^R > 0$ and $\mu_0^R + \mu_1^R \le 1$, corresponding to the idea that beauty serves as a cue for conservatism. We also assume, as we did for candidates in party L, that the perceived congruence of a candidate in party R is always between 0 and 1. The use of beauty as a cue for conservatism implies that uninformed party R voters expect that more beautiful candidates in party R have a higher likelihood of being congruent. The condition that an uninformed voter votes for G is found by replacing c_G and c_H in Eq. (8) by c_G^E and c_H^E in Eq. (9):

$$\mu_1^R(b_G - b_H)(d_{n,L} - d_{n,R}) + \beta(b_G - b_H) + \sigma_n > 0. \tag{12}$$

We denote the average distance between the ideal points of uninformed voters voting for party R and party L's ideological position by $\bar{d}_L^R$ and the average distance between the ideal points of uninformed voters voting for party R and party R's ideological position by $\bar{d}_R^R$. The average distances are given by

$$\bar{d}_R^R = \int_{i=\tilde{i}}^{1} \frac{f(i)|i_R - i|}{1 - F(\tilde{i})} di = \int_{i=\tilde{i}}^{i_R} \frac{f(i)(i_R - i)di}{1 - F(\tilde{i})} + \int_{i=i_R}^{1} \frac{f(i)(i - i_R)di}{F(\tilde{i})} \tag{13}$$

$$\bar{d}_L^R = \int_{i=\tilde{i}}^{1} \frac{f(i)(i - i_L)}{1 - F(\tilde{i})} di \tag{14}$$

We next offer a definition:

Definition 1. The beauty premium is the rate at which a political candidate's vote share increases in his or her beauty.

We can now show:

Proposition 1. *The beauty premium is* $\frac{\beta - (1 - q_t)\mu_1^L(\bar{d}_R^L - \bar{d}_L^L)}{\Sigma}$ *for political candidates in party L and* $\frac{\beta + (1 - q_t)\mu_1^R(\bar{d}_L^R - \bar{d}_R^R)}{\Sigma}$ *for political candidates in party R.*

Proof. See online Appendix C.

Proposition 1 implies that as long as there are some uninformed voters ($q_t < 1$), the beauty premium is larger for political candidates in party R. The reason is that uninformed voters on the right value beauty both in itself and as a cue for conservatism. Uninformed voters on the left also value beauty in itself, but for them its connotation with conservatism counteracts this effect. The difference between the beauty premium in party R and the beauty premium in party L is decreasing in the share of informed voters. If all voters are informed ($q_t = 1$), the beauty premium is the same in both parties.

Note that there is a negative beauty premium for political candidates in party L if $\beta < (1 - q_t)\mu_1^L(\bar{d}_R^L - \bar{d}_L^L)$, i.e., if there is a relatively low intrinsic valuation of beauty compared with its perceived effectiveness as a cue for conservatism.

In the subsequent empirical analysis, we estimate separate beauty premia for political candidates representing the left and political candidates representing the right in real low-information and in high-information elections. Finally, experimental elections and surveys in which respondents are asked to evaluate the beauty and ideology of candidates from other countries allow us to test the predictions of our model at the level of voter behavior.

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[11] This general appreciation of beauty in politics could be explained by beautiful people being perceived as more competent (Eagly et al., 1991) or by voters experiencing satisfaction when supporting good-looking candidates. On the evolutionary origins of an appreciation of beauty, see the original contribution by Darwin (1871) and recent evidence in Rhodes (2006). Besley and Coate (1997) explicitly mention a preference for good looks as a reason for voters to care about the identity of representatives in their citizen-candidate model.

4. Beauty as a cue for conservatism

Voters using beauty as a cue for conservatism was a fundamental assumption in the theoretical model in Section 3. The assumption can be justified indirectly by the fact that candidates on the right are generally more beautiful than candidates on the left, as we demonstrated in Section 2. In this section, we test the assumption directly, by conducting three experiments in which subjects are shown photos of Members of the European Parliament, candidates in U.S. Senate and gubernatorial elections, as well as candidates in Finnish municipal and parliamentary elections. The details of these experiments are presented in online Appendices A.2 and A.4.

In the first two experiments, subjects were shown photographs of either MEPs or U.S. candidates and were asked to indicate on a scale from 1 to 10 where they expected each politician to be located on a left–right scale ranging from 1 (farthest to the left) to 10 (farthest to the right).[12] Subjects correctly placed MEPs representing party blocs that we classify as left to the left of MEPs representing party blocs that we classify as right (using the same classification as in Section 2).[13] The average score on the 1–10 scale was 5.64 and 5.98 for MEPs representing the left and the right party bloc, respectively (p-value of difference = 0.0000; one-sided *t*-test).[14] For U.S. candidates, the average score was 5.47 and 5.66 for Democrats and Republicans, respectively (p-value of difference = 0.0088; one-sided *t*-test).

How were subjects able to differentiate between politicians on the left and on the right in the manner just described? As made precise in our model in Section 3, we propose that voters use beauty as a cue for conservative ideology. To test whether they do, we regress the politicians' inferred ideology on beauty evaluations from another pool of respondents, controlling for the gender and age of the politicians. We find that beautiful politicians, both in Europe and the United States, are placed farther to the right, as shown in Table 2.

In the third experiment, we asked subjects to indicate, on the basis of photographs alone, the side which each of the Finnish candidates represents. These classifications, reported in Table 3, likewise offer support for beauty being used as a cue for conservatism. Regardless of the true party of the candidates, the average beauty of candidates classified as being on the right exceeds that of candidates classified as being on the left.

5. Beauty premia on the left and on the right in real elections

In this section, we explore whether beauty is more electorally beneficial for political candidates on the right in municipal and parliamentary elections in Finland. Finland has a proportional electoral system in both municipal and parliamentary elections. Each voter has to vote for

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[12] Subjects were not told that they were evaluating MEPs or U.S. candidates.

[13] Cf. Jahoda (1954) and Bull and Hawkes (1982), who found that MPs who were perceived to belong to the Conservative Party were rated as more attractive than MPs who were perceived to belong to the Labour Party. However, these early studies did not explore whether politicians on the right actually looked better. Rule and Ambady (2010) find that people are able to infer whether political candidates are on the left or on the right only by looking at their faces, which may be taken to support the interpretation that voters use facial appearance as a cue for non-egalitarianism or similar aspects of ideology. Tskhay and Rule (2013) demonstrate that experimental participants are often able to correctly characterize "perceptually ambiguous groups", including the religious and political affiliation of persons in photographs or video clips.

[14] As we outline in online Appendices A.1 and A.4, we undertook two surveys for evaluating MEPs, one with American respondents and one with predominantly European respondents. These figures are from the former, to decrease the risk of recognition; the corresponding figures from the latter are 5.36 and 5.72, respectively (p-value of difference = 0.0000; one-sided *t*-test). Only two out of 294 respondents recognized someone (one candidate each) and were excluded. In addition, with the American respondents we can check whether ideology evaluations of MEPs differ between young and old as well as between low- and high-educated respondents. We report the findings in Tables B2 and B3 in online Appendix B.2. Both age groups and both education groups evaluate MEPs on the right as being to the right of left MEPs, and the averages between the groups are similar in size.

Table 2
Regressions with inferred ideology as dependent variable.

	MEPs	U.S. Senate and gubernatorial candidates
Beauty	0.10***	0.54***
	(0.04)	(0.04)
Male dummy	0.53***	0.45***
	(0.03)	(0.04)
Age	0.31***	0.13***
	(0.003)	(0.04)
Constant	3.06***	0.97***
	(0.04)	(0.35)
No. politicians	568	510
R-squared	0.37	0.34

Notes: The dependent variable is the average inferred ideology (on the 1–10 scale) of a politician, with 10 being farthest to the right. Coefficients are standardized. Robust standard errors in parentheses. All politicians in the sample represented either a party on the left or a party on the right. Respondents evaluating U.S. candidates were predominantly European, while those evaluating MEPs were American (for results for MEPs using predominantly European respondents, see Table B9 in online Appendix B.3).
*** Denotes statistical significance at the 1% level.

one candidate on a party list, which creates within-party competition among a large number of candidates. Candidates from a given party are elected in the order of their personal votes in their district. Each municipality is obliged by law to provide each party with the same number of slots for posters – and most posters contain photographs of all candidates of a party. Within-party competition in a proportional system allows us to study whether beauty matters more for candidates on the left or for candidates on the right; in one-member districts, vote shares of competing candidates are perfectly negatively correlated in two-party races and strongly negatively correlated also in the presence of smaller parties. Since we study the electoral effects of beauty in a system with within-party competition, it is important to note that although the ideology of candidates differs less within than between parties, cues about ideology could still be informative about differences between candidates from the same party. In online Appendix D, we use data from a voting aid application to show that there is significant within-party variation in candidates' self-reported ideology.

Electoral competition works quite differently at the municipal and at the national level. Municipal elections can be characterized as low-information elections – defined by Buckley et al. (2007, p. 176) as "elections which do not involve significant constitutional office and do not attract large scale media coverage" – because only a few candidates are "career politicians" who are politicians by occupation or have a history of active campaigning and public visibility. Advertising is mainly restricted to posters and newspaper ads; hardly any candidates run individual campaigns on television or radio. By contrast, the parliamentary election can be characterized as one of high information. Parliamentary candidates are a more select group that is, for several reasons, more visible to the public. Many parliamentary candidates hold or have previously held seats at the municipal level and have a political history of which voters are aware. Candidates who spend large amounts of money on campaigning are mainly observed in the parliamentary election. In terms of the theoretical model in Section 3, it is

Table 3
Average beauty evaluations of Finnish candidates according to inferred ideology.

	Beauty	Observations
Candidates on the right inferred as right	2.96 (1.04)	1658
p-Value of difference	0.0001	
Candidates on the right inferred as left	2.82 (1.00)	1401
Candidates on the left inferred as right	2.67 (0.98)	2218
p-Value of difference	0.0006	
Candidates on the left inferred as left	2.58 (0.96)	3080

Notes: Standard deviations are in parentheses. Candidates on the right belong to the National Coalition Party. Candidates on the left belong to the Social Democratic Party or to the Left Alliance. One observation is one assessment of one candidate by one respondent. p-Values are from one-sided *t*-tests of the null hypothesis that candidates on the right do not look better than candidates on the left. Respondents were all non-Finns.

reasonable to expect that the fraction of informed voters (q_t) is smaller in municipal than in parliamentary elections.

We use regression analysis in order to investigate the relationship between beauty and electoral success. We define the *Beauty* of a candidate as the mean beauty assessment of his or her photograph among all respondents who evaluated it. *Beauty* is standardized to have a standard deviation of one. In order to simplify the analysis and make a clear distinction between low-information and high-information elections we focus on non-incumbent candidates. We use list fixed effects in our regressions in order to capture how beautiful a candidate is perceived to be in relation to the other candidates on the same list. We compare electoral competition within the National Coalition Party on the right with that within the Social Democratic Party and within the Left Alliance on the left.[15]

Our dependent variable, *Relative success*, is defined in the following way for candidate *i* on list *j*:

$$Relative\ success_{i,j} = (p_i/v_j) * 100 \tag{15}$$

where p_i is candidate *i*'s number of personal votes and v_j is the number of all votes for candidates on list *j* divided by the number of candidates on list *j*. As the main explanatory variable, we use *Beauty*. This is in keeping with results found by Berggren et al. (2010) and Lutz (2010), showing that beauty evaluations have a higher explanatory power than competence evaluations, and Verhulst et al. (2010), demonstrating that beauty can be seen as a fundamental variable with halo effects on character-based inferences such as perceived competence. *Beauty* is interacted with *Right*, a dummy variable for candidates on the right (i.e., candidates who belong to the National Coalition Party). We also include *Male*, a dummy variable for male candidates, both by itself and interacted with *Right*.

Table 4 contains the regression results that allow us to compare the beauty coefficients of candidates on the left and on the right. We include the interaction of all unreported dummy variables with *Right* in most specifications, but we do not report estimates for the full set of interaction terms in the table. The unreported dummies are *Young*, which denotes an age under 30, and *Old*, which denotes an age over 60, together with dummies for education. For both the municipal and the parliamentary elections, we report three specifications that differ in whether we control for education and whether we interact the variables with unreported coefficients (age and education) with *Right*.

Columns (1)–(3) show that in the municipal elections, the beauty coefficient of candidates on the right is substantially larger than that of candidates on the left (the total beauty coefficient of candidates on the right is obtained by adding the coefficients for *Beauty* and *Beauty × Right*). The beauty coefficients are not much affected by the inclusion of dummies for education (column 3). The positive beauty premium for candidates on the left in the low-information municipal election implies that $\beta > (1-q_t)\mu_I^L(\overline{d}_R^L - \overline{d}_L^L)$ in the model of voter responses to beauty in Section 3. There is a general appreciation of beauty alongside its use as an ideological cue.

As shown in columns (4)–(6), the differences in estimated effects of beauty between candidates on the left and on the right that were evident in the municipal elections seem to be absent in the parliamentary election. There is a beauty premium for candidates both on the left and on the right, such that a beauty increase of one standard deviation attracts about 14–16% more votes for the average candidate.

The estimated model in Table 4 excludes incumbents. We present results when both incumbents and non-incumbents are included in Table B10 in online Appendix B.5. Reassuringly, the estimates show the same pattern: in municipal, low-information elections the beauty premium is much larger for non-incumbent candidates on the right.

We find, however, that the results seem to only apply to non-incumbents, which is not surprising, given that incumbents are generally well-known, such that ideological cues from candidate appearance can be expected not to be very important.[16]

To approximate the electoral importance of beauty, we have carried out some mechanical calculations to roughly see how many candidates that were elected because of their looks. This was done using the coefficients of *Beauty* and *Beauty × Right* from a specification that included both incumbents and non-incumbents (Table B10, columns (3) and (6), in online Appendix B.5). We have calculated the distribution of votes for the hypothetical situation in which the beauty of all candidates equal the average beauty of all candidates on their list. We assume that these changes in beauty only influence the choice of candidates within a list and not the choice between different parties. The new hypothetical ranking of candidates within the lists gives the number of elected politicians who would not have been elected had there been no beauty differences within the lists. In other words, we get the number of candidates who were elected because of their looks. For municipal elections, we find the numbers to be 0 out of 65 politicians on the left (0%) and 4 out of 58 politicians on the right (7%). For parliamentary elections, the figure for the left is 2 out of 64 politicians (3%) and for the right 2 out of 39 politicians (6%). This is an indication of the share of politicians on each side that is elected because of their good looks, and the share is clearly higher on the right.

We finally note that a larger beauty premium on the right could reinforce the advantages enjoyed by political parties on the right when it comes to recruiting good-looking candidates. Good-looking supporters of parties on the right could respond to a higher responsiveness to beauty among voters on the right by an increased willingness to run for office, compared to good-looking supporters of parties on the left.

6. Beauty premia on the left and on the right in an experimental election

To investigate whether the higher beauty premium on the right reflects a causal mechanism, we have carried out an experimental election. For this election, we used 100 randomly selected photographs of candidates on the left from the Finnish elections and matched them with 100 photographs of candidates on the right. The matching was random subject to the constraints that the candidates should be of the same gender, of similar age and from the same type of election (municipal or parliamentary). Respondents were 41 non-Finns residing outside of Finland, primarily in Germany and Sweden. Since the photographs were the only information about the candidates available to respondents, we have a low-information election by construction. In terms of the theoretical model in Section 3, the fraction of informed voters (q) equals zero.

What we can investigate in this low-information setting is whether candidates on the right win more often; whether this can be linked to better looks; and whether voter-respondents on the right are more responsive to beauty in their voting choices. Not least, since facial photographs are the only information available to respondents, we can be sure that the experimental votes are cast based on this information; i.e., any relationship between candidate appearance and votes cannot be driven by omitted variables such as candidate effort or monetary resources. For the same reason, the experimental election will support a causal interpretation of the real election results – if voting patterns are similar.

Candidates on the right looked better in 61 of the 100 matched pairs (the p-value is 0.0180 in a one-sided binomial test of the null that the winning probability is not larger than 0.5). The average beauty was 2.91 for candidates on the right and 2.61 for candidates on the left

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[15] The pooling of candidates from the Social Democratic Party and the Left Alliance is supported by statistical tests; there is no specification in which we can reject that the beauty coefficients are equal for candidates from these two parties.

[16] The combined point estimate of beauty is positive for incumbents on the right, but smaller than for incumbents on the left. However, since the standard errors are very large, it is not possible to say with any degree of certainty that this difference actually holds.

Table 4
Beauty premia of non-incumbent candidates in real elections.

	Municipal Non-incumbents (1)	Municipal Non-incumbents (2)	Municipal Non-incumbents (3)	Parliamentary Non-incumbents (4)	Parliamentary Non-incumbents (5)	Parliamentary Non-incumbents (6)
Beauty	9.14***	8.36***	8.40**	15.92***	15.55***	13.50***
	(2.57)	(2.43)	(2.54)	(3.76)	(3.73)	(3.88)
Beauty × Right	9.76**	13.44***	11.22***	1.57	2.47	4.93
	(3.39)	(2.46)	(2.59)	(7.20)	(7.29)	(7.50)
Male dummy	−20.05	−19.06	−18.13	5.01	5.41	6.79
	(10.95)	(10.95)	(9.94)	(6.12)	(6.24)	(5.35)
Male dummy × Right	25.00	26.88	21.32	2.22	1.55	0.93
	(19.53)	(19.13)	(21.39)	(12.47)	(12.67)	(11.61)
Age dummies	Yes	Yes	Yes	Yes	Yes	Yes
Education dummies	No	No	Yes	No	No	Yes
Unreported dummies interacted with Right	No	Yes	Yes	No	Yes	Yes
List fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Number of candidates	686	686	686	489	489	489
R-squared	0.02	0.02	0.03	0.06	0.06	0.07

Notes: The dependent variable is Relative success in the Finnish 2004 municipal and 2003 parliamentary election. Non-incumbent candidates do not serve in the office to which they are candidates. Candidates on the right belong to the National Coalition Party. Candidates on the left belong to the Social Democratic Party or to the Left Alliance. The education dummies are comprehensive school or less (at most 10 years of schooling); upper-secondary education (corresponds to 12 years of schooling); vocational education (10–12 years of schooling); and university education (with a degree). Robust standard errors clustered at the list level are in parentheses. Respondents were all non-Finns.

*** Denotes statistical significance at the 1% level.
** Denotes statistical significance at the 5% level.

(the p-value of the difference is 0.0001 in a one-sided *t*-test). The candidates on the right are also the more successful in this experimental election, independently of the respondents' own ideology – see Table 5. The comparison of the two electoral-success measures for voter-respondents on the right and on the left provides a first indication that respondents on the right react more strongly to beauty differences.

To test whether respondents on the right react more strongly to beauty differences, we present regression results from the same low-information setting. In Table 6 we report results that show the probability of voting for the candidate whose photograph happened to be placed first.

Column (1) reveals that respondents are more likely to vote for a candidate the larger that candidate's beauty advantage is. Column (2), in which *Beauty gap* is interacted with being a respondent on the right, shows that voters on the right respond more to beauty than voters on the left. In line with our findings for real elections in Section 5, the estimates indicate that voter responses based on a general appreciation of beauty (β) are larger than voter responses based on the usage of beauty as an ideological cue (μ_1). Coefficient sizes are, however, not directly comparable across the different settings in Sections 5 and 6.

To sum up, we find that candidates on the right outperform candidates on the left in an experimental election and that the superior performance of candidates on the right can be linked to their beauty advantage – especially among respondents on the right. This supports a causal interpretation of our findings for real elections.

7. Summary and discussion

Many studies have shown that candidate appearance is related to electoral success, but so far it has not been explored whether this favors one political side over the other. Our study addresses this question and makes three contributions to the literature on appearance-based voting.

First, we show that politicians on the right are more beautiful than politicians on the left in Europe, the United States and Australia. This is bound to have political consequences, as their beauty advantage, all else equal, makes candidates on the right more likely to win office and implement their preferred policies.

Our second contribution is to formulate a theoretical model of voter responses to beauty in an electoral system with competition between candidates within parties, such as in proportional elections with open lists or in primary elections. In the model, voters' responses to beauty depend on their ideology and available information. In addition to a general appreciation of beauty, we propose that voters use beauty as a cue for candidate ideology in settings in which they do not know much about candidates apart from their facial appearance. Our

Table 5
Electoral success for candidates on the right in an experimental election.

Respondent category:	Left	Right
Share of races won by candidate on the right	0.60**	0.72***
Average vote share of candidate on the right	0.57***	0.66***

Notes: A voter-respondent is on the right (left) if the answer to a question about whether redistribution in his or her country should be increased was "somewhat against" or "strongly against" ("somewhat in favor" or "strongly in favor"). For the average vote share the significance levels refer to p-values from one-sided *t*-tests of the null hypothesis that the vote share does not exceed 0.5. For the share of races won by the candidate on the right the significance levels refer to p-values from one-sided binomial tests of the null hypothesis that the probability of the right candidate winning is not larger than 0.5 in each pairwise election. Number of respondents on the right (left): 15 (21). Respondents were all non-Finns.

*** Denotes statistical significance at the 1% level.
** Denotes statistical significance at the 5% level.

Table 6
Beauty in an experimental election.

	(1) Vote for the first candidate	(2) Vote for the first candidate
Beauty gap between the first and second candidates	0.22***	0.19***
	(0.01)	(0.01)
Right respondent × Beauty gap		0.06***
		(0.02)
Right respondent		−0.002
		(0.02)
Constant	0.49***	0.49***
	(0.01)	(0.01)
R-squared	0.14	0.14
Observations	2668	2668

Notes: The first (second) candidate refers to the candidate whose photograph was placed to the left (right) on the survey page. The dependent variable is a dummy = 1 for voting for the candidate placed first. The beauty gap is the average beauty score of the first candidate minus the average beauty score of the second candidate. Robust standard errors are in parentheses. According to F-tests, neither of the constants differs from 0.5 at the 10% significance level. The sample includes respondents who are either classified as being ideologically on the left or on the right. "Abstain from voting" responses are excluded. Respondents were all non-Finns.

*** Denotes statistical significance at the 1% level.

explanation is that beautiful people tend to have both higher incomes and higher social status and are therefore more likely to see the world as just place and embrace conservative values. The model predicts that uninformed voters use candidate looks as a cue for a conservative ideology, resulting in a larger beauty premium on the right. Although other modeling approaches are conceivable, such as allowing for a choice between several candidates representing different parties, we have chosen to focus on a stylized and tractable model that can be directly applied to intra-party choice in proportional elections with open lists and in primary elections, and which yields easily testable predictions. Nonetheless, we see such an extension as a good topic for future research.

Our third contribution is to show empirically that voters indeed use beauty as a cue for candidate ideology, and that non-incumbent candidates on the right benefit more from beauty in low-information elections. Better-looking politicians are inferred to stand further to the right, independently of which party they really represent. We find that the beauty premium is more than twice as large among candidates on the right compared to candidates on the left in real low-information elections, but about the same in real high-information elections. An experimental low-information election confirms that voters favor better-looking candidates, and that conservative voters do so to a larger extent. The general appreciation of beauty among voters means that politicians on the right, who look better on average, have an advantage in elections. This can, in turn, be expected to have welfare consequences, since the relative strengths of the two main opposing sides in politics are affected and thereby the character of economic and social policy.

Appendix A. Supplementary data

Supplementary data to this article can be found online at http://dx.doi.org/10.1016/j.jpubeco.2016.12.008.

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