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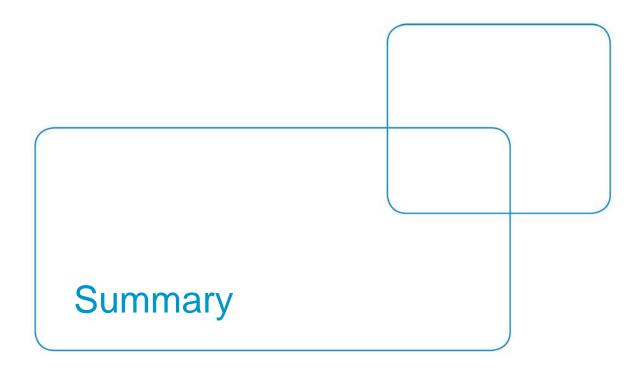
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Issue positions, political programs or past performances of candidates and parties explain only partially a voters' choice. Other more simple mechanisms play a role too. In this paper we explore the influence of physical attractiveness on the number of preference votes cast for 744 candidates at the National Council elections in Switzerland in 2007. The Swiss open ballot PR electoral system offers a good opportunity to study such effects because voters do not only choose between parties or between candidates, but they choose candidates from within parties.

We find a robust influence of physical attractiveness on the number of preference votes a candidate gets as well as an influence on getting elected, which is a more specific measure of electoral success. Attractiveness matters equally much for men and for women. This influence of attractiveness is direct: the influence does not disappear once we control for the rating of the same picture of a candidates competence.

The Electoral Success of Beauties and Beasts

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October 2009

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1. Introduction

This paper explores how physical attractiveness influences the electoral success of candidates for National Council elections in Switzerland in 2007. The Swiss open ballot PR electoral system with its extensive possibilities to express preference votes for candidates is a good case to study such effects of personal candidate attributes because a candidate choice takes place separate to the party choice. For the empirical analysis 25 coders rated 744 candidate pictures in four electoral districts (cantons) with a large district magnitude. In large cantons most candidates don't run much of an active campaign. We can expect that although we look at national elections, information on single candidates is limited and therefore the likelihood of attractiveness to matter is larger than in elections where only few candidates compete.

Democratic theory generally assumes that citizens are reasonable and that they are willing and capable of participating in democratic elections. This model of rational voter choices is most explicit in the economic theory of democracy and voting developed by (Downs 1957b), (Downs 1957a), although other models of electoral choice implicitly assume informed rational decisions of voters too. In this model a voters choice would usually be based on the evaluation policy programs in comparison to a voters own preferences, an assessment of past performance of incumbent parties and candidates as well as non-policy related factors such as leadership quality or trust.

The reality is rather far away from this ideal. Voters know very little about relevant parties or candidates and about politics and political institutions in general (Delli Carpini and Keeter 1991, 1996; Bennett 1995) and they are often not very interested in politics either. Only few voters base their choice on complex political considerations. Affect and emotions influence decision making also in politics: This "most commonly used mode [affect and emotion], as it is in other domains of life, is casual, even thoughtless, reliance on habitual dispositions" (Marcus et al. 2000).

A lack of information is not necessarily a problem. Gathering information on party and candidate preferences is costly and demanding and it is understandable that voters only want to spend a limited amount of time when making a vote choice. This does however not necessarily lead to an unreasonable decision. According to Popkin (1991) and Bennett and Resnick (1990) there are low-information decision making strategies which lead to reasonable choices. People have a very practical way of thinking about politics, which allows them to make a reasoned choice (Lupia and McCubbins 1998). Voters can also rely on different shortcuts and cues when making a party or candidate choice (Lau and Redlawsk 2001). Many voters base their choice on the attachment to a party or on their ideologies. Partisanship is an important cue in political decision making in many situations (Riggle et al. 1992). Voters are embedded in social networks and different interest groups and opinion leaders can endorse an opinion. Voter can use media or poll results or they can rely on friends or people from public live they trust. In addition, although there may be some "noise" in individual decisions, errors at the individual level may equal each other out at the aggregate level (Page and Shapiro 1992, 1999). However there is some doubt, whether aggregate public opinion is any better than individual opinions, since it does not necessarily need to be the case that individual bias does not lead to an aggregated "correct" opinion. (Althaus 1998).

There are more trivial shortcuts which can matter. Those shortcuts can not be linked directly to rational political considerations of policy positions or on who would do a good job in parliament or government. Some voters may care about socio-demographic characteristics (Cutler 2002) such as sex, race (Hedlund et al. 1979; McDermott 1998) or skin colour (Leigh and Susilo 2009) or age when they vote because they believe that these characteristics matter somehow for policy making or because they want to be represented by people alike them. Some of these characteristics can be reasonable if they are based on a judgment about possible legislative behaviour of certain candidates, irrespective whether this is true or not.

In this article we will go one step further and explore if and how physical attractiveness plays a role for an electoral choice. A candidates physical attractiveness has obviously very little to do with objective ability to be a good politician and therefore reveals little about a candidates political qualities.

2. Advantages of being attractive

2.1. Attractiveness and (electoral) success

Being attractive has shown to be important in very many situations (Eagly et al. 1991) such as for the evaluation of social status and interaction power (Haas and Gregory 2005) or for success in the job market (Hosoda et al. 2003), to name only a few of them.

Humans often make judgments based on the first impression of a person. Confronted with the picture of a person only, participants in experiments are willing to make all kinds of judgments such as trustworthiness, competence, likability, aggressiveness and attractiveness (Willis and Todorov 2006). This judgement takes place immediately and Willis and Todorov (2006) showed the evaluation of a person is stable even if a picture was shown only for a very short period of time.

Attractiveness matters for electoral success too, as experimental studies have shown where participants had to make a choice between different pictures (Ballew and Todorov 2007; Little et al. 2007; Sigelman et al. 1987; Todorov et al. 2005; Antonakis and Dalgas 2009) and physical attractiveness increases the likelihood of getting elected (Banducci et al. 2008; Berggren et al. 2006; Buckley et al. 2007; Klein and Rosar 2005; King and Leigh 2006; Leigh and Susilo 2009; Rosar and Klein 2009; Rosar et al. 2008; Sigelman et al. 1987).

Being attractive can have direct and indirect advantages in elections. Direct effects are mainly based on two factors (Rosar and Klein 2009):

- "Attractive Stereotypes": Being attractive is linked to a number of stereotypes attributed to attractive persons. Attractiveness influences the perception of leadership, intellectual competence, popularity or sociability in a positive way (Haas and Gregory 2005; Marlowe et al. 1996). Voters likely value those qualities in politicians as well (Surawski and Ossoff 2006) although there may be some difference how men and women are perceived (Johns and Shepard 2007).
- "Attractiveness Attention Boost": The likelihood of being noticed increases with physical attractiveness. This is especially true for women (Maner et al. 2003). This is likely more important in elections with many candidates for few seats because in such elections, being noticed at all is a very important step for electoral success.

Other effects of attractiveness have been mentioned in the literature as well which may point at a more indirect influence. Attractive candidates may get a better treatment by journalists ("Attractiveness Treatment Advantage") and they appear as more glamorous ("Attraction Glamour Effects") (Rosar and Klein 2009). Being attractive can activate self-reinforcing mechanisms: attractive people may get more attention and better treatment, which raises their self-confidence and how they relate to other people, which then makes them more successful in many situations, which again raises their selfconfidence. The influence of such indirect effects is much more difficult to measure. One way of bypassing the problem of indirect effects is to study low information or second order elections. The argument is that in such elections voters have little information about the candidates and indirect effects don't matter much, because many candidates get little treatment from anybody in a campaign and especially not from journalists. Most of the candidates hardly campaign at all, they invest very little resources into their campaign and for most candidates running in an election is not particularly glamorous.

Many parties and candidates are aware of the importance of how they look. They hire professional photographers to take favourable pictures of the candidates. Some candidates are said to have undergone plastic surgery prior to an election. Candidates in high profile races hire make-up artists, stylists and fashion advisers to coordinate and arrange their public appearance. They plan their public speeches very carefully in terms of location and background to make sure that the right pictures are shown.

2.2. How to study effects of attractiveness?

Studies used two different research strategies to look at the influence of attractiveness on electoral success. One approach is to use an experimental design (Ballew and Todorov 2007; Little et al. 2007; Sigelman et al. 1987; Todorov et al. 2005). Individuals in experiments are exposed to candidate pictures without any additional information and they have to make a choice between two or more candidates. Many studies have found that the candidates finally elected were chosen overproportionally in such experiments. This works not only with adults but also with children. In a recent experiment the choice of children between real candidates in French elections has been studied (Antonakis and Dalgas 2009). Children had to indicate which one of two persons they would prefer to have as a captain on their boat to sail from Troy to Ithaca. The probability of choosing the candidate that was finally elected was 0.71. There were no differences between children and adults in this experiment.

The second approach usually asks several coders to rate pictures of candidates. This attractiveness score is then used as an independent variable in statistical models estimating electoral success. Most such empirical studies on physical attractiveness focus on candidate choices in majoritarian elections such as voting in direct candidate elections in Germany mixed members system (Klein and Rosar 2005; Rosar et al. 2008; Rosar and Klein 2009) or Australia at the national (King and Leigh 2006) and local level (Leigh and Susilo 2009) or STV in Ireland (Buckley et al. 2007). In such elections candidates matter a great deal. However, in these elections it may not be easy to differentiate between party characteristics and candidate characteristics

because these two get mixed up. For most real candidates, not only the looks matter but also the party label because many voters cast a party vote rather than a personal vote, even in majoritarian elections.

Other studies have looked at "low information elections" instead where votes would have little information on candidates (Banducci et al. 2008; Buckley et al. 2007). However, even if those elections may be less important for voters, there are only a limited number of candidates in a constituency and those candidates may be still known to many voters and their party affiliation and therefore effects of attractiveness may be only indirectly linked to candidate success. A study where party affiliation did not play a role was the study that looked at factors explaining the success of academics in elections to the board of the American Economic Association (Hamermesh 2006). In this election, voters which are the members of the association, have little cues about a candidate's qualities and they cannot rely on partisanship as a cue either. Hamermesh (2006) can show, that physical attractiveness plays a role in this election too.

3. The study design

We did not conduct an experiment but tested in Switzerland the influence of physical attractiveness of real candidates on their success in a real election. Switzerland has an open ballot PR system, which has a great advantage over similar studies conducted in other electoral systems (see for a similar approach Berggren et al. 2006). In an open ballot PR system voter decide not only what party gets how many seats with they also influence who gets elected from within a party. For a candidate to get elected in this case it does not matter so much to do better than candidates from other parties. It matters much more to do better than candidates from the same party. Candidate competition is therefore not so much between candidates from different parties but between candidates from within a party.

Voters have the possibility to express their preferences not only for parties but for candidates within a party. For most voters it will be difficult to distinguish candidates based on different policy positions. Many voters struggle to detect policy differences between parties and those voters will struggle even more to find policy differences between candidates.

Another advantage is that if district magnitude is large, candidates will be numerous and the amount of information a voter has on a single candidate background or policy preferences is very low and most voters will not notice much of a candidates' campaign either. In such a setting we can explore the impact of attractiveness on electoral success in a quasi experimental design. In this section we will now discuss key issues which are important for the study, the selection of cases (candidates), how to measure electoral success and we measured attractiveness.

3.1. Case selection

We use data from the 2007 national election in Switzerland. In this election a total of 3089 candidates competed for the 194 seats available in 20 cantons.¹ It did not make sense to include all those candidates because the burden for the coders would have been too high. We reduced the number of candidates included in the study based on several criteria.

We wanted to include only candidates from *larger cantons*. Having many candidates on the same list allows exploring the effect of attractiveness better because we can focus on variance of electoral success of candidates of the same party within lists and can assume that factors that account for variance between lists matter less. In addition, we can expect that in larger cantons most candidates are not well known, not even to voters that vote for that party. In such a situation other characteristics such as age and gender as well as attractiveness are likely to matter more. We chose only cantons with a district magnitude greater than 10.

The tricky part of this kind of study where we don't rely on an experimental design is to have a good argument that voters base their judgment on pictures they actually get to see and that all voters get to see the same pictures. Therefore we chose cantons, in which all households get party leaflets sent home. Voters do get a set of ballot papers sent home in all cantons where the names and the age of all candidates appears, however, there are no pictures on the ballot paper. Usually parties produce leaflets before an election. Typically parties mention the key policies they care about but they also show pictures for all the candidates which are running for elections on these leaflets, sometimes with some additional information for each candidate. There are different regulations in the cantons if and how voters get these leaflets sent home. Some cantons explicitly prohibit that anything else is sent to the registered voters officially than the official ballot papers. In those cantons there may by substantial variation if and from what party or candidate voters see a picture. Other cantons allow for party leaflets to be sent to voters together with the ballot papers, however they leave it to the parties and communities, which are responsible for distributing ballot papers to voters because electoral registers are organized at the local level. In these cantons there is variation too if and how voters get party leaflets within a canton. In some cantons all voters get leaflets sent home from all parties because the cantonal

¹ The lower chamber of parliament has 200 seats, however in six small constituencies/cantons a first-past the post electoral system is used.

regulation requires all communities to do so. We choose only cantons where this is this case. This left us with four larger cantons (Aargau, Bern, Luzern, Zurich), where all voters get leaflets sent home. In these cantons we can assume that many voters when they sit down at home and fill out the ballot paper have the party leaflets present as well and in those cantons they have the chance to see all candidate pictures. Likely, most voters would not go through all leaflets in detail but pick some parties first and then choose candidates from within a party.

This would have still resulted in 1690 candidates to be evaluated for each of the coders. Therefore we limited the number of candidates to those who participated in the Comparative Candidate Survey (CCS)² in order to be able to include control variables about campaign activities and candidates' background. Applying this last criterion, there remained 744 candidates to be evaluated (44% of the candidates in those 4 cantons).

3.2. How to measure electoral success

The most obvious indicator for electoral success is whether somebody got elected or not. However this is not a very fine tuned measure. We use the number of preference votes for each candidate as our main measure of electoral success because it relates directly to how attractiveness may influence an electoral choice of voters.

We can distinguish between different types of preference votes which relate to how voting takes place in Switzerland. Some weeks before an election, voters receive a set of different ballot papers for each election by mail.³ This set includes an empty ballot paper with a line on top for the party name and as many empty lines as seats to fill in candidate names. In addition, the set includes for each party list one pre-printed ballot paper with the party name on the top and the parties' candidate names printed on it as well. Voters have as many candidate votes as there are seats to be filled, which means that in the largest canton they can cast 34 votes, in smaller cantons only 2. Then voters can do different things:

- Cast a party ballot without any changes. If voters use a party ballot, all candidates get the same amount of votes and a voter does not influence the candidate ranking on the ballot.

² As part of the Swiss Electoral Studies (Selects) and the Comparative Candidate Survey (CCS) all candidates for the national election for both chambers were interviewed in 2007. The overall response rate in the Swiss CCS study was 54%. The participation in the CCS was not very biased with respect to party membership, elected vs. non-elected candidates or age and sex.

³ Voting procedures can vary slightly from canton to canton. For example in one canton voting is compulsory. All cantons have introduced postal voting with very easy procedures by now. Instead of going to a polling station voters can just as well send their ballot back by mail. The use of postal voting is very common. In most cantons a majority of the people that vote use postal voting, in some cantons 90% of the voters cast their votes by post.

- Voters can take a party ballot and cross off names, write a name from the same party list twice (called cumulation), but not more than twice or add candidate names from other parties (so called panachage).
- Voters can use the empty ballot and start filling in candidate names from one or many parties.

The preference votes for individual candidates are the only criteria for the rank order within a list.⁴ We excluded the preference votes from voters which cast an unchanged party ballot because these votes don't require an active candidate decision. The remaining preference votes for a candidate very used as one dependent variable. However, The way changed ballots can be filled out and the system of panachage allows us to distinguish between different kinds of preference votes which follow different logics what a preference vote means:

- a) Preference votes from own party voters. These are preference votes that are given to candidates which appear on the ballot the voter has chosen. Being on a list of a voters own party ballot, however, does not necessarily require a very active decision from a voter. If a voter takes a pre-printed party ballot, he will leave many candidates names unchanged and in this case it is not clear whether this was a voluntary act or just that a voter didn't care about those candidates. We only have aggregated preferences and can not distinguish on how many ballots a candidates name has been stroke off the list and on how many ballots a candidate appeared twice, we only have the net gain or losses of each candidate.
- b) Preference votes from voters from other parties (panachage votes). Those preference votes do in all cases need an active decision of a voter. Voters have to choose another party lists, look through the candidates and write a candidate on their ballot by hand. This is a clearer candidate preference and therefore we should be better able to find effects of attractiveness on electoral success and other campaign related activities than with the candidate votes to candidates from a voters own party list.

We used the separate measures of preference votes as well as the total number of preference votes in different models. We took the log value of the number of preference votes since the distribution is skewed because of the many candidates from smaller parties.

⁴ There are other preference voting systems where the initially proposed order matters as well and candidates have to win a larger number of preference votes in order to make it up higher on the list.

3.3. Measuring attractiveness

We asked different coders to rate how attractive they found a candidate for each of the 744 candidates. We decided to try to have all coders rate all candidates, which was a rather heavy burden for each coder, although coders could interrupt and continue the coding at any time. Therefore we gave coders an incentive of 40 CHF in form of book vouchers when they coded all pictures. A similar strategy has been used by King and Leigh (2006) or Rosar and Klein (2009). An alternative approach would have been to have many more coders rate a few candidates only, which decreases the burden for an individual coder and possibly increases the representativeness of the coders (such a way was chosen for example by (Pouvtaara et al. 2009, Berggren et al. 2009). However unless there we have a very large number of coders, such a strategy makes it more difficult to control for reliability of the rating.

A key question was who to recruit as coder. Many of the studies rely on students for coding of pictures. This may not be problematic because of a generally observed "Attractiveness Consensus" (Rosar and Klein 2009) proven in many studies which shows that the perception of physical attractiveness does not vary much between individuals. Nevertheless we recruited coders from different social backgrounds, gender and age groups to make sure that we get a more divers selection of coders. We can assume that with very few exceptions coders did not know any of the candidates. There are way too many parties and candidates in large cantons even in a canton where a voter lives. In most countries people would recognize only a handful of politicians from their country when they see the face anyway.

We are primarily interested in physical attractiveness on electoral success and asked to rate the candidates' attractiveness. However, we know from other studies that attractiveness influences other attributes of a person, such a competence, leadership qualities etc. The influence of attractiveness would then be rather spurious. Therefore we wanted to add a control variable. Ideally we would have been able to have coders assess a larger number of attributes, like it was done in other studies. Given that we wanted coders to rate all pictures, we had to limit the number of attributes asked for each picture because each attribute adds another 744 ratings to be made. We decided to use "competence" as a second attribute for each picture, because this is what has been most widely used in other studies and it showed to be an important attribute to explain electoral success.

We collected the party leaflets parties produce prior to an election and scanned and cut out the candidate pictures. If the same picture of the party leaflet was available online, we took that version of the picture. We set up an online survey and coders were asked to rate the different pictures one after the other on two 11-point scales from 0-10. One scale was "attractiveness", the other was "competence". Coders were also instructed at the beginning to use the entire scale and to try to keep a mean value of 5 for both scales. The order how the candidate picture appeared was randomized for each coder.

In order to check how reliable the judgment of the coders remained until the end, we showed nine pictures for a second time at the end of the survey, so coders had to rate the same picture twice. This allowed to control whether the same coder rated the same picture in a coherent way. Overall we have 162 pictures that were rated twice. For attractiveness in 88% of the cases were rated with zero or one point difference on the 11-point scale. In 8% of the cases, the difference was two points and in 4% the difference was 3 points (overall mean difference 0.70). For competence the reliability was slightly lower. In 78% of the 162 cases, pictures were rated with zero or one point difference 0.98). Nevertheless this is not a problematic difference in the overall rating, especially when we also assume that the possible deviation in the rating of the coders equal each other out when we take averages.

To be on the save side, we excluded all coders which had an average difference of more than 1 point on the scale from the analysis for both attractiveness and competence. This left us with ratings from 18 coders for the attractiveness measure and 17 coders for competence measure.⁵ We then took the mean score of those coders.

We argued that it matters what picture is shown from a candidate. To test this we included 15 pictures from candidates that were different from the picture that appeared on the party leaflet. Having different pictures does influence the rating to some degree. The mean difference in the rating of a different picture of a same candidate was 1.04 on the attractiveness scale and 1.37 on the competence scale. This is slightly larger than what we would expect from above where people had to rate the same picture twice. Therefore it seems justified to have focused the analysis on those cantons only where all voters get the same party leaflet sent home.

We also wanted to know if and how the visible candidate's characteristics age and gender mattered for the different coders. We collected some information on the coders such as their sex, their age and whether they came from the French or the German speaking part of the country.

⁵ All the analysis were re-run including the scores from all coders for both attractiveness and competence. We also tested whether it makes a difference using standardised scores (*z*-transformed) for both average ratings of all and only of the more reliable coders, because the average rating slightly differed between coders. The correlation coefficient between the different attractiveness variables and is 0.98 and between the competence variables 0.95 and higher. Not surprisingly, all the models using slightly different attractiveness or competence measures did not produce any different results.

Table 1 shows the influence of coders and of candidates' visible characteristics on the attractiveness and on the competence rating. Age is negatively related to attractiveness: the older a candidate, the less attractive is his/her rating. Male candidates' attractiveness was rated significantly lower than the attractiveness of female candidates by 1 point on average on the 11-point attractiveness scale. A coders age did not have any influence, nor did it matter from which linguistic region in Switzerland a coder came from (German vs. French speaking area). It did however matter, which gender a coder had. Male coders rated the attractiveness of the candidates higher than female coders.

	F			/		Attrac	tiveness	:			
	Attractiveness				iveness: andidates	Femal candic	-	Competence			
	Coeff.	SE		Coeff.	SE	Coeff.	SE		Coeff.	SE	
Cand. Age	-0.021	0.003	***	-0.017	0.003 ***	-0.030	0.004	***	0.023	0.004	***
Cand. Gender (1=male)	-0.937	0.155	***						-0.246	0.158	
Coder Age	-0.003	0.017		0.000	0.018	-0.009	0.016		-0.015	0.013	
Coder Gender (1=male)	0.838	0.355	**	1.017	0.397	0.533	0.341		0.343	0.319	
Coder linguistic region	-0.101	0.299		-0.391	0.339	0.392	0.293		-0.134	0.279	
Constant	5.821	0.520	***	4.709	0.524 ***	6.124	0.505	***	4.693	0.525	***
N	17222			10856		6366			17222		
R2	0.144			0.098		0.079			0.049		

Table 1: Explaining the level of attractiveness and competence of candidates (robust standard errors in parentheses)

Dependent variable; Attractiveness and competence scores 0-10; *** = sig. at 0.01 level, ** sig. at .05 level, * sig. at 0.10 level.

Because of this difference between coders we ran the same model separate for male and female candidates to see whether this higher attractiveness evaluation of male coders (or the lower of female coders respectively) is directed rather to women than to men. The results indicate that male coders give higher attractiveness scores to male candidates or female coders a lower score to male candidates respectively. For female candidates there was no difference in the attractiveness rating between male and female coders.

For competence, a candidates' age had an influence too, however in the opposite direction than attractiveness: older candidates were rated as more competent than younger candidates. A candidates' gender did not have an influence. Controlling for a candidates age, women were not rated as less competent than men. All the coders' characteristics had no influence on the rating of competence.

4. Results

We ran the same model with three different type of preference votes as discussed above.⁶ Model A with the total number of preference votes, and we further distinguished between candidate votes from within a party list (Model B) and candidate votes from voters which cast the ballot of another party (panachage votes, Model C).

The main independent variable we are interested in is the mean *attractiveness rating* of a candidate and we also included our *competence rating* of the candidates. Attractiveness and competence are correlated (Pearsons correlation coefficient 0.39), which means that voters who get a high attractiveness score, also tend to score high on the competence score. However the correlation is not strong enough that multi-collinearity becomes a problem. We wanted to include competence to make sure that it is not the influence of attractiveness on the evaluation of competence that explains electoral success but attractiveness itself.

We included a large number of additional control variables.

- The number of preference votes may depend on *age and gender* since some voters may use simple socio-demographic cues which are also detectable from a picture when making a vote choice.
- We included an *interaction term between gender and the attractiveness rating* because it may be possible that attractiveness plays a different role for men than for women.
- Number of changed party ballots. This control variable has to be included because when voters use a pre-printed party ballot, they may not actively cast preference votes to all of the candidates but they may add only some candidates, cross off some but leave most of the ballot unchanged. Therefore the number of candidates' votes is highly dependent on the number of ballots cast for a party. We also took the log value of this variable to correct for the skewed distribution.
- *Incumbent* candidates have a large advantage in many elections and are more likely to attract preference votes because they are better known to the voters.
- Ballot position: Ballot position may have a positive effect for two reasons. (1) Candidates which are higher on the ballot are more likely to attract additional votes than candidates at the bottom of a ballot. (2) Candidates that are on the bottom of the list are more likely to be crossed off than candidates on the top of the list because voters who want to add candidates from other party ballots (panachage) or want to cumulate candidates tend to add them from bottom on their list and have

⁶ All this data has been made available from the Federal Office of Statistics.

to cross off candidates accordingly. We used the relative position on the ballot as a measure for candidate success which is division of the ballot position through the district magnitude. We also changed the sign to make sure that a positive sign indicates a positive influence of a higher ballot position.

- Some candidates are *pre-cumulated*, which means that their names appears already twice on the pre-printed ballot paper. Those candidates are more likely to receive preference votes especially from voters of the same party, because those voters may not change the entire party ballot but only add or cross off a few candidates.

Finally we were controlling for campaign and candidate experience effects, assuming that the more a candidate campaigned, the more likely he or she managed to attract preference votes.

- *Campaign spending.* Candidates' spending varies greatly between candidates and they likely have an impact on the number of candidate votes. Those figures are based on candidates' self-declarations. Although such a campaign spending measure may not be very reliable because candidates don't need to disclose their finances it is the best available.
- Self-evaluation of chances. All candidates were asked how they assessed their chances of getting elected at the beginning of the campaign. We use this indicator as a proxy for campaign activities assuming that the more somebody hopes to get elected the more he or she will invest in the campaign.
- Previous political mandates: Often candidates have held positions in the subnational governments and parliaments which has helped them to make themselves known to voters and attract additional votes especially beyond the partisan voters. We calculated an additive index of five possible mandates candidates could have held at the sub-national level.

Because of the hierarchical structure of the data we applied a linear multilevel regression model. Candidates run on lists and the number of preference votes for a candidate depends to some degree on the number of voters for the list as we have explained above. Table 2 shows the result of the regression models. The first model includes all candidate votes, the second model only candidate votes that came from voters of a candidates own party and the third model candidate votes a candidate won from voters that cast a ballot from an other party (panachage votes).

All models explain a fair amount of variance, however there are some differences. Model B explains most variance, followed by Model A and then model C. This is linked in both cases to the fact that the number of votes for a candidate is strongly dependent on the number of votes from the pre-printed ballots. Because many voters use a preprinted ballot and replace only a few candidate names, candidate do not get any number of votes, but a number of votes close to the number of total party ballots. Therefore we included the total number of party ballots which is indeed the strongest predictor of preference votes. The votes from other party voters then are not logically linked to the number or party ballots and therefore we can explain much less variance in model C.

Our key variable, attractiveness shows a highly significant effect in all the models, however the effect is strongest in model C with panachage votes only (the votes from other party ballots). The explanation for this is that for voters of a specific party the parties own candidates are know better and as a consequence other attributes than just how a candidate looks matter more. For voters of other parties, attractiveness plays a much greater role when they cast a preference votes for a candidate from another party. Some voters likely just go through the party leaflets of the parties they like and cast preference votes if they like some candidate for whatever reason. In such a situation being attractive raises attention and may reveal the positive traits people have when looking at a pretty face.

	Model A: Total	candidate vo	tes	Model B: Prefe		6	Model C: Pref		es
	(log) Coeff.	SE		own party vote Coeff.	SE		other party vo Coeff.	SE	
Constant	1.385	0.243	***	-0.733	0.185	***	2.922	0.445	***
Attractiveness (0-10)	0.148	0.030	***	0.056	0.017	***	0.276	0.054	***
Competence (0-10)	0.020	0.031		0.022	0.018		-0.026	0.055	
Gender (1=male)	0.062	0.037	**	0.021	0.021		0.134	0.066	**
Gender * Attractiveness	-0.047	0.049		-0.019	0.028		-0.084	0.088	
Age	0.000	0.002		-0.001	0.001		-0.003	0.003	
Total party ballots (log)	0.699	0.019	***	0.933	0.018	***	0.342	0.036	***
Incumbent (1=yes)	0.770	0.070	***	0.465	0.040	***	1.393	0.127	***
Relative ballot position (ballot position / district magnitude)	0.554	0.053	***	0.319	0.030	***	1.024	0.096	***
Pre-cumulated (1=yes)	0.412	0.082	***	0.425	0.058	***	0.319	0.150	**
Campaign budget (in CHF)	0.000	0.000		0.000	0.000		0.000	0.000	***
Initial evaluation of chances to win seat	0.041	0.013	***	0.022	0.007		0.086	0.023	***
Previous political mandates at lower levels	0.068	0.018	***	0.041	0.010	***	0.150	0.033	***
R2 within	0.525			0.556			0.531		
R2 between	0.955			0.971			0.694		
R2 total	0.923			0.961			0.622		
Sigma u	0.239			0.260			0.448		
Sigma e	0.327			0.183			0.590		
Rho	0.348			0.668			0.366		
N	671			671			671		

Table 2: Multilevel- regression model explaining electoral success (dependent variable: number of preference votes)

Data sources: Official results: Federal office of Statistics; Campaign activities: Comparative Candidate Survey. *** = sig. at 0.01 level, ** sig. at .05 level, * sig. at 0.10 level.

Competence does not matter in any model, which indicates that although competence and attractiveness are clearly correlated, its attractiveness that is a stronger predictor or electoral success than competence.⁷ This contradicts findings from other studies which assume that attractiveness influences the perception of competence, leadership etc. which then has a positive influence on vote choice. The fact that attractiveness plays a more important role, points at a strong direct impact of attractiveness on voters decisions.

We find a small effect of gender on electoral success. Male tend to receive more panachage votes and more overall votes than women. However we don't find a significant interaction effect between gender and attractiveness which means that attractiveness plays an equal role in mobilising preference votes for men and women. Age does not have an impact on the votes.

The total number of ballots cast for a party matters a lot for a candidates votes from the own party (Model B) but not so much for preference votes from other party ballots (Model C) although it is highly significant in both cases. This is what we would expect as we have explained above. Incumbency has a strong impact in all models. Incumbent candidates are much better known and embedded in social and political networks and therefore attract a lot of preference votes. This is not very surprising either. Being precumulated has the expected positive effect. Candidates that already appear twice on the ballot paper receive more candidate votes than candidates that only appear once.

Ballot position matters too. Being higher up on the ballot means that a candidate attracts a lot of preference votes. There may be different explanations for this. First, ballots are often not ordered alphabetically, parties place candidates according to different criteria, among others often some estimate on how well a candidate will do. Having such structured lists also sends a signal to voters. Therefore ballot position is to some degree already an indicator of a party's expectation of a candidate success. The influence of ballot position on candidate votes is rather spurious in this case. Second, voters often express preference votes starting from the top of the list and start writing them down from the bottom to the top on their own ballot. Therefore being first has a positive impact, but being last that is punished.

Campaign money buys votes, but only for the panachage votes. So does the expectation of winning have a positive impact however this is likely an indirect influence: the more somebody believes he/she has a chance, the more efforts somebody will make in a campaign. This effort mainly leads to additional preference votes from other parties' voters. Having held other political offices at the lower level is positively related to candidates' votes in all models. It makes candidates known to voters beyond the own party electorate.

In a last step we now ran a multilevel logit model to detect whether attractiveness has an influence on success in a more narrow sense, which is whether somebody got elected or not. For this analysis we had to exclude candidates from those lists, where no single candidate got elected. If a candidates list does not win a seat, the chance of

⁷ If one includes only the competence measure but not the attractiveness measure in the model, the competence is highly significant.

getting elected is 0 anyway. This reduces the number of cases we can include in the model. We excluded the number of party ballots cast for a party from the analysis because we are not looking at the overall candidate votes anymore.

	Coeff.	SE
Constant	-23.012	6.766 ***
Attractiveness (0-10)	1.194	0.705 **
Competence (0-10)	-0.463	0.674
Gender (1=male)	1.238	0.847
Gender * Attractiveness	-0.302	1.045
Age	0.009	0.039
Total party ballots (log)	1.249	0.477 ***
Incumbent (1=yes) Relative ballot position (ballot position / district	4.624	0.995 ***
magnitude)	1.939	1.324
Pre-cumulated (1=yes)	2.194	1.049 **
Campaign budget (in CHF)	0.000	0.000
nitial evaluation of chances to win seat	0.585	0.199 ***
Previous political mandates at lower levels	-0.045	0.316
sigma_u	0.001	0.517
rho	0.000	0.000
N	329	

Table 3: Multi-level logit-model explaining being elected (dependent variable: being elected = 1)

Note: only candidates included that ran on lists where any candidate got elected; *** = sig. at 0.01 level, ** sig. at 0.10 level.

Attractiveness also shows a significant impact for getting elected, which means electoral success in a stricter sense: attractive people have a higher probability of getting elected. Again, competence does not have any influence. The other effects remain also the same with some exceptions. The ballot position is not significant anymore, nor is there an effect of campaign spending on electoral success.

5. Conclusion

This article looked at the influence of physical attractiveness on electoral success using candidate pictures from the Swiss election in 2007. Coders were asked to rate 744 candidates on a attractiveness and a competence scale ranging from 0-10. This measure was then used in a model which explains candidate success in a real election.

We showed in this paper that physical attractiveness of a candidate has a significant influence on the electoral success: attractive candidates receive more votes than unattractive candidates and they have a higher probability of getting elected. This is not different for male or female candidates; attractiveness is important for both men and women.

We believe, that this is mainly due to an "attractiveness attention" effect and so much because of the "attractiveness stereotype" effect. In all models we included a measure of the evaluation of candidates competence derived from rating the same pictures on a similar competence scale. Both measures are significantly correlated and the competence score has a significant impact on electoral success too, however once we include the attractiveness score the effect of competence disappears.

It would be interesting to explore what leads to a positive evaluation of attractiveness and competence at a later stage. We have some evidence that overall women and younger candidates get higher attractiveness scores while gender does not matter for the competence rating but older candidates get higher competence scores. However those are only some elements. The pictures of the candidate vary a lot. Some of them colour pictures, others are black and white, some only show faces, others present candidates in a certain environment.

What do these findings tell us about the functioning of democracy? Probably something we all know but we don't really like to hear. Voter's choices don't only depend on careful consideration about party programs or candidate policies. Voters often use very simple cues and shortcuts when they make candidate choices, physical attractiveness of candidates being only one of them. This is very well known to candidates and campaigners. Candidates in high profile elections have hired fashion advisers or they make sure that they appear favourable on pictures. In low information races with many candidates, such as elections to the Swiss National Council, even small parties hire professional photographers to make their candidates look good. Campaign posters and leaflets use images and pictures to transmit a message and stimulate positive emotions for both parties and candidates. Appearance and being good looking may especially matter in low information elections with many candidates because in those elections most voters will know very little about a candidate and this makes it more likely that a voter uses simple short cuts such as age, gender or attractiveness.

As long as there is no better political system than one that requires regular mass participations of all citizens irrespective of their educational background or their political interest and intellectual capacity, the way to go is rather to be open about such mechanisms and to make sure that certain groups in society don't get disadvantaged because of such simplistic decision making modes. There is not much evidence of this in this study since we find for example that attractiveness matters for both men and women. Many candidates get elected that are not rated as very attractive.

Attractiveness is also by far not the only criteria that matters. Incumbents are awarded, campaign investments pay off and previous experiences at lower levels of the state give an advantage. What nevertheless remains, as has been shown by very many other studies too, is a relative advantage of the beauties over the beasts in the electoral arena.

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