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## **Facial Similarity Between Voters and Candidates Causes Influence**

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Social science research demonstrates that people are drawn to others perceived as similar. We extend this finding to political candidates by comparing the relative effects of candidate familiarity as well as partisan, issue, gender, and facial similarity on voters' evaluations of candidates. Using morphing software, we created tailored facial images of various political candidates whose faces became subtly similar to over 1000 voters across the United States. Evidence across three studies in separate elections over a period of three years suggests that even in high-profile elections, voters base their decisions partly on facial similarity.

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**SYMPOSIUM SUMMARY**  
**Marketing Issues in Politics**  
Akshay Rao, University of Minnesota, USA

**EXTENDED ABSTRACTS**

**“Marketing of Political Candidates and Voter Choice”**

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**Voting behavior**

A great deal of research has explored the determinants of citizens' vote choices in elections and the psychological processes by which citizens make those choices. In fact, voting behavior has been one of the central topics of social science research on mass political behavior. Empirical research on voter decision-making began in the late 1940's and has progressed through four stages of development, as we shall review below. During the first three phases, research focused primarily on identifying the determinants of citizens' vote choices. In the fourth stage, interest has shifted to understanding the psychological processes involved.

**Social Structure**

During the first phase of voting research, studies focused on the impact of social structure on vote choices. This approach was best exemplified by the classic book, *The People's Choice*, by Lazarsfeld, Berelson, and Gaudet (1948). These researchers examined data from repeated survey interviews of a panel of citizens and found that their candidate preferences were a function of their memberships in various social groups. Specifically, three demographic variables were found to be particularly strong determinants of citizens' preferences: place of residence, social class, and religion. Living in a rural area, being middle-class, and being Protestant enhanced the likelihood of voting for Republicans, whereas living in urban areas, being working-class, and being Catholic enhanced the likelihood of voting for Democrats. Citizens who belonged to social groups with conflicting tendencies (e.g., an urban, working-class Protestant) were “cross-pressured” and were found to have unstable political preferences, selected a candidate late in the election, and frequently did not vote at all.

**Party Identification**

During the second phase of voting research, the emphasis shifted from a sociological one to a psychological one that emphasized attitudes (See also: ATTITUDE THEORY AND RESEARCH). This new perspective was advanced by University of Michigan researchers Campbell, Converse, Miller, and Stokes (1960) in *The American Voter*. The Michigan approach acknowledged both long-term attitudinal influences on voting by party identification and political IDEOLOGY, as well as short-term influences of attitudes on specific policy issues and attitudes towards specific candidates.

The Michigan approach emphasized party identification as the key determinant of vote choice. A citizen's party identification was presumed to be a result of his or her place in the social structure as well as the interpersonal influence of family members, especially parents. Adopted early in life, party identification was hypothesized to be a highly stable orientation that directly influenced voting. Additionally, party identification was thought to function as a perceptual screen that shaped short-term influences on voting.

Although a great deal of research has consistently demonstrated that party identification is a stable and powerful predictor of

vote choice, the relation between party identification and short term influences on voting has turned out to be more complex than originally thought. Specifically, in addition to influencing short term forces, party identification appears to be influenced by them as well. For example, although party identification has been found to influence citizens' perceptions of economic conditions and their preferences on policy issues, the latter seem to influence the former as well. Thus, the relation among party identification and short-term influences is reciprocal in nature. Consequently, it appears that party identification may reflect other determinants of vote choices rather than being the single, primary engine driving voters' decisions.

**Additional Determinants of Voting**

During the third phase of voting research, researchers maintained the psychological emphasis and have expanded the list of vote determinants. One major body of work focused on the impact of attitudes on specific policy issues. In contrast to the *American Voter's* presumption that such attitudes play relatively peripheral roles in vote decisions, more recent work has shown that policy attitudes do indeed have significant impact when the issue is considered personally important by a voter. But when an issue is considered personally unimportant, it appears to have little or no impact on candidate preferences.

Other phase-three research has focused on retrospective judgments of the past performance of the candidates and parties in handling national problems. Judgments in domains such as the economy and foreign affairs have been shown to exert substantial influence on vote choices (e.g., Abramson, Aldrich, & Rohde, 1991).

Finally, voters' perceptions of candidates as people have been found to influence voting. Specifically, perceptions of candidates' personality traits (i.e., competence, integrity, leadership, and empathy), as well as the emotions candidates elicit (e.g., anger, pride), shape the impressions voters form of candidates and thereby determine voting in part (Kinder, 1986).

**Psychological Processes**

Most recently, research has moved beyond specifying the determinants of voting and has focused on the processes by which these determinants are combined. It has been suggested that this is a relatively simple process, in which voters simply add up the number of things they like and dislike about each candidate and choose the candidate with the most positive net score. However, Lodge, McGraw, and Stroh (1989) have proposed a more complex psychological process model that distinguishes between on-line and memory-based decision-making. Rather than waiting until the end of an election campaign to integrate information from memory about the candidates to formulate a vote choice (as the memory-based perspective would suggest), voters appear to form evaluations of the candidates early on and continually update these attitudes on-line as new information is encountered. This sort of on-line updating seems especially prevalent among citizens who are political experts rather than political novices.

**Conclusion**

This summary touches on just a very small set of the research to be reviewed in this presentation regarding the determinants of

who a citizen will vote for. New work on the role of the mass media and the impact of advertising is especially interesting and has clear applications for the understanding of consumer behavior broadly.

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## “Mere Measurement, Implementation Intentions, and Voter Turnout”

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Since World War II, in over 1,600 national elections in 170 independent states, voter turnout rates have averaged about 65% of the voting age population. Policy makers in 18% of these democracies have deemed electoral participation important enough to justify compulsory voting laws, under which non-voters can face fines and other punishments. Recently, the US Congress authorized 3.9 billion dollars for the Help America Vote Act, and state governments have invested in expanding early-voting methods, which accounted for roughly 20% of the votes cast in the 2004 election. Worldwide, rewards for voters have included tax breaks, job opportunities, scholarships, and even high-stakes lotteries.

What drives voter turnout? Political theory speaks of the costs and benefits of voting and the slight probability that one's vote will be decisive. In practice, these and other variables appear in policies that target two causes of weak participation: low motivation and high obstacles. Motivation-focused initiatives aim to impart the desire to vote by invoking the importance or closeness of an election, a voter's sense of duty, rewards, punishments, or social comparisons. Obstacle-focused policies aim to make voting easier, such as by introducing same-day or automatic registration, voting by mail, or early in-person voting. If voting is largely influenced by motivations and obstacles, policy makers might take inspiration from psychological research on goal attainment, which has revealed the strong effects of two simple treatments. We attempt to demonstrate that simply asking people if and how they intend to vote can increase turnout.

The technique of asking people if they intend to vote comes from research on attitude accessibility and self-fulfilling prediction. In what is called the mere measurement or question-behavior effect, people become more likely to perform certain actions if they are first asked whether they expect to perform them. That is, merely measuring intentions changes behavior. One surprising study found that asking people whether they intended to buy an automobile increased their chances of doing so.

Why does mere measurement work? One important literature suggests that people who make forecasts about the future may alter their behavior to make the predictions come true. An emerging and complementary view is that when people answer questions about

intentions, their underlying attitudes become concrete and readily accessible. For this reason, questions can be polarizing. If attitudes toward electoral participation are generally positive, assessing intentions may turn voting into a goal.

Eighty years of research has looked at the effect of polls, questions, and surveys on voter turnout with some promising findings but leave an unclear picture due to mixed results and some methodological controversies. Part of the variation in results may be due to the variety of populations, instruments, and historical periods studied. Additional variation may be due to the way experiments have mixed mere measurement treatments with related political questions and even practical information on voting.

The second technique, asking people how they intend to vote, comes from research on implementation intentions, which are simple plans that help people overcome obstacles en route to goal attainment. The effects of implementation intentions have been estimated in over 100 policy-relevant studies on exercising, recycling, smoking, and beyond, however, the link to voting has not been investigated in the literature.

How do implementation intentions work? These plans are hypothesized to lead one to direct resources (such as time and attention) toward a target goal, and away from competing goals when they inevitably arise. Furthermore, implementation intentions might make one aware of goal-realization opportunities that would otherwise go unnoticed (e.g., noticing registration offices near work), and help automate responses to foreseeable obstacles (e.g., identifying a means of backup transportation to the polls).

We illustrate the application of mere measurement and implementation intentions through experiments, analyzed in order to estimate causal effects on voter turnout in two national elections: the 2006 US Midterm Election and the 2005 German Federal Election.

In the US study, 1,968 participants were invited to take part in a brief survey approximately two months before the election. In it, a mere measurement group was asked about intentions to vote, and an implementation intentions group was additionally asked to formulate simple plans to vote. The crucial difference with the German study, which involved 1,426 people, is that it took place 1 to 4 days before the election, presumably leaving treatments fresh in the minds of participants.

The experiments pose novel theoretical and applied questions. Will implementation intentions have an effect above that of mere measurement? Will the two treatments be effective on one-shot goals that can be realized only on one day (e.g., voting on Election Day) and open-ended goals that can be realized on many possible days (e.g., early and postal voting)? For both types of goals, do mere measurement and implementation intentions treatments fade over periods of days or months?

For the open-ended goal of early (e.g., postal) voting, mere measurement treatments given two months in advance (US study) had moderate positive effects on turnout, a finding consistent with studies showing that mere measurement treatments can impact the probability of undertaking an action (such as purchasing a computer) on any day within a window of several months. For early voting, estimated implementation intentions effects were similar to those of mere measurement.

For the one-shot goal of election-day voting, mere measurement was only effective when it was administered days (Germany), but not months (US) in advance. Implementation intentions treatments, in contrast, held their effectiveness for both near and distant races.

Our study contributes to a growing body of research demonstrating that policies can benefit from working in concert with psychological mechanisms. People's preference for default op-

tions, for instance, can lead to increased membership in organ donor pools, and participation in retirement savings plans. While some policies benefit from a tendency toward inaction, others must help people to act. To construct effective campaigns and messages, policy makers might consider addressing voting as a goal, one that is aided by stating intentions and making plans.

#### **“Facial Similarity between Voters and Candidates Causes Influence”**

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Voters identify with political candidates in many ways, from agreeing with their positions on issues, holding the same party affiliation, belonging to the same social categories such as race or gender, or even having common physical traits such as height and facial appearance. Political scientists typically focus on candidates' policy positions, performance records, and party affiliation as the fundamental determinants of voter preferences. With a few notable exceptions nonverbal cues are conspicuously absent from the list of “usual suspects”. The cognitive paradigm so dominates voting studies that even when researchers detect the effects of similarity based on a candidate's physical traits (most notably, race and gender), they typically attribute the propensity to support same-gender or ethnicity candidates to voters' tendency to infer agreeable policy positions from these traits.

On the other hand, an extensive literature across the social sciences demonstrates that people are often drawn to others perceived as similar. In the current work, we examined the relative effects of different forms of similarity on candidate evaluations by using an experimental design that manipulated the degree of candidate-voter facial similarity. We were particularly interested in how facial similarity compares to other forms of similarity such as partisanship or policy agreement and with other non-verbal cues including gender and candidate familiarity.

In Experiment One, we examined the effect of facial similarity among unfamiliar political candidates and hypothesized that the effect of facial similarity would be significant due to the lack of other cues or pre-existing biases. One week before the 2006 Florida gubernatorial election we presented a national random sample of voters with photographs of unfamiliar candidates (Charlie Crist and John Davis) that had been morphed either with the voter filling out the survey or with an unfamiliar person. In other words, Experiment One allowed us to examine, as a first step, whether facial similarity could be used to sway political outcomes in the least restricted scenario.

In Experiment Two we replicated the design with familiar candidates (George W. Bush or John Kerry) one week before the 2004 Presidential election. Our hypothesis was that the effect of facial similarity among familiar candidates would be significant, but minimal, due to the presence of pre-existing biases and other information surrounding a presidential election. The effect of facial similarity would also be minimized because the study was administered so shortly before the actual election and many voters may have already made up their minds. Thus, Experiment Two tested the effect of facial similarity in the most conservative and realistic way possible.

In Experiment Three we combined different aspects of Experiment One and Experiment Two by using a set of potential candidates (some familiar, some unfamiliar) for the 2008 presidential election. In the study, we also directly pitted forms of similarity (e.g., facial similarity, gender similarity) against candidate familiarity. We also manipulated the gender of the candidate and pitted the effects of facial similarity against the effects of attitude similar-

ity on salient political issues. Thus, Experiment Three builds upon the first two studies by allowing us to understand the relative importance of facial similarity among other cues typically present in a political election.

In these three studies we demonstrated a moderate but consistent effect of facial similarity on evaluations of actual candidates. In all three studies the effect of facial similarity was heightened when other competing identity cues were less salient. In Experiment One, we examined similarity in the least restrictive situation and demonstrated that similarity increased support for unfamiliar candidates across the board. In Experiment Two, in a high information election in which voters were invested in the outcome, facial similarity increased support for familiar candidates only among weak partisans and independents. Experiment Three directly tested the relationship between familiarity and similarity and demonstrated that facial similarity proved effective only when the candidate was relatively unfamiliar. Furthermore, the effect of facial similarity was smaller than cognitive similarities such as issues and party membership.

These results convey clear implications for the study of voting behavior. While other scholars have demonstrated that candidates who look more “competent” win elections, they have not identified the characteristics of faces that make voters evaluate a candidate more favorably. Our work demonstrates that facial similarity is one such characteristic. Increasing the facial resemblance between candidates and voters can alter electoral results, especially when the candidate is unfamiliar. The effects persist on a limited basis even when the information is conveyed about familiar candidates, one week before a closely contested presidential election. Given the revolution in information technology, we have no doubt that political strategists will increasingly resort to transformed facial similarity as a form of campaign advertising.

#### **“Reference Dependence When Tastes Differ”**

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Behavioral decision scholars have made great strides in showing that decisions can be influenced by context and references (Kahneman and Tversky 1979, Thaler 1985, Highhouse 1996). In marketing this work has developed a much deeper understanding of behavior given the decision context (Huber Payne & Puto 1982, Hedgcock, Rao & Chen 2007), and has explored areas such as reference prices (Winer 1986, Hardie, Johnson & Fader 1993) and product line strategy (Orhun 2007).

The bulk of this work typically concentrates on vertical attributes; i.e. attributes that have a clear ordering on any single dimension and a directionality which is consistent amongst people. For example all other things being equal, people prefer high to low quality, and lower prices rather than higher prices.

There are, however, many situations where attributes cannot be easily classified as vertical. For example, in political marketing voter preferences are often modeled as horizontal differentiation, such as the classic left to right continuum. This is true of many product characteristics such as color, and taste. For example, there is no commonly agreed “ideal” car color. In these situations, consumers will not all make the same choice even when they are faced with identical alternatives and all have the same information. Not only does horizontal differentiation characterize a wealth of consumer decision contexts, it allows us to consider more complex markets where tastes must be aggregated to assess the outcomes and implications of reference dependence and marketing activities.

We use the classic Hotelling model to explore “horizontal” reference dependence, introducing reference effects that are not direction specific, i.e. the references represent a consumer's atti-



tude about the distance to the product they experience and not an attitude to the location of the reference as such. The work horse model of competition research, the Hotelling (1929) line, parsimoniously captures both a consumer's personal preference and the market outcomes incorporating other people's preferences. We develop "horizontal" reference dependence in a manner faithful to horizontal differentiation and prospect theory, using non-direction specific effects which show diminishing sensitivity to gains and losses. The reference effect is a function of both the consumer's distance to the reference and to the product being considered. We apply reference effects to utility additively (Koszegi & Rabin 2004); a parameter sets the relative power of reference effects compared to "actual" distance.

This adds discreteness which greatly complicates the Hotelling model. To maintain a manageable scope of this work we take a partial equilibrium approach. We explore the implications of reference points not the process of setting reference points. To solve the model we analyze all possible permutations of gains and losses, 65 cases. We show that although references influence the relative strength of preferences, references don't change choice under horizontal differentiation in this model. However, extending the model to contexts where strength of preference matters, we show that choices can be substantially influenced by "horizontal" reference dependence. These choices move in reasonable ways given loss aversion and diminishing sensitivity which allows specific advice to be generated as to the location managers of any given product want consumers to use as a reference.

We apply this to political marketing, which is a natural market in which to consider taste differences. In politics, despite controversy about the prevalence of coherent ideology (Converse 1964, Jost 2006), many people are willing to categorize politicians and their policies on a single taste dimension (Gigerenzer 2007). The left-right continuum that is widely used in political research (Morton 1999, 2006) represents taste differences because there is no objectively agreed upon reason for the superiority of left to right or right to left. The policy position that each voter prefers depends upon where they stand on the policy continuum.

We examine primary elections. Both the primary and predicted general election choices are captured on a Hotelling line. We show that in a general election reference effects don't change the voter's choice. However we also show that when electability and uncertainty matter, references can influence voter choice in primary elections. This allows us to develop marketing advice; campaign managers shouldn't necessarily aim to anchor potential voters' references around their own candidate's position. Specifically more electable candidates, those expected to be stronger in the general election than their primary election opponents, want voters' references far from the primary contest while less electable candidates want voters to concentrate on their specific policies, they want voters concentrating on the primary election at hand.

Thus, we provide an explanation of how reference dependence can sometimes be a very powerful influence on certain political decisions and yet have no effect on others. We explore why Howard Dean's 2004 communications strategy may have helped John Kerry noting that the conventional wisdom—that the "scream" cost Dean the election is incomplete, Dean's fall in the polls and loss in Iowa preceded the scream. In 2004 Howard Dean was relentlessly attacking George Bush not his opponent in the election John Kerry. This attention to the President reinforced a focus on ousting George Bush minimizing the policy differences between John Kerry and Howard Dean. Where voters' references are focused outside the specific primary contest this is an advantage for candidates perceived as more electable like John Kerry. This work also helps

explain why in 2008 republican voters confounded expert's predictions that they would choose a candidate more in tune with their core beliefs instead choosing John McCain, the candidate seen as more electable.

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