# Facing Facts

## Evaluating voters' appearance-based strategies in congressional elections




BY

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To my loving family, supportive friends and ever tolerant husband Joe…I can probably go out to dinner now

## ABSTRACT

*In this era of candidate-centered politics a wealth of research has shown that candidate appearance can predict electoral success. Many of these studies attribute this link to voters incorporating candidate image into their electoral decision making. Specifically, several studies have asserted that candidates who are viewed as more attractive or competent gain an electoral advantage because they draw voters who lack partisan affiliations or lack the political sophistication necessary to utilize more complex cues – such as candidate ideology.*

*Utilizing survey data of voters and data from the U.S. House of Representatives, this project combines theories from electoral studies, cognitive psychology, and evolutionary leadership research to investigate the degree to which candidate appearance influences vote-choice. Evidence from this thesis suggests that while unaffiliates and unsophisticated voters are the most likely to change their vote choice on the basis of candidate appearance, they are also the least likely to convert that preference into meaningful political action.*

*This thesis adds to the literature on candidate appearance by suggesting a new mechanism through which positive candidate image leads to electoral success – by increasing the enthusiasm of all voters for a candidate, and thus bolstering mobilization efforts and voter turn-out.*

# INTRODUCTION

Classic democratic theory often emphasizes the need for an attentive and well informed electorate (Lau & Redlawsk, 2001). While the cognitive revolution of the 1960's and 70's threw cold water on the classic portrayal of voters as "omnicompetent" consumers of information about the policies, philosophies, and leadership abilities that distinguish candidates (Kinder & Sears, 1985; Pillai & Williams, 1998), there remains a strong normative desire for citizens to select political leaders on the basis of meaningful criteria. Consequently it may be disturbing for many concerned with the health of American democracy to learn that a large body of research has found that the physical appearance of candidates can predict electoral success (e.g. Ballew & Todorov, 2007; Hall, Goren, Chaiken, & Todorov, 2009; Olivolia & Todorov, 2010; Todorov, 2005). But before any political scientists go rampaging through the streets yelling "it's all over, my life is a sham, the American electorate is hopelessly broken", it is important to take a critical look at what these studies actually reveal about the decision making process of the modern American voter. To begin this endeavor it is necessary to understand what lead political scientists to look for a connection between candidate appearance and electoral success in the first place.

## THE PERSONALIZATION OF POLITICS AND THE RISE OF CANDIDATE IMAGE

There is little question that the coverage of political campaigns has shifted in focus over the past half century from parties to candidates. This trend is often referred to as the "personalization of politics" (Sears, 1969). One example of this shift is evident in the content of campaign news coverage. In 1952, candidates received 1.7 mentions for every party mention in

media coverage of the U.S. Presidential election. By 1996 that number had jumped to 5.6 candidate mentions, over three times as many (McAllister, 2007).

The rise of candidate focused campaigns went hand in hand with the growth of television as the preferred mode of political communication (Keeter, 1987). For many Americans, who would never meet candidates for federal elections face-to-face, the television created an intimate connection between themselves and their elected officials. Television made candidates more than the sum of their issues and/or party. In the TV era the candidate was sitting with you in your living room, and you could judge for yourself what type of person she was. This sentiment was well captured by the New York Times TV critic Jack Gould back in 1952:

> a TV-aware electorate is not going to be voting for a man merely on the basis of his reputation, or his thoughts as recorded in the printed word, or his disembodied voice as it comes out of a loudspeaker. Television makes the candidate of today a human being at one's elbow, who is going to be judged on the same terms as a man greets any new acquaintance. (cited in Keeter, 1987, p.344)

When television brought the candidate off the podium and into the homes of voters it introduced new modes of information for voters to utilize when forming impressions of political leaders. Driving home this point, the former chairman of the Federal Communication Commission, Newton Minow, once declared, “television’s most significant political characteristic probably is its ability to present an image of a politician - providing an indication of his character and personality” (in Nimmo, 1975 p.6). Rather than compiling assessments from information in print or on the radio, voters could form positive or negative impressions of

candidates from the way they looked. This caused some scholars to conclude that U.S. elections were moving into an era of "perception politics" (Landtsheer, De Vries, & Vertessen, 2008, p.219).

The world of perception politics encourages the use of easy to process cues in the form of a candidate's physical appearance, gestures, and language style to make intuitive assessments about the character of a candidate and the type of leader she will be. For some political science scholars this marked an utterly depressing shift for American democracy. As Newman (1999) laments, "the political system today is driven by marketing with an emphasis on image over substance" (p. xvi). A similar sentiment was echoed by McGinniss (1969) in his assessment of the 1968 presidential election when he noted, "style has become substance" (p.30).

It is important to note the two distinct yet inter-related consequences of television on campaigns. First, television drove voters to became more interested in the candidate as a person, rather than an extension of the party (Rico, 2014). Media outlets similarly shifted emphasis from parties and policy positions to candidates and their character. Second, voters were exposed to visuals of candidates with much greater frequency (Schill, 2012), making their assessments vulnerable to perceptions based on visual cues. Voters of today see visuals of candidates on television advertising, in news coverage, on social media, and on candidate websites. And the increase in campaign spending on TV and internet ads suggests that campaigns understand the importance of controlling their candidate's visual image (Carpinella & Johnson, 2016; Dimitrova & Bystrom, 2013; Druckman et al., 2009; Sapiro et al., 2011).

While television may have been the catalyst for the rise of visual information, what author Neil Postman once called the "visual revolution", images of candidates now permeate all modes of election coverage. Of particular note is the rise in online forms of political

communication, be they candidate advertisements or digital newspapers. In 2017, almost 43% of Americans said they often got their news online, compared to 50% who often get news through television. And, in 2012 presidential candidates spent $78 million on online advertising alone (Ballard et al., 2016). The cheap and visually rich medium presented by online platforms means that politicians can disseminate their image more efficiently than ever before.

The following section highlights how political scientists and students of psychology became interested in candidate image in the first place. In Chapter 2 and Chapter 4 this thesis revisits this narrative, looking in-depth at whether candidates (and by extension their image) actually influence the voters of today in the same way scholars in the latter half of the 20th Century predicted.

## The Links Behind Candidate Appearance & Electoral Success

In 2005 Alexander Todorov, a psychologist at Princeton University, published a paper in Science which predicted the outcome of congressional races from naive participants' ratings of candidate images. That article has been cited over 1145 times and has led to a surge of studies looking at how the appearance of candidates impacts electoral choices. Despite its impact, Todorov's 2005 paper was far from the first to note a connection between candidate image and electoral success. As far back as 1968 political scientists Natchez & Bupp, upon reviewing presidential elections from 1952 to 1964 concluded that, "The best predictor of voting behavior…is candidate image" (cited in Nimmo, 1975, p.411). The link between appearance and electoral success has now been demonstrated for elections in Australia (King & Leigh, 2009), Germany (Klein & Rosar, 2005; Rosar, Klein & Backers, 2008), Switzerland (Lutz, 2010), the United Kingdom (Banducci, Karp, & Rallings, 2008), Brazil and Mexico (Lawson, Lenz, Baker,

& Myers, 2010), Finland (Poutvaara, Berggren, Jordahl 2006), and Bulgaria (Sussman, Petkova, & Todorov, 2013).

The studies cited above all have one thing in common - they show that intuitive impressions based on naive participants' ratings of candidates' physical appearance can predict election outcomes. What is unclear is whether this connection between appearance and election outcomes is evidence that voters are succumbing to perception politics and utilizing visual images of candidates in place of more traditional forms of political decision making (i.e. voting based on party, issue stance, incumbency, etc.). As Ahler, Citrin, Dougal, & Lenz (2017) point out, "While these observational studies find that candidate appearance correlates with actual election results, these studies do not show that candidate appearance actually causes voters to change their minds in real world elections" (p. 78).

Although strong empirical evidence is lacking, some researchers have been quick to cite studies that correlate candidate appearance and election outcomes as evidence of voters' use of photographs in political decision making. For example, Berggren, Jordahl, & Poutvaara (2010) took their findings that candidate beauty is positively related to electoral success as evidence that, "voters favor good-looking candidates" (p.15). However, other researchers (e.g. Ballew & Todorov, 2007) have been more cautious when interpreting the implications of their findings. They note that these trends may be due to the fact that, "party leaders can promote competent-appearing candidates for key positions" (p.17952).

The notion that research is picking up on decisions made at the level of the candidate or the party, rather the individual voter, has received some support. Campaigns are keen to gain any advantage and are careful to shape the image of their candidate (Hoegg & Lewis, 2011; Schill, 2012). When campaigns are looking for high quality candidates they consider physical

appearance (for evidence see Squire & Smith, 1996). Furthermore, strong candidates are often strategic in their decision to run and are less likely to challenge an incumbent who is perceived as being of high quality (Mondak, 1995). Consequently, more attractive candidates may be more likely to win because they run when electoral competition is lower.

A second and related possibility is that appearance is related to other beneficial traits, regardless of campaign intervention. A correlation between the actual quality of the candidate and their physical appearance would make it impossible to tell whether individuals in actual elections were following the decision making strategy of their experimental counterparts and voting based on appearance, or voting due to other quality measures. For example, a genuinely competent and well-liked candidate may raise more money from potential donors. This funding advantage could then translate into promotional materials that make a candidate look more attractive (i.e. better photographers, photoshopping images, consultants who help with decisions about clothing and haircuts). This would result in candidate appearance being inseparable from other campaign relevant advantages such as increased voter outreach, advertising advantages, and simply having a more popular platform or experience, if this was the basis for increased funding.

This possibility has at least some support. Lenz & Lawson (2011) found a .59 correlation between the spending advantage of candidates in the 2006 U.S. Senate races and appearance derived from naive raters (see also Ahler et al., 2017). However, it is unclear the directionality of this relationship – i.e. whether candidates received more money because they looked good or whether candidates looked good because they had more money to spend on cultivating their image.

While the theory of a campaign effect seems plausible, at least two studies have directly investigated this theory (i.e. Atkinson, 2009; Laustsen, 2014) and found the electoral advantage of attractive and competent looking candidates held, even when the nominating strategies of the campaigns and candidate spending were controlled. However, the Lausten study was conducted in Denmark, so the implications for U.S. elections should be interpreted with caution. Exploring all possible explanations for the relationship between candidate appearance and election outcomes is beyond the scope of a single thesis. Still, Chapter 4 will provide further discussion of how these alternatives have been addressed in the existing literature.

Despite these alternative arguments, there are at least two reasons to directly test the theory that voters incorporate visually-derived trait inferences into their decision-making structure. First, normative democratic values are most challenged by the notion that voters utilize candidate appearance when making electoral decisions. Second, scholars working on appearance and elections have traditionally interpreted their findings to support a voter-based theory. For example, Todorov (2005) noted that their findings, "suggest that rapid, unreflective inferences can contribute to vote choice" (p.1623). And Barrett & Barrington (2005) state, "The nonverbal style of a person in the political arena…can and does have a tremendous effect on the way he is received and how much he is liked" (p.15-16). As a result, it is worthwhile to directly test whether visual cues can influence voters' decisions.

## How Visual Cues are Incorporated into Voting Models

The studies mentioned above demonstrate that assessments of candidate appearance can predict the winners of elections. What they do not empirically demonstrate is that voters are incorporating visual cues in their decision processes. However, almost all of the aforementioned

studies present (to varying degrees) a theoretical narrative about why appearance would be an attractive tool for some voters to employ. As the theory goes, traditionally decision-making processes of voters have been viewed as a conscious deliberation involving "rational" assessments of a voter's attitudes and beliefs about various candidates. However, cognitive science has produced new models that recognize the affective and unconscious aspects of vote choice (Erisen, Lodge, & Taber, 2014). These new models are especially important for understanding political decisions in a television era. The introduction of constant visual cues represented an important shift in the type of information that voters are exposed to when selecting candidates. Images are uniquely adept at capturing the attention of their audience and evoking swift emotional reactions (Verser & Wicks, 2006; see also Graber, 1989). Among visual stimuli, human faces seem especially potent. By simply looking at a photograph, voters form impressions about a politician's trustworthiness, intelligence, and competence as a leader (Little, Burriss, Jones, & Roberts, 2007). Often these assessments pool together, creating an overall feeling of liking or disliking a candidate. This narrative will often be followed by an amusing historical anecdote. For example, "in an exchange on 60 Minutes Senator Phil Gramm (R-TX) was asked why he came across poorly on television. He responded, 'It's called being ugly" (cited in Atkinson, 2009).

In general, the theory sections of papers on candidate image and electoral outcomes have set up appearance based trait inferences as an intuitive and inescapable facet of human cognition. However, suggestions about the impact of this predisposition on vote choice have varied from study to study. In some instances, scholars have gone so far as to argue that voters use appearance as a heuristic similar to that of partisanship (e.g. Lenz & Lawson, 2011), using a candidate's image as the sole deciding factor and either disregarding or failing to acquire other

information. While it is well documented that some partisan voters support candidates on the basis of party affiliation alone (reviewed in Lau & Redlawsk, 2006), it is less clear that voters use physical appearance in the same way. Thus, in their research on the impact of voter sophistication and candidate appearance Lenz and Lawson (2011) show that the attractiveness of candidates is a stronger predictor of electoral success for some voting demographics (i.e. unsophisticated voters with high TV exposure). However, they extrapolate this finding to suggest that these voters disregarded other types of information, "[Our findings] lend further credence to the notion that candidate appearance influences citizens' voting decisions, at times favoring candidates who "look the part" over candidate who share citizens' policy views or are more qualified" (p.575).

The view that visual cues "take the place" of other politically relevant information is also perpetuated by Hall and her colleagues (2009), "people can form their voting preferences either by relying on and processing superficial heuristic cues such as the facial appearance of the candidates or by processing systematically valid cues about the candidates' abilities and agenda such as their voting record on particular issues" (p.6). While the from Lenz & Lawson (2011) data demonstrates a stronger correlation between appearance ratings and vote choice for unsophisticated voters, nothing in their data is sufficient to demonstrate that candidate appearance was the deciding factor in these voters' decisions.

## THE GOALS OF THIS THESIS

One of the goals of this thesis will be to problematize theories that candidate appearance functions as a stand-alone decision cue for uninformed or unsophisticated voters. This is achieved in three ways. First, by demonstrating that these theories make assumptions about the

diminishing role of partisanship in elections which are largely unfounded. Second, by providing evidence that appearance is intrinsically bound-up with other more traditional political variables (i.e. partisanship, issues, incumbency, etc.) and thus capable of impacting a broader demographic than candidate appearance studies have suggested. Third, by outlining a theoretical framework that suggests candidate appearance is more likely to influence voter turnout and activism than swing voters between parties.

Hall and her colleagues (2009), in a review of studies on the correlation between candidate appearance and election outcomes issued a call for future research, "Studies on actual voting decision processes will be crucial to delineate the causal influence of appearance on elections" (p.18). This thesis takes a small step in that direction, seeking to offer a more nuanced understanding of the impact of visual media – in the form of candidate images – on the decision-making structure of U.S. voters.

Specifically, this thesis borrows from theories in the fields of electoral studies, cognitive psychology, and information processing to explore how candidate images operate alongside other forms of electoral information such as partisanship and policy preferences. By situating candidate appearance in tandem with more traditional political variables this thesis provides a better understanding of the relevance of candidate appearance for vote-choice.

The thesis begins in Chapter 2 with a review of voters' decision strategies in the absence of visual cues. Because candidate appearance has been shown to influence voters' perception of candidate traits, this chapter takes an especially close look at the role of character traits in the election literature and the interplay between character traits and more traditional political variables such as partisanship.

Chapter 3 investigates the literature on facial perception to better understand how voters cognitively process candidate photographs. This chapter will take an especially close look at the assumptions implicit in the stimuli utilized in many studies of candidate appearance.

In Chapter 4 the thesis takes an in-depth look at the history of research linking appearance to election outcomes. Furthermore, this chapter explores potential links between candidate appearance and traditional political variables. At the end of the chapter, I test the main hypothesis of the thesis – that candidate appearance exerts influence on voters' decision implicitly, altering their enthusiasm for candidates that they favor on more explicit and substantive grounds. This thesis builds on prior work in this area (e.g. Bailenson, Iyengar, Yee, & Collins, 2008; Hoegg & Lewis, 2011; Lenz & Lawson, 2011).

In using an experimental approach rather than survey data from real voters (i.e. Lenz & Lawson, 2011), this study is better able to control the type and level of information subjects use when making their decision. Second, the few studies that do use experimental designs and supply participants with political information (i.e. issue positions, previous employment, etc.) have focused on non-partisan elections (Bailenson et al., 2008) alone. In the current study participants are exposed to a full range of political information, including the partisanship of candidates. This is particularly important given the evidence that appearance can predict electoral outcomes in partisan races. Finally, this study constructs a non-visual model of electoral decision making and then adds visual cues in the form of candidate photographs, thus allowing for a better understanding of the unique contribution of photographs to individual's electoral choices.

Chapter 5 transitions to investigate whether appearance, in addition to predicting electoral outcomes, can also be used to determine the success of candidates once in office. This chapter explores the theoretical evidence for the utility of incorporating candidate appearance in electoral

decisions and experimentally tests whether voters can actual infer task-relevant information (such as success once in office) from the way a candidate looks. This chapter and subsequent experiment is included to help gauge the impact of research linking appearance to electoral outcomes on the overall health of Congress. Specifically, if candidate photographs influence how voters process other electorally relevant information, does it help or hinder voters in achieving their desired outcome - a good representative? Finally, Chapter 6 offers a summary and discussion of the thesis as a whole, and makes suggestions for future work.

Samuel Popkin (1991) wrote in his seminal work on American voters, "I must emphasize at the outset that I am attempting to provide a theoretical basis upon which future studies can build, not to demonstrate or test every relevant proposition. Some parts of my argument have been demonstrated by others; other parts are demonstrated in this book; still other parts are theoretically grounded conjecture, not yet tested" (1991, p.9). This thesis takes a similar approach to the study of appearance in electoral research. The goal is not to definitively prove whether candidates' looks are important factors in vote choice. Rather it offers a political counterbalance to the psychological theories that have dominated this field of research.
One would think that the drastic increase in visual political cues would be met with a corresponding rise in political science studies investigating the impact of candidate appearance on vote choice. While there have been many studies showing the predictive power of candidate photos, research into the causal relationship between visual stimuli and voters' decision processes is severely lacking (Schill, 2012).

# CHAPTER 2
# CANDIDATE TRAITS & ELECTIONS

As noted in the Introduction, voters have become increasingly interested in candidates as people. Chapter 4 of this thesis will delve into the specific role of visual images in shaping these assessments. For now, let us look more closely at the non-visual information citizens can utilize to form trait assessments.

## MODELS OF VOTING

The majority of studies looking at the impact of photos on election outcomes have originated in psychology departments. Often psychologists characterize voting decisions as dichotomous, consisting of either effortful calculations based upon meaningful criteria (i.e. partisanship, issue stance, etc.) or effortless use of irrelevant information (i.e. candidate appearance). This is apparent in psychologists' suggestion that the link between appearance and electoral success is driven by "un-voters" - those who are uninformed, unaffiliated, and/or unsophisticated. This dichotomy obscures much of the nuance of the voting decision that has been illuminated by decades of work in political science. While Chapter 4 will deal directly with theories of the "un-voters", this section highlights how major models of voting have traditionally conceptualized the relationship between partisanship, issues, and candidates. In doing so this section offers a more sophisticated understanding of when candidate variables, and by extension candidate image, is most likely to influence electoral choice.

To begin this endeavor it is worth focusing on three prominent models of voting - the Columbia School, the Rochester School, and the Michigan School. It is also worth recognizing that almost every major model of voting has incorporated some combination of party identification, issues, and candidates. What tends to differentiate these models is which variables are emphasized, when, and to what degree.

At the heart of voting models in the U.S. is the question - how do parties gain and lose votes across elections? For academics, this question inevitably leads to theories about how voters make choices. For campaigns this question prompts them to consider how to allocate scarce resources – toward persuasion of undecided voters or toward mobilization of their supporters. As we will come to see, the three major schools of voting each offer a slightly different interpretation of when voters are susceptible to persuasion.

One of the first major quantitative studies of the American voter took place through Columbia University's Bureau of Applied Social Research. Columbia University's work in the 1940's was particularly interested in the ability of campaigns and the media to persuade voters. Driven by the work of Lazarsfeld and his colleagues (*The People's Choice*, 1944; *Voting*, 1954), the findings from the Columbia School emphasized the role of partisanship and its ability to insulate voters from the effects of campaigns. Voters, they argued, are not tabula rasa when they are exposed to the information barrage that so often accompanies American elections. Rather, they come to elections with several firmly set beliefs. Thus, some members of the electorate are unlikely to be swayed by campaign propaganda. As Berelson et al. (1954) so nicely summarized, "The people vote in the same election, but not all of them vote on it" (p.316).

For the Columbia School the voters perceived as most likely to be persuaded by campaigns and the candidates themselves were the so called "cross-pressured" voters. For

Lazarfeld and his colleagues, partisan ties were closely bound up with socioeconomic factors. They found, for example, that lower income individuals, people in urban areas, and Catholics were more likely to be Democrats, while those of higher social status, people living in rural areas, and Protestants were more likely to be Republicans. However, these identities were not mutually exclusive (e.g. a Protestant blue-collar worker), and sometimes individuals found themselves caught between social circles with differing partisan allegiances. These "cross-pressured" voters were more likely to swing between candidates from different parties.

Over the last half-century the sociological view of partisanship has fallen out of favor, in part because of changing demographics and in part because of the rising interest in psychological models of voting (Popkin, 1991). However, in pursuing their work on cross-pressured voters the Columbia School also looked at another demographic thought to represent swing voters - high interest and low partisanship voters- and found little evidence for their influence in elections, a point that is returned to in Chapter 4 of this thesis.

The Rochester School, and other positivist political scientists such as Anthony Downs (*An Economic Theory of Democracy*, 1957), brought an economist's eye to the literature on vote choice. With a strong focus on the incentive structure of voters, Downs famously introduced a spatial model of voting which suggested that voters would gravitate toward the party or candidate who was closest in proximity to the voter's own issue positions (see also Enelow & Hinich, 1990). As a result, Downs proposed that both candidates and parties would converge over time to the position of the median voter within a district. Subsequent sections of this thesis will discuss criticisms of the median voter hypothesis and how it relates to issues of partisan polarization. For now it is worth noting that these models, more so than any other, emphasized the role of issues in vote choice.

Over the years the spatial models of Downs, along with other rational choice theorists, have been criticized for assuming voters are capable of shouldering the large cognitive burdens inherent in proximity voting (i.e. calculating the issue positions of all candidates/parties in a given election). However, these criticisms often ignore another major contribution of rational voter models - a recognition that voters have little motivation to invest time and energy into gathering information to improve their vote choice.

Downs noted that voters, to reduce the burden of information gathering, could utilize their pre-existing knowledge of parties as a type of information short-cut or default position. For Downs even the most rational voter should recognize that investing heavily in information gains produces minimal utility. This theory was taken a step further by Samuel Popkin (1991) in his book *The Reasoning Voter*. Popkin criticized consumer models of voting which suggest that voters have a vested interest in taking the time to learn about candidates. As he noted, "Time spent evaluating policies leads not to better policies but only to a better-informed vote" (p.22). And this better-informed vote is not guaranteed to lead to a better outcome for the voter, since the final choice is one of public consensus not individual mandate. The subsequent low utility of acquiring information means that even rational voters should be less willing to invest time and energy into learning about candidates. Instead, Popkin argued, voters should favor information that they receive as a by-product of activities they pursue in their daily lives (i.e. talking with friends and family, seeing advertisements on TV, etc.). This notion of "low-information rationality" supported Downs' supposition that voters will be highly reliant on partisanship, since it offers a low cost decision-strategy.

Interestingly, the rising interest in candidate traits in the political science literature emerged in part as a response to the Downsian spatial models of voting (Downs, 1957). From the

perspective of the spatial model, the goal of the candidate is to position himself in a multidimensional issue space relative to voters so as to maximize vote totals. This approach assumes that voters enter elections with preconceived issue positions and then shop for the candidate that best represents these positions. Some scholars took issue with the idea that voters had the capacity or incentive to consider the issue positions of candidates and proposed "valence" models as an alternative (i.e. Stokes, 1963; 1992).

The term "valence" in election literature often refers simply to non-policy aspects of candidates such as their personal integrity or competence for office (Stone & Simas, 2010). In general, valence models assume that there are universally desired social outcomes (i.e. a strong economy, low crime, clean environment, etc.) and voters look for the candidate who is best equipped achieve these results. As Barisione (2009) notes, valence represents, "the ability of leaders to project a credible image on declared and shared objectives and, more generally, a positive image of their leadership qualities" (p.478). While issue distance is the key variable for spatial models, valence models are more concerned with candidates' character traits like competence and trustworthiness (Clarke & Whitten, 2013). As Pratt (2002) highlights, "an inept politician creates pure inefficiencies which are costly to all citizens" (p. 167-68).

The models proposed by Downs and Stokes did agree in some respects. For example, Downs (1957) thought that when candidates did not differentiate on issues, voters would fall back on measures of party performance and evaluations of which party had been most successful (i.e. competent) in delivering benefits such as a strong economy and high employment. The notion of calculating party performance is closely related to Stokes' (1963) valence model. And more recent empirical models have supported the theory that decreases in party polarization

increases valence based decision-making among voters (e.g. Green & Hobolt, 2008; see also Buttice & Stone, 2012).

Perhaps the most influential models of voting emerged from the Michigan School led by Campbell (*The American Voter*, 1960), which overlapped both the Columbia School and the rational choice models of Anthony Downs. However, their approach differed in its strong embrace of the cognitive revolution taking place in the social sciences at the time. In particular, the Michigan school emphasized the psychological perceptions of voters during elections. Partisan attachments were viewed as a stable attitude which was formed early in life. Importantly, these attachments were affective. A major tenant of *The American Voter* was that the strength and direction of party identification was a key determinant of voting behavior. Like the Columbia School, candidates and issue orientations were seen as short-term forces that could vary from election to election. And the Michigan School acknowledged that candidate personality was capable of influencing some voters, though these were presumed to be those with either weaker partisan attachments or no partisan affiliation (i.e. independents).

The models mentioned above were all developed from the 1940's through the 1960's. Since then much of the work in electoral studies has been testing the theories proposed. What has become clear is that there is no universal rule for how voters decide. Rather, the relative importance of the three key variables (partisanship, issues, and candidates) changes over time. In the 1940's through the 1960's, the majority of the American electorate identified with one of the two major political parties. It is thus no wonder that models developed during this time placed a strong emphasis on partisanship in determining vote choice. In the 1970's through the 1990's the number of voters identifying as independents began to rise causing many scholars to suggest that partisanships influence over the electorate was decreasing. Textbooks from this era were rife

with proclamations that "Voters no longer strongly identify with one of the major parties as they once did" (Bartels, 2000, p.35). One author proclaimed that there existed a, "massive decay of partisan electoral linkages…to the ruins of the traditional partisan regime" (Burnham 1989, p.24). As just noted, political scientists became interested in candidates as people - and the images they projected - in the latter half of the 20th century when television was on the rise and the influence of partisanship was thought to be waning.

In all three schools of thought mentioned above, partisanship represented both a long-term influence on voters and an easy and intuitive short-cut for making decisions. The reasoning was then that the decline of partisan affiliation should produce an electorate more susceptible to campaigning and candidate image. For many psychologists interested in the influence of candidate appearance, this is the lingering conception they have of partisanship and the electorate in America. For example, Praino et al. (2014) refer to the "inexorable organizational decay of political parties" and, "systemic partisan dealignment where voters are not locked into party commitments". To support this view Praino and his colleagues rely on studies conducted in the 1980's and 90's (i.e. Ladd, 1981; Silbey, 1991; Wattenberg, 1991). Building on this supposition Praino suggests that since, "parties have largely stopped working as heuristic devices, quick assessments made by voters based on physical appearance may become important" (p.3). Thus, according to authors like Praino, the last few decades have seen a decrease in the utility of partisan variables for explaining vote choice and a rise in candidates' influence on the electorate. Chapter 4 of this thesis will deal directly with the first supposition – that partisanship is becoming less influential. The remainder of this chapter considers the more fundamental question for studies of candidate appearance - do candidate variables play a role in explaining voting decisions?

Despite theoretical interest in the personality traits of candidates, many of the empirical voting models that explicitly include candidate variables focus on the strategic advantages of factors such as name recognition, campaign spending, and campaign skills (in Adams et al., 2011). Yet almost all work on the appearance advantage of candidates suggests that candidate image influences election choice by affecting voters' trait perceptions of candidates (e.g. the politician's competence or likeability). If the perceptions of a candidate's character doesn't actually influence voting decisions, then it is difficult to suggest that the appearance of candidates -which influences these perceptions - will.

Buttice & Stone (2012) once described the question of whether voters care about the character traits of candidates as "perhaps the most basic, yet under investigated, hypothesis about voting choice in House elections" (p.871). The section that follows takes a closer look at the role of traits – what was previously referred to as a candidate's "valence" (Nyhuis, 2016) or "quality" (e.g. Buttice & Stone, 2012; Mondak, 1995) – play in electoral decision-making today. While the research considered here includes work conducted at the presidential level, care is taken to include multiple studies of congressional and gubernatorial races, as this is the level at which many studies of candidate appearance take place.

## PSYCHOLOGY OF TRAIT ATTRIBUTIONS

When political scientists talk about a candidate's character or "traits" to what are they actually referring? Within the psychology literature personality traits are broadly defined as habitual patterns of behavior, thought, and emotion (Kassin, 2003; in Garzia, 2011). Several studies have now demonstrated that when people think about others, their assessments can be

categorized along two broad dimensions - competence and trustworthiness. These broad categories reflect important aspects of social living humans experienced in our evolutionary past.

There are several arguments for why candidate traits appear in the decision structure of voters. One of the more common explanations is grounded in cognitive science. Namely, because candidates are highly salient and less abstract sources of information than issue positions their traits are easily stored and retrieved from memory when making political decisions (Miller, Wattenberg, & Malanchuk, 1986). This theoretical approach fits nicely with notions of voters as cognitive misers (Fiske & Taylor, 1991). Thus, while there are a number of variables that individuals could use to overcome the complexity inherent in selecting political leaders, candidate traits are uniquely intuitive. As Funk (1996) put it, candidate traits are an appealing way for citizens to, "evaluate candidates on their performances without having to invest considerable time and energy into following public affairs or uncovering candidate issues" (p.97).

## Trait Attributions in Political Science

There is some disagreement about whether the different traits used in character assessments are equally important across all candidates and election environments (e.g. Kinder & Abelson 1981; Kinder, 1983). The view that traits have fixed importance for candidate assessments across election environments is currently the norm. As Funk (1999) notes, "models of candidate evaluation have typically assumed a single model of decision making in which the criteria for judgement is the same across all candidates" (p. 703). However, in her model on the impact of traits on overall candidate evaluations, Funk found that only competence could be

interpreted as universally important, while other traits such as integrity and empathy differed both across candidates and election cycles (p.711; see also Fridkin & Kenney, 2011).

Some political science scholars have raised concerns about the use of traits on normative grounds, arguing they represent inherently irrational forms of decision making. For these scholars the question is not whether voters do use candidate traits, but whether they should. This view is captured well by Gary Jacobson & Michael Dimock (1994) remarks on voters' use of character traits in the 1992 elections:

> Like the drunk in the old joke who searches for his keys under the streetlight, not because he dropped them there but because that is where the light is, many voters in 1992 judged their representatives on irrelevant information that was available as substitute for relevant information that was not (p.622).

Do character traits represent irrelevant information? From a Lockean perspective, frequent elections exist precisely to ensure that elected officials who do not demonstrate their competence and trustworthiness in office (regardless of their ideological position) are removed (Levi & Stoker, 2000) . However, it is questionable whether members are as beholden to constituents' evaluations of in-office performance as accountability theories contend (See Stokes & Miller, 1962). The public often knows little about what their representatives are doing while in office, making it difficult for constituents to hold members accountable for their actions once elected.

Given this constraint, qualities such as personal integrity and competence should be valued more during the selection process. By picking trustworthy and capable leaders from the start constituents are relieved from the duty of monitoring every decision their representatives make once in office (Bianco, 1994; McCurly & Mondak, 1995). This view is congruent with the

work of Mansbridge (2009, 2011) who argues that a principal- agent relationship between constituents and their representatives is facilitated by voters investing time in the selection of a trustworthy and competent representative rather than continuously monitoring the choices of a legislator once he/she is in office in an effort to sanction bad behavior.

Supporters of spatial models of voting may argue that policy agreement can shield voters from worrying about the character of political representative. The thinking goes that even a politician behaving badly will not harm their constituents so long as they are pursuing goals that are in line with those of the voters who got him/her elected. However, relying simply on the ideological overlap between oneself and a candidate to ensure "good" representation can be problematic given that there is no guarantee that, once in office, a politician will follow through on promises made during the campaign. Even Downs (1957), who famously promoted spatial models of voting, recognized the difficulties associated with predicting how a politician would behave once in office. He noted that candidates often "formulate policies in order to win elections, rather than win elections in order to formulate policies" (p.28). For a candidate seeking political office a campaign is one long sales pitch, and there is little reason to believe that their issue stances are immune from strategic marketing. This point is made explicit by Fenno (1978) who states, "Position taking is just as misleading to constituents and as manipulative of their desires as image selling. It may be just as symbolic as any form of candidate advertising" (242).

Indeed, the stability - and by extension the predictability - of a candidate's behavioral disposition[1] (for evidence of stability see: Kramer & Ward, 2012; Mehta & Gosling, 2008; cross cultural evidence McCrae & Costa, 1997) compared to their policy preferences makes it an appealing metric for voters. As Caprara & Zimbardo (2004) noted, assessments of a candidate's

[1] How traits such as competence fit into notions of "behavioral dispositions" will be discussed in Chapter 3.

disposition "allow one to extend control over others' future performance, on the common assumption that personality traits are relatively stable and individual character is relatively constant" (p.587).

## Evidence that Traits Impact Elections

Much of the work on candidate appearance and electoral choice suggests that visual cues predict elections because they influence voters' perceptions of a candidate's character (i.e. their competence and trustworthiness) and by extension their electoral appeal. In order for this line of reasoning to stand up it would need to be demonstrated that candidate traits are indeed meaningful variables for electoral decision-making. While there is ample evidence that voters think about the character traits of leaders, there is a good deal of debate as to whether these assessments actually influence electoral choice.

Some researchers have noted the limited influence of politicians' character traits on voter preference (i.e. Bartels, 2002; King, 2002). And while McCurley & Mondak (1995) find evidence that constituents hold incumbents accountable for their personal qualities, most of the literature on congressional elections shows that challengers struggle for visibility among voters (Gronke, 2001; Jacobson, 2009; see Adams et al., 2011). Others skeptics have pointed to the fact that, even without the inclusion of character traits, several traditional models of voting retain strong predictive power (Hardy, 2017).

Conversely, other studies have shown that perceptions of character traits can impact voting behavior (e.g. Funk, 1999; Hayes, 2005; Goren 2002), even when more traditional variables are controlled. Thus, in a study of House elections, Buttice & Stone (2012) found that the candidates could pick up about 4.8% in vote share for each unit advantage in quality. One of

the most influential works on the role of candidate valence on voting was The New American Voter (Miller, Shanks, and Shapiro, 1996). Interestingly, Miller and his colleagues landed in the middle of the two sides. Their studies demonstrated that while candidate traits retain a unique influence on vote choice, their importance as predictors of electoral outcomes diminished greatly as antecedent variables like party identification and issue support were included in the model (see also Hardy, 2017).

Complicating matters further, there is now some question about the directionality of the relationship between candidate traits and voting behavior. For example, it might be that individuals attribute positive traits to the candidates they support, while attaching negative traits to their opponents (King, 2002). However, both Fenno (1978), and more recently Burden (2004), suggest that candidate character can actually insulate politicians from having to conform to the ideological median of their district. In a study of the 2000 election, Burden found that winners often had more extreme views than their challengers. From this data he concluded that the winners, "manage victory on the basis of non-ideological criteria that overwhelm the modest effects of ideological proximity" (p.221).

## CONTEXT & VARIATION

As is often the case, much of the conflict surrounding the utility of incorporating candidate character in voting models can be attributed to the nuance of differing election environments. As Barisione (2009) suggests in his review of leader effects on voting, "[The evidence] suggests that we should reframe the question in conditional terms, i.e. under what conditions do leaders make a difference? The point to be considered is not only "how much" but also "where", "when", "to whom", and "how""(p.474).

Furthermore, some lexical care should be taken to distinguish between "impact" and "importance". For example, despite being skeptical of the overall impact of candidate traits on election outcomes, Bartels (2002) nonetheless concedes that in the 2000 election it is quite possible that the half point advantage George W. Bush held over Al Gore on candidate trait evaluations contributed to his razor-thin victory (p.65; see also Hardy, 2017). In this case candidate traits may have had a small impact, but if it tipped the balance in a close election there is no doubt it was important.

There are several reasons why the impact of traits would fluctuate both across candidates and across election cycles. Three possibilities - the campaign strategies of the candidates, the salience of traits in the media, and the strength of partisan and issue cues – are explored in the following sections.

## CAMPAIGNS

It is not uncommon for political campaigns to control their message, emphasizing traits that favor their candidate and disparage their opponent. For example, in several TV appearances Hillary Clinton highlighted Donald Trump's supposed mental instability while Trump painted a picture of candidate Clinton as dishonest and untrustworthy with the catch phrase "lock her up". As Hardy (2017) notes, "In advertisements, on the stump, and in debates, candidates routinely attack the integrity, honesty, and leadership credentials of their rivals and as such inherently praise their own" (p. 2). And several studies have now demonstrated that within congressional advertising there is an emphasis on personality traits (e.g. Kahn & Kenney, 1999; West, 2004; see Fridkin & Kenny, 2011). This is particularly true of political attack ads, which routinely target the competence or integrity of an opposing candidate (Geer, 2006). This point is driven home by Fenno (1978, 1996) who, after conducting several elite level interviews with politicians,

found that congressional candidates make a concerted effort to shape how constituents perceive their character over the course of a campaign.

While it is difficult to quantify the true impact of campaigns, at least some evidence exists which demonstrates the ability of campaigns to shape an election. For example, in their analysis of the 2000 election, Johnston et al. (2004) found that Vice President Al Gore lost his 8 point margin in the lead up to the election – especially in battle ground states - in part because of effective Republican ads that attacked his competence and integrity.

However, not all campaigns will be equally adept at shaping the image of their candidate via-a-vis their opponent. Incumbents, for example, often have a dual advantage over competitors in this arena. First they have built an existing relationship with constituents and as Fridkin & Kenny (2011) argue, this familiarity provides voters with the cognitive scaffolding necessary to take in and process new information about the candidate. As Steenbergen & Lodge note, "The more familiar an object is, the better developed the knowledge structure for the object is, and the easier it is to encode new information about the object" (2003, 137). Second, incumbents often have a monetary advantage over challengers which allows them to disseminate their campaign message more effectively.

While money and recognition can help campaigns build a positive image of their candidates in the minds of voters, there are some inherent limitations. For example, the ability of campaigns to influence character perceptions may be bounded by a need for a candidate's messaging to "ring true" (Funk, 1999). When president Trump attempts to market himself as the "smartest president in history" and then fails to spell simple words correctly, the image is unlikely to take hold in the public's mind. Conversely, Republican Senator John McCain has often been praised by both the right and the left for his integrity. This perception is easy to adopt

(despite partisan differences) in light of his record of refusing to leave a POW camp before fellow soldiers. Additionally, the persuasiveness of a candidate's message can be mediated by measures of character that are beyond the control of the candidate or the campaign (Laustsen & Petersen, 2016 ). One important sources of information beyond the candidates control is the media.

## MEDIA

Perhaps the most direct way voters can access trait information about candidates is through the media. The degree of media coverage of candidates in congressional campaigns can vary wildly from race to race (e.g. Fridkin & Kenny, 2011). As races become closer, it is more likely that citizens will tune in to both political advertising and media coverage of the candidates (Kahn & Kenny, 1999). Increases in campaign spending that accompany more competitive races are also likely to increase citizens' awareness of candidates' personal characteristics (Jacobson, 2009).

There is little doubt that the media can shape perceptions of political figures in the minds of voters (Barrett & Barrington, 2005). News coverage of elections often includes direct information about the personal qualities of candidates (Funk, 1996). For example, on April 15, 2015 - the day Marco Rubio announced his candidacy for President - New York Magazine released an article pointing out the tendency for media outlets to describe the new presidential candidate using the same three trait terms – young, ambitious, and charismatic. NPR referred to him as "Marco Rubio, the charismatic, Hispanic, young (and even younger looking) freshman senator from Florida", while the Tampa Bay Times gave him the title of, "the ambitious Floridian". The LA Times called him, "the charismatic, young tea party favorite", and The Week

described Rubio as, “a great candidate, young, charismatic, Latino, with an inspiring life story” (Fuller, 2015).

In addition to focusing on character coverage, newspapers also commonly show favoritism toward one candidate over another (i.e. Kahn & Kenny, 2002; Page, 1996; Rowse, 1957). For example, in a study of 67 congressional campaigns Kahn & Kenny (2002) found that when a newspaper’s editorial board endorsed a candidate it significantly altered the tone of coverage and the degree to which the candidate was criticized. Furthermore, such biases have been shown to impact the perceptions voters hold about a candidate’s character (Druckman & Parkin, 2005).

## PARTISANSHIP & ISSUE STANCE

There is little doubt in electoral studies that partisanship represents the single greatest contributor to vote choice. Empirically this has been demonstrated by researchers such as Shively (1982), who used nationwide data from 1888 to 1980 to demonstrate that the partisan margin from stable voters was a much larger contributor to electoral results than shifts from unstable voters. This chapter has already noted that several prominent theories of voting suggest that candidate characteristics will matter most to voters when other variables, such as partisanship, are weaker (e.g. Barisione, 2009; Converse, 1969). Chapter 4 will look more deeply at the evidence surrounding the strength of partisanship in U.S. elections.

In addition to the strength of partisanship, the impact of candidate variables is also influenced by the degree of polarization between the parties. Some scholars have noted that candidate image is least influential when the ideological platforms of the party are disparate and distinct (i.e. Barisione, 2009; Sartori, 1976). And Downs once noted that when candidates converge on ideology, “voters are encouraged to make decisions on some basis other than the

issues", such as candidate and party valence (1957, p.136). Thus, we should expect the impact of candidates to be weakest in highly polarized electoral environments.

Partisan attachments and polarization are not independent of one another. As political conflict increases –as parties become more divergent in their platforms – partisan identities become stronger. This phenomenon is sometimes referred to as "affective polarization" (i.e. Miller & Conover, 2015). Furthermore, increases in negative campaigning (Iyengar, Sood, Lelkes, 2012) only function to exacerbate this emotional tension. This affective division can drive voters to behave more like dedicated fans of a home team, driven more by team spirit than thoughtful consideration of issue positions. And it seems, far from dissipating as some scholars have argued, this affective rift is on the rise. As Miller & Conover (2015) state in their analysis of political polarization, "In the modern U.S. political context, politics is bitterly divisive, and partisan disagreement is at its highest level in decades" (p.225).

## Traits and Other Political Information

There are several well established variables that impact voters in congressional campaigns including partisanship (e.g. Abramowitz & Segal, 1992), the state of the nation (e.g. Jacobson & Kernell, 1983), and ideology (e.g. Wright & Berkman, 1986). Often the way candidates traits are discussed in scholarly work can make them appear orthogonal to other categories of political information (Nyhuis, 2016). If this were reality, then questions surrounding the relative importance of character traits vis-à-vis traditional political variables would hold some validity. However, it is the contention of this thesis that character traits, far from representing a unique dimension of political decision-making, are intricately bound-up with more traditional political variables. If this is true, then one reason for their intuitive theoretical

appeal but weak performance in statistical models could be that they explain much of the same variance as other predictors. The following sections explore the empirical support for this theory.

## ECONOMY

In two party systems, especially when one party controls multiple branches of government, voters can easily attribute government policymaking to incumbent candidates. In the original valence models of voting proposed by Stokes (1963; 1992), economic factors were included in the voting model as one assessment of candidate performance. Other scholars have followed in this tradition, showing that the state of the economy can be viewed as a barometer of a president's competence (Ksiazkiewicz, Vitriol, & Farhart, 2018). Interestingly, these concepts are so intertwined that there is now some debate as to whether economic perceptions influence or are influenced by presidential trait perceptions (e.g., Evans & Andersen, 2006; Lewis-Beck, 2006; in Ksiazkiewicz et al., 2018).

## INCUMBENCY

Incumbency is another common variable in electoral models. And in the case of congressional elections, it has been shown to be a strong predictor of vote choice (Druckman, Kifer, & Parkin, 2009). However, not all incumbents are created equal. In studies of congressional elections incumbents with strong reputations for competence and integrity tend to win larger voter shares, are less likely to be opposed by strong challengers, and are less likely to be defeated early in their congressional careers or to not run for re-election (Buttice & Stone, 2012; McCurley & Mondak, 1995; Mondak, 1995). This evidence suggests that politicians become long-term incumbents because they are perceived as competent, making it

methodologically difficult for survey studies to separate measures of incumbency from measures of perceived competence.

### PARTISANSHIP

Even partisanship can become entangled with the trait perceptions of candidates. For example, some research indicates that party brand stereotypes can be distinguished along the same individual level trait dimensions as candidates (Hoegg & Lewis, 2011). When looking at the stereotypes present day voters hold about the two parties certain patterns emerge. For example, Democrats are often viewed as compassionate, selfless, and kind, while Republicans invoke images of strength, practicality, and decisiveness (Petrocik et al., 2003). And these values are commonly reflected in the policy approaches undertaken by the two parties. Republicans commonly promote platforms that send the message that they are strong on defense and tough on crime, while Democrats promote themselves as helping those in need, promoting peace, and investing in education and health care. What is important to note here is that traits are not orthogonal to parties and issues. Rather, policy platforms often function to convey the types of traits candidates and their parties value.

## OTHER TYPES OF ELECTION RELEVANT BEHAVIOR

One issue with the heavy focus on vote choice as the dependent variable in election studies is that it is not the only way in which candidate quality can influence election outcomes. Hall et al. (2009) casually mention this fact. Voters can stay home, they can participate in get-out-the-vote activities, and/or they can donate to campaigns - all of which exert influence on the electoral fortunes of candidates.

As far back as 1944 political scientists recognized that while some variables were unable to impact vote choice, they could nonetheless influence elections by shifting the enthusiasm or commitment of supporters for their chosen candidate (e.g. Lazarsfeld, Berelson, Gaudet, 1944). For example, Lupia (2010) used survey data from ANES to show that 7 % of people who voted for Republican George W. Bush in the 2004 presidential election were sufficiently less enthusiastic about presidential candidate John McCain that they stayed home during the 2008 election.

Each of the voting models mentioned at the outset of this chapter – Columbia, Michigan, and Rochester – have slightly different suggestions for what contributes to switching or motivation in the electorate. The Columbia School suggested that party outreach is what drives the mobilization of marginal voters – a position that has found empirical support in later studies (e.g., Gerber & Green, 2000). The Michigan School emphasizes electoral salience as a key driver of mobilization. Finally, the Rochester School suggests that the more voters view the outcome of a race as consequential to their utility, and the more they view their involvement as necessary to achieve their desired outcome, the more likely they are to turn-out. This thesis puts forward an additional variable impacting mobilization – a candidate's appearance.

As this chapter has demonstrated, many of the theories surrounding the use of candidate variables consider when candidates will factor into voters' decisions about which candidate to choose. By narrowing the scope of voting behavior to the choice between candidates, these models are forced to place candidate characteristics in competition with other predictors of vote choice (e.g. partisanship). However, when considering additional electoral behaviors – e.g. the decision to turn-out, how often and fervently a voter voices their support, donating money –

candidate character can operate alongside partisanship to bolster or dampen mobilization efforts. This point will be explored more fully in Chapter 4.

# CHAPTER 3
# INFERRING TRAITS FROM PHOTOGRAPHS

The two traits most commonly found to predict electoral success are competence (e.g. Hall et al., 2009; Todorov et al., 2005) and attractiveness (e.g. Berggren et al., 2010; Hart et al., 2011; King & Leigh, 2009; Rosar et al., 2008), with some suggesting that attractiveness is more fundamental than assessments of competence (i.e. Verhulst et al., 2010). The goal of this chapter is two-fold. First, it offers an introduction to what is known about the psychology underlying peoples' appearance based trait perceptions. Second, it takes a closer look at how physical trait perceptions have been measured in the literature on candidates and elections, and the assumptions inherent in these studies.

## COGNITIVE UNDERSTANDING OF FACIAL APPEARANCE

For decades researchers have attempted to uncover the facial features that lead to specific trait impressions. In particular researchers have been interested in whether trait perceptions based on physical appearance are universal aspects of human cognition or products of culture and socialization. The outcomes of this research have demonstrated that people from diverse cultures - as well as infants and young children - show similar perceptual responses to facial structures, suggesting some universal mechanism rather than an arbitrary cultural influence (Cunningham et al., 1995; Dion, 2002; Langlois et al., 1991; Little et al., 2007; Ramsey et al., 2004; see Zebrowitz & Montepare, 2008 for review). Also, neuropsychologists have now identified several regions of the brain involved in the processing of facial features, including the orbitofrontal

cortex, the fusiform face area, the lateral occipital cortex, and the amygdala (reviewed in Verhulst et al., 2010).

Studies of facial perception have demonstrated that most people judge faces along two interrelated dimensions – competence and trustworthiness (Oosterhof & Todorov, 2008). This first dimension (competence) relates to an individual's propensity or capacity to act, rather than the intentions of their actions. The second dimension (trustworthiness) is more closely related to whether the other individual will behave antagonistically or cooperatively. Given this, some scholars have taken to referring to these two social-perceptual dimensions as ability and intention (Hehman et al., 2015).

These dimensions were likely important considerations for early humans who were constantly encountering unfamiliar conspecifics. Specifically, humans often had to make quick evaluations regarding the intentions of others and the capacity of others to act on their intensions. As Susan Fiske states, "Dark alleys and battle zones approximate the survival setting of ancestral encounters with strangers" (p.77). As a result, humans evolved universal dimensions to social cognition. And research on appearance based trait perceptions suggests that the human brain evolved to look for these social cues, at least in part, in the face. While there is evidence that trustworthiness represents a core dimension of social cognition, it has been largely unrelated to outcomes in political elections (e.g. Rule et al., 2010; Todorov et al., 2005) and thus the focus of the remainder of the thesis is on perceptions of attractiveness and competence.

## COMPETENCE

Competence as a trait is generally defined as possessing the required skills, knowledge, qualification or capacity for a task. But what is known about the characteristics of a face that cause it to be perceived as competent? At least three key features have been shown to influence

perceptions of competence: facial maturity, masculinity, and attractiveness (Olivola & Todorov, 2010).

### *Facial Maturity & Masculinity*

As Brian Spisak once noted, "Age is one of the most basic and easily accessible cues of face perception" (2014, p.1). Age is a basic biological classification and even infants are capable of discerning age cues by 4 months (Montepare & Zebrowitz, 1998). Furthermore, the cognitive capacity for age discrimination has been shown to persist even when areas of the brain associated with facial identity are damaged (Reviewed in Spisak, 2012).

In both humans and other animals, certain facial features are found to correlate with age. For example, facial morphologies commonly found in infants (i.e. big eyes, small nose, large forehead, etc.) automatically elicit behavioral responses in adults that increase an infant's chance of survival. One example of such behavioral responses is deference (reduced anger & aggression) towards naïve violations of social norms (Berry & McArthur, 1985). And, it has been demonstrated that in primates, loss of these features corresponds with an increase in directed aggression (Struhsaker, 1971).

When boys hit puberty their body increases its production of testosterone which corresponds to a masculinizing of facial features (i.e. more angular jaws, closer eyes and eyebrows) (Burriss, Little, & Nelson, 2007; Lefevre, Lewis, Perrett, Penke, 2013; Penton-Voak & Chen, 2004). This means that maturity and masculinity are often perceptually linked. While Babyfaced men are perceived as juvenile – i.e. less strong, threatening, and reliable and more warm and honest (Berry & McArthur, 1986) – masculine faces are commonly perceived as more dominant, uncooperative, and threatening (Mileva, 2014).

While theoretically distinct, competence and dominance perceptions have been shown to be closely associated in people's minds. Laboratory studies of small group interactions demonstrate that people often assume that dominant attributes (i.e. assertiveness, confidence, decisiveness) imply competence (Anderson & Kilduff, 2009). And this might explain why masculine faces have also been associated with aspects of competence such as leadership ability and influence (Leary, Cottrell, & Phillips, 2001), and produce higher competence evaluations (reviewed in Olivola & Todorove, 2010; Riggio & Riggio, 2010). Furthermore, these perceptual trends are seen cross-culturally (Zebrowitz, Montepare, & Lee, 1993), suggesting they are not products of socialization.

Given that masculinity and maturity drive both competence and dominance perceptions, it is not surprising that these variables are commonly confounded in the literature. For example, some studies have combined dominance and competence into one index (e.g. Rule & Ambady, 2008, 2011), or looked solely at dominance (e.g. Rule et al., 2010), or competence (e.g. Todorov et al., 2005), without controlling for the interplay between the two. This can be particularly troublesome when assessing political candidates, given the growing evidence that perceptions of dominance are favored differently by the two political parties, a point that will be returned to in Chapter 4.

## ATTRACTIVENESS

The facial morphology that correlates with attractiveness attributions is well researched. As symmetry and averageness increase, so do ratings of attractiveness (For review, see Gangestad & Simpson, 2000). This finding holds true for both natural and digitally manipulated faces (Little et al., 2007; Penton-Voak et al., 2001). Symmetry refers to the extent to which one-

half of an object is the same as the other half. The second measure, "averageness," refers to how closely a face resembles the average of other faces within a population.

People attribute a broad range of positive character traits to people they view as physically attractive - often referred to as the "Attractiveness Halo Effect" (Verhulst et al., 2010; Re & Rule, 2015). For example, Zuckerman et al., (1995) found a positive association between attractiveness and impressions of warmth and agreeableness. On the other hand, the more a normal face resembled an anomalous one, the more negative people infer negative traits (Zebrowitz et al., 2003). For example, asymmetrical faces have been rated as more neurotic, less agreeable, and less conscientious (Noor & Evans, 2003; in Fink et al., 2005).

There is mounting evidence to suggest that facial symmetry is correlated with masculinity (Scheib et al., 1999; Gangestad & Thornhill, 2003). And individuals view more masculine male faces as more attractive (DeBruine et al., 2006; Feinberg et al., 2008), though this effect has been shown to be context dependent (Penton-Voak & Perrett, 2001; Penton-Voak et al., 2003). Conversely, other studies have uncovered evidence suggesting that more feminine male faces or faces with average levels of sexual dimorphism are viewed as more attractive (for review of masculinity and attractiveness literature see DeBruine et al., 2010).

Attractive people are also commonly viewed as more competent and intelligent (Todorov et al., 2015) across a range of contexts including in the classroom (Ritts et al., 1992), during job interviews (Toledano, 2013), and during performance reviews (Mobius & Rosenblat, 2006). Though it is unclear whether this is driven by the association between attractiveness and masculinity or because competence is a positive trait and thus falls under the "attractiveness halo".

Understanding the bio-psychology of facial perceptions is a rich and expansive field, and well beyond the scope of one political science thesis. However, because research on vote choice and candidate appearance draws heavily from research in this field it is worth understanding some of the theories that underlie this work. What is clear is that our ancestral judgements appear alive today in the way voters think about candidates. Voters perceive candidates along the same trait dimensions they employ in other social settings (Funk, 1996), and competence evaluations are a key predictor of global evaluations of political candidates (Kinder, 1986). In the sections that follow we take a closer look at how perceptions of candidate competence and attractiveness are measured and evaluated in studies of candidate appearance and election outcomes.

## Stimuli in Studies of Candidate Appearance

In most studies of candidate appearance naïve participants are presented with headshots of the winner and the runner up for an election (e.g. Rule & Adams, 2010). Often these photographs are only presented for a brief amount of time in an attempt to capture "first impressions" (e.g. Ballew & Todorov, 2007). This short exposure to photographs can be highly predictive of reactions to longer exposure (Ambady & Rosenthal, 1992; Ballew & Todorov, 2007; see also Benjamin & Shapiro, 2009).

## Consistency of Trait Ratings

The work on impression formation has consistently shown that stable facial structures correlate to particular trait perceptions. And when participants make personality attributions based on facial images, they show a high rate of consensus (Todorov et al., 2005; Penton-Voak et al, 2006). However, some traits are more likely to produce perceptual agreement. For example,

peoples' ratings appear to converge more readily on evaluations of dominance than evaluations of "likability" (Todorov & Oosterhof, 2011).

## CHANGING PHOTOS

There are many aspects of appearance that are utilized by individuals when making inferences about the quality of a person's character from their physical appearance. These may be mutable aspects such as how a peoplw dress or wears their hair (Spezio et al., 2012), how they gesture (Dumitrescu & Gidengil., 2015), where they look, or the facial expressions they make (Main, DeBruine, Little, & Jones, 2010; Burgroon, Birk, and Pfau, 1990). Or, they may be stable biological features such as their gender (Sapiro, Walsh, Strach, and Hennings, 2009), height (Stulp et al., 2013), or facial structure (Todorov, Olivola, Dotsch, Siedlecki., 2015).

Within election literature there is a propensity for studies to treat perceptions of a candidate's attractiveness, competence, and trustworthiness as stable aspects of that candidate's physical appearance. While not explicitly stated, by using trait ratings derived from a single candidate headshot to predict election outcomes researchers are assuming that actual voters make the same attributions as study participants (i.e. Candidate X is more attractive than Candidate Y). This is despite the fact that real voters are exposed to a variety of different photos and videos of the candidates over the course of an election. In short, studies demonstrating a correlation between trait ratings from photographs and election outcomes are not interested in the impact of the specific photograph used in their study. Rather, they are interested in the actual appearance of a candidate - in those stable characteristics that will carry from one photograph to another. In the sections that follow the validity of such assumption is investigated.

Several studies have demonstrated that certain structural aspects of a face (i.e. facial masculinity, facial maturity, symmetry and averageness) correlate with perceptions of

attractiveness and competence. However, changes in the way politicians are depicted has also been shown to mediate the relationship between facial structure and trait perceptions.

As visual images have become more common in newspapers, online, and in television, candidates have become more savvy at creating moments where they can be captured in a positive light. As De Landtsheer et al. (2008) point out, "Once the physical features that lie at the roots are determined, it is possible to manipulate the physical appearance of political candidates in a 'politically desirable' sense (p.225)". Aspects of photographs such as camera angle, viewpoint proximity, and imagery (i.e. kissing babies, being saluted by soldiers, etc.) can all be manipulated to invoke desirable emotions from viewers (reviewed in Verser & Wicks, 2006).

As will be discussed more fully in Chapter 4, additional information about a subject can also alter ratings. For example, the link between perceptions of masculinity and attractiveness can change when women receive information about a target's relationship fidelity (Quist et al., 2012). It may be that perceptions of candidates are altered when raters learn information such as their partisan affiliation, information that is not included when studies ask for ratings from naïve subjects.

This is not to argue that static images of a candidate's face have no relevance for election research. Still images of candidates' faces are prominently featured in newspaper articles, on campaign websites, and in attack ads on television. When sitting for interviews there is often little environmental context and candidates are commonly featured in neutral positions or from the shoulders up. While it is my contention that future work in this field should expand beyond the headshot, this thesis employs the same stimuli as studies predicting election outcomes from photographs. This better situates the findings presented here to join the existing conversation on candidate appearance and elections.

## Quality of Photos

It is worth embarking on a brief digression regarding the quality of stimuli and the assumptions that go with them. Several studies that conduct forced choice comparisons of political candidates use photographs that are of questionable quality (e.g. Hoegg & Lewis, 2011; Stockemer & Praino, 2015). Given that raters are more likely to make negative judgements when presented with poor quality photos (see Banducci, Karp, Thrasher, & Rallings, 2008), differences in photo quality can have a major impact on the appropriateness of conclusions drawn from experiments. This is a particular problem for studies which use candidate photos to predict actual election results, since the assumption is that test subjects are being exposed to the same stimuli as real world voters. For this assumption to hold, one would have to demonstrate that one candidate's photos were systematically worse than her competitor's throughout the election.

However, this problem is less intrusive for studies - such as this one – that are interested in the impact of photos on information processing. In these studies the reasons why a voter dislikes the photo is not consequential to the primary investigation, it only matters what the consequences of holding a negative perception might be for subsequent information processing. Therefore, while it is optimal to have photos of equal quality, the impact of failing to meet this standard varies by the goals and design of the study. All photos used in this study are included in Appendix A.

## Reliability of Trait Ratings

The consensus around trait ratings is an interesting subject in its own right. Often ratings consist of both shared variance among judges - which can be attributed to facial properties that are universal signals of a trait - and idiosyncratic variation that arises from signals that individual raters associate with a trait (Engell et al., 2007; Honekopp, 2006). For example, more masculine

faces may be universally perceived as more dominant than feminine faces. But one rater may have grown up watching tons of mob movies, and inherently associates people of Italian origin with a tough-guy persona. If a candidate looks Italian, then that rater may attribute dominant traits to him above and beyond those invoked by the masculinity of his face. This would be an example of idiosyncratic variance.

Not all studies that use ratings of candidate appearance report statistics for inter-rater agreement (e.g. Lev-On & Waismel-Manor, 2016). When they do the most common measure of inter-rater reliability is Cronbach's alpha, where raters are treated as variables and photographs as cases (Rosar & Klein, 2014; within election research Rule & Adams, 2010). Cronbach's alpha is actually a subclass of reliability formulas referred to as intraclass correlation coefficients (ICCs). Although the structure of the equations can vary, Cronbach's alpha is mathematically equivalent to a two-way random effects ICC for consistency commonly denoted as ICC (2, *k*) (Koo & Li, 2015). Cronbach's alpha can also be computed for binary variables, but in this case it is actually identical to the Kuder-Richardson 20 (KR-20) formula.

In some instances Cronbach's alpha has been described as a measure of "rater agreement" (e.g. Berggren, Jordahl, & Poutvaara, 2010). The more precise studies refer to Cronbach's alpha as a "consensus" measure or a measure of the "internal consistently" of trait ratings (e.g. Rosar et al., 2008). Cronbach's alpha is an appropriate statistic when assessing the appropriateness of utilizing mean trait scores (e.g. Sussman et al., 2013). As an indicator covariance among raters it can help establish that participants had similar views about the *relative* attractiveness or competence of targets. However, as will be demonstrated in the study at the end of this chapter, agreement about the relative position of candidates on traits can obscure important differences among perceivers. This has led some scholars to criticize the application of

the term "agreement" to covariance measures like Cronbach's alpha. For example, Hayes & Krippendorff (2007) state Cronbach's alpha, "is appropriate as a measure of the reliability of an aggregate measure across observers, such as the arithmetic mean judgment, but it does not directly index the extent to which observers actually agree in their judgments (p.81).

Finally, the number of naive raters often varies from study to study. For example, Rule & Adams (2010) used 29 raters to assess all of their photos while Stockmere & Praino, (2015) randomly assigned 5 raters to different photographs from a pool of 24. The differing procedures is not in and of itself problematic. Rather, the lack of consensus in the literature on the effects of different rater schemes leaves important questions unanswered.

## Context of Trait Ratings

Several scholars have suggested that perceptions are relative, not absolute (e.g. Banducci et al., 2008; Rosar, Klein, & Beckers, 2008; Stockemer & Praino, 2015). Put simply, voters judge traits such as the attractiveness or competence of a candidate relative to his or her opponent. For example, Benducci et al. (2008) looked at non-partisan elections for Community Boards in the United Kingdom. They reported that the absolute attractiveness of candidates did not consistently predict election outcomes. However, candidates who were seen as more attractive than their opponent had an electoral advantage.

In some studies scholars have used absolute trait ratings (often on a 7 or 9 point scale) derived from photographs presented to participants one at a time. These studies then create an "attractiveness differential" by subtracting one absolute score from another (e.g. Stockemer & Praino, 2015). Still other researchers have employed both forced choice and continuous judgements (e.g. Ballew & Todorov, 2007).

In this last study, Ballew & Todorov (2007) specifically tested whether the use of forced choice or continuous measures impacts the ability of participants to predict election outcomes and found that it did not. However, it was not specified whether these two rating styles found the same candidates to be more attractive, or whether both approaches were able to predict races at rates greater than chance.

## Present Study: Measuring Trait Perceptions

As previously mentioned, this is not a thesis about facial perception. However, photo ratings collected for two subsequent studies provides the necessary data to test one of the theories presented in this chapter. Specifically, a survey was conducted in which participants were forced to choose which candidate from a pair was more attractive/competent. This procedure was used to select faces for the hypothetical voting scenarios run in Chapter 4. Additionally, continuous measures of attractiveness/competence from single faces was collected from 59 U.S. Congressmen for the "kernel of truth" test conducted in Chapter 5.

### Stimuli

The type of photograph used in a perception study is often dictated by factors external to the researcher, including the time-period and the subject of the inquiry. When possible, primary data collection of faces is always preferable. Shifts in camera distance, angle, pixel quality, and lighting can all distort the shape of people's faces and make them more difficult to standardize for comparison. However, there are several reasons why obtaining primary photos may not be possible. When the target is a public figure, like a politician (e.g. Todorov et al., 2005) or a prominent member of the business community (e.g. Rule & Ambady, 2008), gaining access can be difficult if not impossible. If the researcher is interested in studying historic populations, or

longitudinal data, some individuals may no longer be alive at the time of the study, or may have aged to an extent that a current photo would illicit different perceptions than those obtained during the period of observation (e.g. Lewis, Lefevre, & Bates, 2012).

This current study faced several of these issues. Because the focus of this experiment is federal politicians, gaining access (particularly for a laboratory-style photo shoot) would be incredibly difficult. Furthermore, to ensure an accurate measure of political behavior, longitudinal data was collected which required that photos be selected from historic Congresses. Many of the legislators chosen for the study have subsequently retired (making access more difficult) or passed away (making access impossible). Thus, all photographs used in this thesis are obtained from online sources, specifically candidate websites or the official Congressional photo directory. Every photo was standardized to a height of 250 pixels and the background removed using photoshop. Because the photos were simply the head and a small portion of the candidate's bust, the width of the photos varied slightly depending on the width of the candidate's head and body position. All photos used in this thesis can be found in Appendix A.

## PARTICIPANTS

Participants for both the continuous rating trial (N=31) and the forced choice trial (N=18) were recruited from MTurk. Quotas and screening questions were used to try and achieve balanced samples. Both trials were fully-crossed, meaning each rater was asked to assess every face or pair of faces. The partisan and gender breakdown for the two trials is presented in Table 1. The Continuous data skewed slightly Republican and female while the Forced Choice trial had slightly more men.

Table 1.

*Number of Participants by Gender and Partisanship*

| | Total | Male | Female |
|---|---|---|---|
| **Continuous** | | | |
| Democrat | 15 | 6 | 9 |
| Republican | 16 | 8 | 8 |
| Total | 31 | 14 | 17 |
| **Forced Choice** | | | |
| Democrat | 9 | 6 | 3 |
| Republican | 9 | 5 | 4 |
| Total | 18 | 11 | 7 |

## PROCEDURE

In the continuous condition, raters were presented with the faces of Congressmen (N=59) one at a time and asked to assess their competence and attractiveness on a 7 point scale (1 = "very incompetent/unattractive": 7= "very attractive/competent"). Raters were first asked to assess all faces for familiarity (dichotomous yes/no), then asked to rate competence and attractiveness. Whether a respondent saw the competence or the attractiveness block second was randomized. The blocking procedure was implemented to try to ensure that any association between competence and attractiveness was not an artifact of the questions appearing in quick succession. Within each trait block all questions were also randomized. In the original data collection (N=35), 4 respondents reported recognizing some of the faces and they were subsequently dropped from the trial.

Of the 59 original Congressmen from the continuous condition 9 were selected to create 36 unique pairs of faces. A procedure similar to the continuous condition was employed, but

rather than assessing a single face respondents were asked pick which candidate from a pair was more attractive or competent. An example of both the continuous trait and forced choice questions can be found in Appendix A. In this trial no respondents reported being familiar with any of the 9 faces.

## Difference Among Raters

Within the continuous trial, men and women did not differ significantly in their mean ratings of competence (men: M = 4.64, SD = .83; women: M =4.41, SD = .65), t (116) = -1.735, p = .085) and attractiveness (men: M = 3.53, SD = 1.04; women: M =3.48, SD = .85), t (116) = -.294, p = .769), and thus they were collapsed for the remainder of the analysis. However, Democrats and Republicans did show significant differences in ratings of both competence (Dem: M = 4.05, SD = .84; Rep: M=4.98, SD = .67) t(116) = -6.71, p<.001, and attractiveness (Dem: M = 3.25, SD = 1.07; Rep: M=3.75, SD = .85) t(116) = -2.77, p<.007.

## Measures of Rater agreement

As previously discussed there are several measures of inter-rater agreement, of which Cronbach's alpha is the most prevalent in studies of trait ratings. Table 2 presents a comparison of inter-rater agreement scores derived from Cronbach's alpha and Krippendorff's alpha. The former displays a measure of covariance or "concordance" among the raters (what is best understood as agreement about the relative position of targets on a given trait) compared to absolute agreement. The treatment labeled "Categorical" represents a collapsing of continuous scores into three categories: unattractive/incompetent < 4, undecided = 4, competent/attractive > 4. This allows absolute agreement to reflect meaningful categories.

Table 2.

*Comparison of Inter-Rater Agreement Across Traits*

| | Continuous | | Categorical | Forced Choice | |
|---|---|---|---|---|---|
| | Cronbach's | Krippendorff's | Krippendorff | Cronbach's | Krippendorff's |
| **Competence** | | | | | |
| Democrat | .92 | .36 | .32 | .51 | .09 |
| Republican | .85 | .19 | .18 | .52 | .11 |
| Total | .93 | .23 | .21 | .65 | .09 |
| **Attractiveness** | | | | | |
| Democrat | .95 | .52 | .42 | .81 | .31 |
| Republican | .93 | .32 | .28 | .82 | .33 |
| Total | .97 | .40 | .33 | .90 | .31 |

As we can see, Cronbach's alpha is influenced by the number of raters being assessed. However, the influence of adding new raters begins to drop after about 10 (Field, 2009). This may be why the forced choice condition shows a larger drop between the total (N=18) and the partisan conditions (N=9) than the continuous condition total (N=31) partisan (N=15, 16). Importantly, even the collapsed scale ratings (i.e. "Categorical" in Table 2) show low rates of agreement. This is actually not uncommon in trait research (i.e. Todorov & Oosterhof, 2011). The importance of this distinction becomes clear when considering how correlational studies based on mean ratings of candidate appearance are generalized to theories of voter decision making. Specifically, when calculating the number of swing voters who would support the "most attractive candidate" as determined by the consensus of naïve raters, one would have to subtract the proportion of those voters who do not agree with the consensus view. When papers only report Cronbachs alpha it can give the impression that there was nearly unanimous agreement as

to the more attractive candidate, suggesting that the advantaged candidate would gain any votes decided on the basis of appearance.

## VISUAL TRENDS IN AGREEMENT

The visual chart presented in Figure 1 offers a clearer depiction of the problems of reporting only Cronbach's alpha. In Figure 1 the 36 pairs of faces are represented along the x axis. The y axis represents the percent of raters who believed the first candidate in the pair, "Candidate A", was more competent. Above the center line represents pairs where over half of the raters favored Candidate A. Below the center line over half the raters thought Candidate B was more competent. The colored lines correspond to the partisan identification of the raters: blue for Democrats, red for Republicans, and green for Democrats and Republicans combined. The yellow arrows indicate situations in which Democrats and Republicans would have come to a different majority consensus regarding which candidate was more attractive.

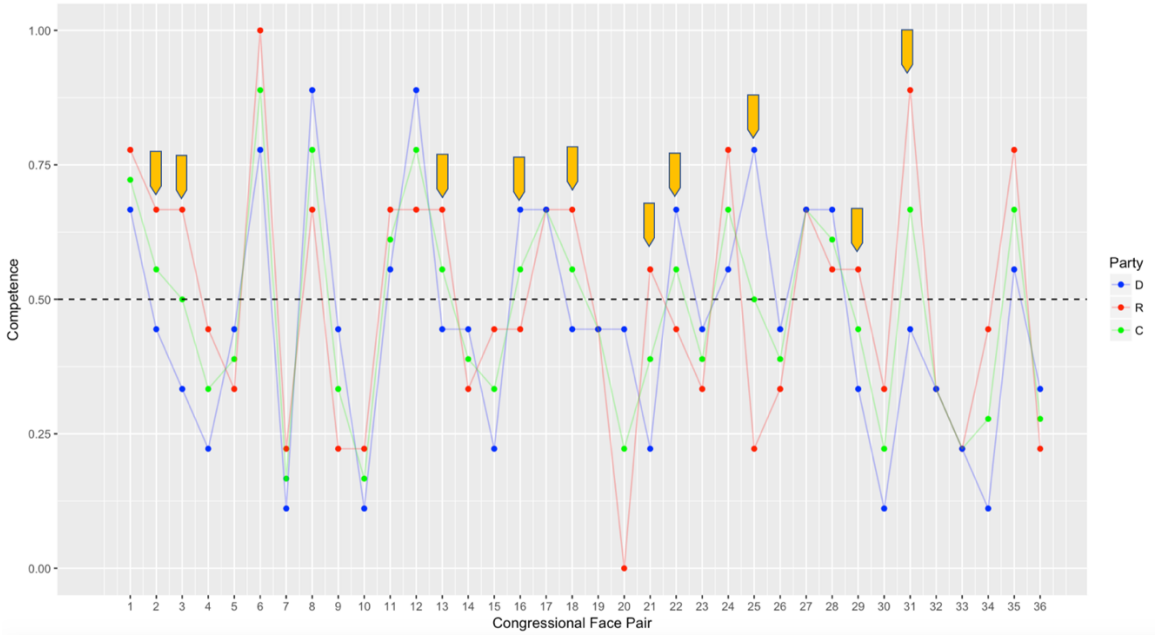



*Figure 1.* Percent of raters favoring "Candidate A" as most competent by party.

While all the lines appear to move in sync, representing high covariance and thus a high alpha, 10 of the 36 pairs (27%) would be decided differently depending on the proportion of Democrats and Republicans in the sample. Thus, if researchers use a naïve sample of raters to assess perceived competence, the proportion of Democrats and Republicans would need to mimic the partisan proportions of voters found in the actual races being evaluated. Otherwise, voters may (on average) assess a different candidate to be more competent than the naïve raters. This demonstration is in no way meant to be conclusive evidence that naïve raters cannot be used to determine objective trait ratings for candidates, only that the underlying assumptions should be considered with greater care than has currently been employed by studies of candidate appearance.

## Scatterplot of Percent Agreement vs. Absolute Differential

As previously mentioned, Ballew & Todorov (2007) specifically tested whether altering the procedure for measuring trait differences (i.e. forced choice or subtracting continuous measures) impacted the ability of candidate appearance to predict election outcomes. They found both procedures performed at similar rates. However, it was unclear from their study whether these procedures predicted the same candidates would be more attractive/competent. The regression chart below demonstrates that these two procedure do, in fact, produce similar results for which candidates are viewed as higher on a given trait. The correlation is .61 for competence and .89 for attractiveness.

**Figure 2. Correlation between Forced Choice and Continuous Measures of Candidate Traits**

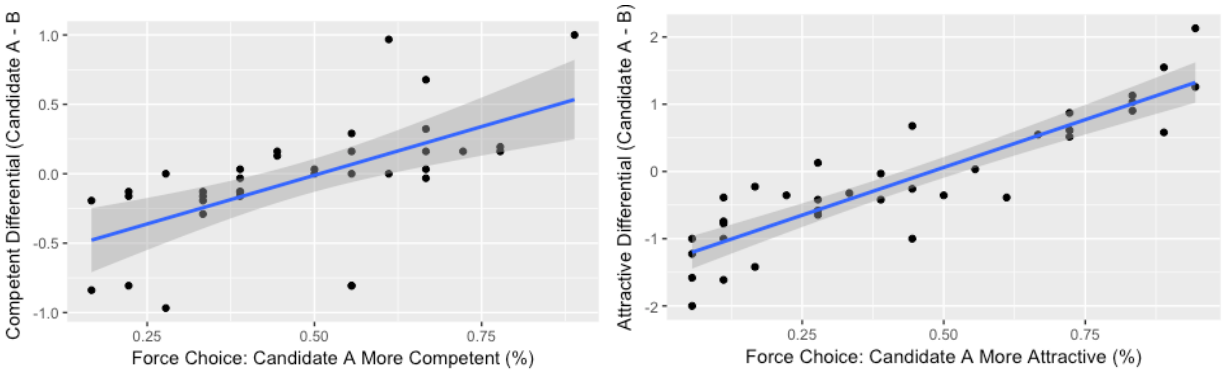



*Figure 2.* Scatterplot of relationship between ratings (Left: Competence, Right: Attractiveness) achieved through forced choice as compared to trait differentials.

## RATERS

In today's academic environment the two most common places to find survey participants is either among the student body of a university or online. Among the online recruitment platforms Amazon's Mechanical Turk (MTurk) has become a popular option. Electoral studies are no exception to this trend and much of the research on candidate appearance has utilized MTurk workers (e.g. Stockemer & Praino, 2015). While it has long been known that university samples are not representative of the American electorate as a whole (Druckman & Kam, 2011), less is known about participants recruited from MTurk. Given the prevalence of this platform for recruitment and the fact that participants for this thesis are recruited from the online platform, it is worth taking a moment to consider who these individuals represent. In particular, this section focuses on variables of interest to political scientists such as party identification, ideology, news consumption, voting, and education.

One of the first studies to look at the utility of using MTurk respondents demonstrated that recruitment from MTurk tends to be more representative of the US population than in-person

convenience samples such as those collected on university campuses. However, it was not as representative as online panel surveys such as the American National Election Survey (ANES) or the Cooperative Congressional Election Survey (CCES) (Berinsky et al. 2012). These large panel studies are the best approximation of the actual electorate, and thus they are used as a benchmark for determining where MTurk either over or under represents certain demographics.

In terms of political identity, younger individuals are similar between CCES and MTurk. However, MTurk appears to overrepresent liberals within their older workers. When it comes to education there is little difference between CCES and MTurk samples. However, older workers on MTurk are less interested in the news than their CCES counterparts. Finally, when it comes to voting behavior both CCES and MTurk show similar patterns in individuals' voter registration and intention to vote (Huff & Tingley, 2015). Taken together this evidence caused Huff & Tingley (2015) to suggest that, "MTurk could be an excellent means for exploring how experimental manipulations could influence voting tendencies" (p.5).

While demographically MTurk workers represent a strong pool of respondents for electoral research, there are some concerns. First and foremost, criticisms have arisen around the levels of compensation these workers receive (Fort et al., 2011). The mean hourly wage for MTurk workers is less than $2 USD (Silberman et al., 2010). While this may be an acceptable way to make extra cash on the side (60% of MTurk workers), at least 20% of workers state that they use the platform as their primary source of income (Ross et al., 2010). Many sites will advise researchers that a rate of $.10 min is acceptable. This is well below the compensation that would be accepted at many major universities. For the current thesis, all workers were compensated $2.00 for surveys that lasted no more than 10 minutes.

Setting aside ethics, there is also some concern to researchers that low wages will drive workers to complete as many surveys as possible, and thus the quality of responses will diminish. While it is possible to reject responses (and thus avoid paying for bad data) it is often difficult to establish a criteria for subjective responses (i.e. questions about a candidates attractiveness). Research into the ethics and utility of MTurk is just beginning, and future research should strongly weigh the strengths and weaknesses of the platform.

# CHAPTER 4
# PHOTOGRAPHS AND ELECTIONS

## INTRODUCTION

As we saw in Chapter 2, there are a variety of factors that influence how voters form impressions of candidates' character including the media, campaign messaging, partisanship, ideology, and incumbency. In Chapter 3 it was demonstrated that people also infer these same traits from individuals' physical appearance. Consequently, it is not surprising that electoral studies have demonstrated that voters' perceptions of a candidate's character is generated--at least in part--by rapid, unreflective inferences made on the basis of a politician's physical attributes (Todorov, 2005; Hall et al., 2009; Olivola & Todorov, 2010). In looking at a photograph voters appear to spontaneously form impressions about a politician's trustworthiness, intelligence, and competence for office. An early example of the power of candidates' appearance to shape impressions came during the Kennedy/Nixon presidential debates (Kraus, 1996). Kennedy's advantage among voters arose not from his arguments, but from his superior physical appeal (Carpinella & Johnson, 2016). Conversely, the pervasive media coverage of Sara Palin's appearance caused many in the public to view her as less competent (Heflick & Goldenberg, 2009; Ksiazkiewicz et al., 2018).

The rising use of visual forms of political communication has made studies on the impact of candidate appearance all the more relevant. In recent years, the use of "video bites" – brief video clips where candidates are shown but not heard – have grown in popularity. In a study of presidential campaigns, Bucy & Grabe (2007) found that image bites accounted for 25% of election coverage, while sound bites only accounted for 14.3% (see also Schill, 2012; Lowry &

Shidler, 1995, 1998). Furthermore, there is some movement, especially outside the U.S., toward including candidates' photos on election ballots (Banducci et al., 2008; Lev-On & Waismel-Manor, 2016). Thus, it is no surprise that an increasing number of studies have sought to determine whether candidate appearance influences vote choice.

## THE STANDARD CANDIDATE APPEARANCE STUDY

One of the most impressive aspects of studies linking candidate appearance and electoral outcomes is the replicability of findings. The ability of naïve voters' assessments of candidate appearance to predict the winning candidate has been shown in U.S. Congressional races (Todorov et al., 2005), U.S. gubernatorial races (Ballew & Todorov, 2007), U.S. Presidential races (Little et al., 2007) and in elections around the world (Australia - King & Leigh, 2009; Germany - Klein & Rosar, 2005; Rosar, Klein & Backers, 2008; Switzerland - Lutz, 2010, United Kingdom - Banducci, Karp, & Rallings, 2008; Brazil and Mexico - Lawson, Lenz, Baker, & Myers, 2010; Finland - Poutvaara, Berggren, Jordahl 2006; and Bulgaria - Sussman, Petkova, & Todorov, 2013).

All of these studies share some key characteristics. First, all use naive participants to rate the faces of politicians either one at a time (e.g. Rule & Adams, 2010) or in a forced choice scenario (e.g. Ballew & Todorov, 2007; Little et al., 2007). This process is thought to capture the type of trait inferences voters would make during the election, an assumption that was problematized in Chapter 3. Then the average score for each candidate-trait is used as an independent variable and regressed on the dependent variable of percentage of vote received by the candidate in an actual election (e.g. Benjamin & Shapiro, 2009; Ballew & Todorov, 2007).

In some instances successful predictions are judged at the level of the participant, with the researcher assessing whether the participants are statistically more likely (judged against the chance prediction of .50) to choose the winner than the runner up as more competent (i.e. Ballew & Todorov, 2007 Experiment 1). Alternatively, others have look at the aggregate level, at the "percentage of correctly predicted races" (e.g. Todorov et al., 2005; Ballew & Todorov, 2007). A race is judged to be "correctly predicted" if over 50% of the participants judged the winner to be more competent. For example, Ballew & Todorov (2007) used this method and found that groups of naïve raters selected the winner as the most competent candidate (under forced choice conditions) in 64% of gubernatorial races, which was significantly higher than chance (set at 50%).

## Alternative Explanations

There have been several alternative explanations proposed to explain the ability of appearance to predict election outcomes, and political scientists have responded by generating more sophisticated replication studies to test these alternative hypotheses.

One of the most obvious arguments against trait inferences is that voters are responding to other physical cues, such as the race or gender of candidates. To control for this several studies have utilized elections in which the candidates are matched on race and gender (e.g. Olivola et al., 2012; Todorove et al., 2005). Similarly, some have challenged that positive and negative trait assessments are actually related to how familiar a candidate appears to a rater (Zajonc 2001; Lenz & Lawson, 2011). These challenges assert that even when a participant does not *explicitly* recognize a candidate, they may have been exposed to the image enough to have an *implicit* familiarity. This objection is bolstered by evidence that attractive politicians can receive more

media attention, which would confound assessments of attractiveness and familiarity (Waismel-Manor & Tsfati, 2011; in Lev-On & Waismel-Manor, 2016). One of the main ways that such concerns have been addressed is to draw naive raters from other countries, where they are more insulated from any media attention about a candidate (e.g. Berggren et al., 2010; King & Leigh, 2009; Lawson et al. 2010)

In the Introduction it was noted that one possibility for the link between appearance and electoral success is that better funded candidates can produce better photographs of themselves. To control for this effect, Atkinson et al., (2009) control for candidate spending while Antonakis & Dalgas (2009) and Benjamin & Shapiro (2009) controlled for both actual quality and resource level. In both instances the relationship between appearance and electoral success held.

The final challenge addressed here is perhaps the most problematic – the suggestion that campaigns use attractiveness to help select the best candidate, and those candidates run in more favorable elections. In one of the few studies to test this theory directly, Lausten & Petersen (2018) found that naïve ratings of facial competence were significantly related to intra-party nominating decisions. Specifically, this research demonstrated that more competent-looking candidates were assigned the top ballot positions in Danish elections. This research is important for the current thesis in two respects – first it suggests that there are multiple paths through which candidate appearance can influence electoral prospects. Second, and more importantly for the present work, it suggests that even the decisions of strong partisans (i.e. those controlling party decisions) can be influenced by trait perceptions.

Before moving I offer an additional potential explanation for the success of attractive/competent candidates that does not rely on large numbers of voters basing their decisions on appearance. I call this the "central node" theory. Decades ago, The Columbia

School noted that the impact of campaign communication and mass media is not direct, but mediated by discussions with others (Popkin, 1991). And several studies have noted that informal interpersonal conversation regarding candidates and elections can have important political implications (Bennett, Flickinger & Rhine, 200; Song & Eveland, 2015). One of the most important findings from analysis of communication networks is that individuals who are centrally located (i.e. well connected to others, and often the intermediary between other nodes) exert strong control over the way other members of their network access and frame new information (Burt, 2004). Thus, one possibility is attractive candidates increase the enthusiasm that politically active (and centrally located) individuals have for a candidate. As a result, they are more likely to recruit peripheral voters (those that may be less attentive or informed) to support their desired candidate. While this supposition is not directly tested in the current thesis, the study of hypothetical voting lends preliminary support for this theory.

## When Do Voters Rely on Visual Cues

One of the major criticisms leveled against work on visual information in elections is the argument that other types of political information - be it partisanship, ideology, or incumbency – are so influential as to make the impact of visual cues irrelevant. This has caused some to argue that visual cues are only consequential for elections where more substantive information is lacking or when voters themselves are unable to avail themselves of such information. As Carpinella & Johnson (2016) note, "voters may not be highly informed about the political process or may be unfamiliar with candidates running for political office. Nevertheless, they are able to make social judgements about candidates based on superficial cues such as their physical appearance with remarkable cognitive efficiency…perceptions of facial competence, physical

attractiveness, and facial gender typicality provide heuristic information that voters utilize when forming judgements about candidates, evaluating candidate, and deciding which candidate to support in an election" (p.2). Similarly, Todorov et al. (2005) acknowledged the likelihood that additional political information can dilute the relationship between initial impressions based on photographic inferences and voting behavior, suggesting that more savvy or attentive voters are not relying on candidate appearance.

There are four variables that have traditionally been used to explain the differences in voters' decision-making strategies. They are sophistication, knowledge, affiliation, and media consumption.

## Unsophisticated Voters

Many models of voting, including those associated with the Michigan School (i.e. Campbell et al. 1960), have theorized that less politically sophisticated voters are more likely to be idiosyncratic leader-oriented voters. However, there has been little consistency in the variables scholars employ to distinguish between politically sophisticated and unsophisticated voters. For example, political sophistication has been operationalized using a variety of measures including formal education (Delli et al., 1996), cognitive ability (Luskin, 1990), partisan motivation (Parker-Stephen, 2013) and supply of information (Curran et al., 2009; Jerit et al., 2006). The general argument for proponents of candidate image models is that character impressions are intuitive aspects of human cognition and are more easily stored and retrieved from memory. Thus, individuals can employ character heuristics without needing the more complex cognitive scaffolding necessary to interpret more political variables such as issue positions.

This theory has found some support (e.g. Kroh, 2004). However, others, such as David Glass (1985), have shown that education is not systematically related to the use of candidate personal qualities. Indeed, Glass demonstrated that highly educated voters are just as likely to consider the personal attributes of candidates as their less educated counterparts.

## UNINFORMED VOTERS

Political knowledge has sometimes been referred to as "The cornerstone construct in research on political behavior" (Barabas, Jerit, Pollock, Rainey, 2014). There are several studies that have come to the conclusion that less knowledgeable voters are more reliant on candidate appearance (e.g. Lau & Redlawski, 2001). While there are many ways one could define political information, I adopt Fowler & Margolis's (2013) definition that *political information* or *political knowledge*, "refers to a citizens' knowledge about the major parties' positions on key issues of public policy" (p.2). This definition is selected in part because it fits nicely with how political knowledge has been conceived of in studies of candidate appearance. For example, Stockemer & Praino (2015) operationalized "uninformed voters" as those who only see the picture of two candidates for the U.S. House of Representatives, while their "informed voters" received descriptions of the candidates' background, political expertise, and professional qualifications. Similarly, other experiments have defined "high information" and "low information" environments as those in which the politician is either well known or completely novel to participants respectively (e.g. Laustsen & Petersen, 2016; Lev-On & Waismel-Manor, 2016).

The relationship between political knowledge and voters' use of candidate image in decision making is not settled. Some experimental data suggests that when candidates are well known to voters (i.e. voters are familiar with their party and issue stance), manipulations of the candidates' physical appearance fails to influence voters' decision making (e.g. Laustsen &

Petersen, 2016; Lev-On & Waismel-Manor, 2016). Conversely, there is also evidence that leader effects are actually strongest among those who are most interested and invested in elections (Gidengil et al., 2000). Coming down in the middle of this debate, Zaller (1992) found that those individuals who are the least attentive to politics also lacked knowledge about candidate characteristics, and thus were not heavily impacted by leader variables. Instead, Zaller finds that those of medium interest/attentiveness to campaigns are most influenced by candidates' images.

It is important to be careful when constructing political knowledge variables. While many studies have employed the five-item battery suggested by Carpini & Keeter (1996), others have suggested that the use of factual questions to assess what citizens know and understand about politics is problematic (e.g. Graber, 2001). The pros and cons of different measures of political knowledge is thoroughly reviewed elsewhere (i.e. Barabas et al., 2014), and thus is not discussed in detail here.

Perhaps most important for the current work is the relationship between political knowledge and other voter characteristics such as political sophistication and partisan attachments. For example, a voter's education has been found to be one of the strongest predictors of his/her political knowledge (Carpini & Keeter, 1996). As the authors state, "education promoted the opportunity to learn about politics by transmitting specific information…it increases motivation by socializing students to the political world and stimulating their interest in it; and develops the cognitive ability necessary for effective learning (p. 190).

## UNAFFILIATED VOTERS

The overwhelming influence of partisanship in voting models is one of the most difficult arguments for studies advocating for the inclusion of candidate image in electoral decision-

making to overcome. This is especially true given that the partisan affiliation of candidates is listed on the ballot in many of the elections where candidate appearance has been studied, while photographs of candidates are not. In 1964 Converse argued that the American electorate was, on the whole, not particularly interested in politics. This apathy, he suggested, drives many citizens to simply not vote. Those that do vote often lack coherent attitudes toward the issues dividing the candidates and as a consequence employ simplified decision rules based on partisanship or candidate personality.

Supporters of candidate image models have thus turned to the independent voters, those lacking partisan attachments, to explain the influence of candidate image. Praino et al. (2014) exemplify this line of reasoning, "as parties have largely stopped working as heuristic devices for some voters, quick assessments made based on physical appearance have become important" (p.3). This theory was especially appealing given that in the 1970's and 1980's more and more citizens were identifying as independents, and the number of strong partisans was declining. This lead some scholars to argue that these voters were, "adrift without an anchor in a political world full of eddies and strong currents" (Wattenberg, 1986, p.130). This thesis takes a critical look at who these independent voters are and what is known about how they vote.

The trend of identifying as "independent" has not changed in the new millennium. In 2008, a plurality of the American electorate - 39 percent - classified themselves as independent, while 34 percent identified as Democrats and another 26 percent as Republican. But who are these independents, and what does their identification tell us about the type of voters they are?

In 1992 a group of researchers at the University of California Berkeley, led by Bruce Keith, used election data from the American National Election Study [ANES] from 1952 to 1988 to examine who independents were and how they behaved. The ANES measured partisanship

along a 7 point scale: strong Democrat, weak Democrat, independent lean Democrat, true Independent, independent lean Republican, weak Republican, strong Republican (*The Myth of the Independent Voter*, 1992). What they found was that independent leaners were just as partisan in their attitudes and behavior as declared partisans. Importantly, true Independents (those who did not lean) tended to differ significantly from partisan independents in their background, political perceptions, and behavior. What was perhaps their most striking finding was that true Independents made up only 11 percent of the eligible electorate in 1988, and only 8 percent of people who actually voted in elections. This suggests that partisanship remained an influential force in the latter half of the 20th Century (Keith et al. 1992).

Even after the publishing of *The Myth of the Independent Voter*, some scholars failed to differentiate between independents, assuming all of them possessed "no party attachment". This definition caused some to suggest that upwards of three fifths of the electorate lacked partisan ties. This prompted members of the original Berkley team to produce a follow up to their work with the goal of assessing whether these same trends applied to independents in the new millennium (Magleby, Nelson, & Westlye, 2011). For the remainder of this thesis the term *leaners* will be utilized to refer to partisan *independents* and the term Independent will apply only to pure Independents.

What Magleby et al. (2011) demonstrated was that leaners and Independents today look very similar to their counterparts in the last century. Independents both then and now represent some of the least educated members of the electorate. They also are more likely to be uninterested in politics and often lack the political awareness of their partisan and leaning counterparts. The finding that Independents have low political involvement was similarly noted by Campbell et al. (1966). While strong partisans remained among the most educated and

politically engaged, leaners were shown to be well educated, politically aware, and civically active - at times even more so than weak partisans. When it comes to political knowledge, leaners were comparable to strong partisans and surpassed weak partisans, while Independents performed the worst.

While the demographic background of voting blocs is interesting, it can fail to capture what many view as the key to partisan voting – emotion. In the 1960's the Michigan School highlighted the psychological and affective ties partisans held toward their party. This grew into future studies utilizing Social Identity Theory (e.g. Miller & Conover, 2015) to demonstrate that people have positive emotional attachments to their party or "in-group" and negative emotions toward the opposition or "out-group". As Mason (2015) puts it, "much like in sports, party members are now driven by their team spirit – their party identities". When investigating these ties among leaners and Independents, Magleby et al. (2011) found that while leaners retained positive affect for the party they identified with, they lacked the negative emotions for their opponents displayed by partisans. On the other hand, Independents remained neutral toward both parties.

Bartles (2000) looked at Congressional elections and found that by 1996 party loyalty in voting had returned to its 1964 level. As candidates took a clearer and more disparate stance on issues – which became evident in the House and Senate through an increase in party-line votes (Miller, 1991; Poole & Rosenthal, 2001) and in elections via candidate policy platforms (Ansolabehere et al., 2001; Stone & Simas, 2010), Democrats became more aligned with liberals and Republicans with conservatives.

Some experimental studies have attempted to quantify the impact of voters who rely on appearance only (e.g. Stockemer & Praino, 2015 who put the number at 10% of the electorate),

though it is often unclear from where these numbers are derived (see p.438). However, there is ample evidence to suggest that among those who actually show up and vote, partisanship is still very relevant. As Magleby et al (2011) noted, "we hope our work will quash the notion that there is a large bloc of unattached voters out there who are choice pickings for a clever candidate" (p.279).

## MEDIA USE

As noted previously, in their study of image bites[2] in political campaigns Grabe & Bucy (2009) found that candidate focused image bite averaged 25.8 seconds per story on network news and accounted for more time than traditional sound bites. This is not surprising with the high expense of television advertising and limited time candidates need to convey as much information as possible. And, as Schill (2012) notes, "These visuals can convey evidence for verbal arguments, provide cues for cognitive elaboration, or serve as arguments via association, connotation, and juxtaposition" (p.120). Given the imbalance between visual and verbal cues in television as compared to print media, it is not surprising that scholars have looked to television viewers to study the impact of candidate appearance.

The majority of Americans still use television as their primary source for news (Pew, 2010). And there is evidence that those who consume the majority of their news about candidates from television are more susceptible to being swayed by a candidate's image (e.g. Keeter, 1987; Lenz & Lawson, 2011). Yet others have found that television only modestly increases the weight voters give to candidates (Gidengil et al., 2000), and in a cross cultural

[2] Brief visual shots where the subject is not heard.

analysis Kroh (2004) found that leadership effects were lower in societies with a higher distribution of television viewership among the electorate.

What should be clear from this section is that the voter traits mentioned – sophistication, knowledge, affiliation, and media use – are not mutually exclusive categories. Rather, these variables often correlate with one another and contribute to a voter's level of interest in an election and her motivation to act. Importantly, true Independents are often less sophisticated and less informed than their partisan counterparts, producing a voter who may be more susceptible to candidate image but also less likely to actually participate in an election. This suggests that candidate image may actually find its influence in its ability to motivate and energize partisans to turn out and contribute to campaign efforts, rather than persuade voters to switch allegiances. This theory will be directly tested later in this chapter.

### The Nature of Congressional Elections

Congressional elections, and House elections in particular, tend to be considered "low salience" elections. This is despite the fact that over a billion dollars was spent in advertising in the 2006 midterm elections (Spezio et al., 2008). However, not all midterm elections are created equal. House races tend to be far less visible than Senate or Gubernatorial elections (Buttice & Stone, 2012), but the degree of interest and media attention they garner can fluctuate with the competitiveness of the race and the number of news outlets covering the race (Hayes & Lawless, 2015).

## Photographs and Other Political Information

As was highlighted in Chapter 3, appearance is an innate way in which people infer characteristics from novel individuals. While certain faces appear to generate universal trait

inferences, it is our social environment that drives how we use those inferences to inform behaviors like voting. The previous examples discussed situations in which characteristics of the voter or the election environment might drive individuals to utilize appearance as a quick and dirty decision tool. However, such discussions can give the impression that visual cues are orthogonal to other electorally relevant information such as a candidate's partisanship or issue stance. The section that follows introduces evidence suggesting that appearance, just like the candidate traits it evokes, may actually be bound up with these more traditional political variables.

## IMAGE, PARTISANSHIP, AND IDEOLOGY

Partisanship is a common heuristic included in almost every model of voting. The assumption is that parties offer voters a condensed and simplistic cue for the candidate most likely to represent their interests (Lau & Redlawsky, 2006). However, as discussed in Chapter 2, parties may represent more than just policy differences. They also differ in the character traits they value. For example, Republicans are often seen as placing value on strength and dominance in male candidates. On the other hand, Democrats are commonly stereotyped as embodying traits such as intelligence, warmth, and openness. What is interesting is the degree to which this dichotomy maps onto traditional gender stereotypes. As Winter (2010) notes, humans apply gender stereotypes to things that are not literally male or female. When policy actions embody traits that are associate with different sexes, then gender and policy can become subconsciously linked. In addition, the parties have generally held differing stances on the link between sex and gender, with Republicans favoring more traditional gender roles for men and women (Lye & Waldron, 1997).

When looking at candidates for the U.S. House of Representatives, it appears that these values are perpetuated in the appearance of different parties' candidates. For example, Republican female candidates display more sex-typical features (i.e., look more feminine) than their Democratic counterparts (e.g. Carpinella & Johnson, 2013). Given this, some voters may look to appearance as a honest signal of the candidate's dedication to party values, and may punish candidates when their outward appearance conflicts with such values. If this is correct, then we might expect candidate to gain an electoral advantage when their appearance matches party stereotypes. As it turns out, there is evidence to suggest that this is the case (e.g. Lausen & Bang Petersen, 2016; Samochowiec et al., 2010). As Hoegg & Lewis (2011) note, "Political candidates may be viewed as a human extension of the political brand" (p.11). And Samochoweic et al. (2010) suggest that, "looking like what you are seems to be an asset in politics" (p. 211). Interestingly, the propensity of people to associate certain facial features with different parties and platforms can help candidates running in states where their party is at an electoral disadvantage. Olivola et al. (2012) found that Democratic candidates running in Republican leaning states benefited when they looked more stereotypically Republican than their rival.

In their study of candidates, Hoegg & Lewis (2011) found that attributions of intelligence increased the likability of Democratic candidates more than Republican candidates, while the inverse was true for perceptions of competence. In a similar vein, Berggren et al. (2010) found that candidates perceived to be more competent were also more likely to be categorized as conservative. However, Herrmann & Shikano (2016) found no evidence for such a relationship.

As was noted in Chapter 3, dominance and competence are often confounded, and in an important methodological caveat, Laustsen & Petersen (2016) found that the connection between

competence and conservativism was driven more by liberal candidates being electorally penalized for looking competent than conservatives receiving benefits for their competent appearance. Importantly for the interpretation of these results, when dominance is added to their model, competence becomes positively associated with electoral success for both parties. Consistent with the "double edged sword" theory of competence (Chen et al., 2014) these findings suggest that dominance is at the heart of partisan trait preferences. Supporting this interpretation, other studies that include dominance in their models have found friendly, warm, and non-dominant faces to be associated with Democrats (e.g. Hayes, 2005; Rule & Ambady, 2010).

The majority of work on candidate appearance and party branding has focused on perceptions of competence, however some work on attractiveness does exist. For example, Herrmann & Shikano (2016) found that perceptions of attractiveness increase the chances that a participant will view a candidate as left-leaning. (see also Olivola et al., 2012). As discussed in Chapter 3, attractiveness is a complex area of perceptual research. While some studies have demonstrated a link between masculinity and dominance, and between masculinity and attractiveness, there is also evidence that attractiveness is inversely correlated with ratings of dominance. This latter result would make findings that more attractive candidates are viewed as more liberal theoretically consistent.

What this line of research suggests is that voters are not blank slates who processes candidate appearance in the absence of other cues such as the candidate's partisan affiliation. However, in studies linking candidate appearance to electoral success the subjects who rate candidate photos are traditionally naive to the partisan affiliation of the candidates they are scoring. This raises an important theoretical and methodological question - do voters in partisan

races perceive candidates the same as raters naive to the partisan affiliation of the candidates? Although not directly investigated in this thesis, this represents a fruitful avenue for future research.

The evidence for a relationship between ideology and appearance has not been studied to the same degree as partisanship. However, there is some preliminary evidence that individuals have a propensity to ascribe their own political attitudes to candidates they find more attractive (Johnson, 1981; Marks & Miller, 1982; Herrmann & Shikano, 2016).

## Social Context

Studies demonstrating a link between partisanship and appearance preferences are commonly conducted in neutral environments, meaning the participants are not instructed to make decisions under a specified context. Is the country at war? Is the economy strong? Is immigration more salient than usual? Several studies now demonstrate that when prompted to consider their environment people will gravitate to certain traits in predictable ways. In other words, when voters think about the type of political leader they want, context matters. For example, individuals appear to prefer more dominant (Van Vugt & Grabo, 2015) and more attractive (Little, Roberts, Jones, & DeBruine, 2012) faces during times of conflict. Conversely, trustworthy faces are favored when voters are prompted with peacetime scenarios (Hall et al., 2009; Little et al., 2007; 2012). These preferences make sense when considering the evolutionary origins of trait perceptions discussed in Chapter 3. More recently researchers have combined work on partisan trait preferences and environment dependent preferences (e.g. Lausten & Bang Petersen, 2016 ) to theorize that preferences for dominant and competent facial features among

conservatives is associated with the propensity of conservatives to view the world as a more threatening and conflict-ridden place (Hibbing et al., 2013; Jost et al., 2009).

## Explicit and Implicit Trait Perception

One of the greatest contribution of psychology to the study of politics is the development of theories that recognize that information is processed both implicitly and explicitly (Ksiazkiewicz et al. 2018). This theorization is all the more relevant when discussing candidate trait perceptions. Olivola & Todorov (2010) suggest that visual cues, "provide a channel, separate from more explicit verbal information, through which voters often form impressions about candidates" (p.84). A growing body of literature in political communication now demonstrates that it is not just the content of communication but also the source of communication that shapes its persuasiveness (Lenz & Lawson, 2011; Schill, 2012).

As previously noted, faces are a unique aspect of the cognitive processing of human beings (Todorov & Oosterhof, 2011). Perceptions of others based on their appearance occur rapidly and often outside of conscious awareness (Todorov et al., 2005). This suggests that facial inferences occur extremely early in the perceptual stream, and consequently may act like a perceptual anchor, influencing subsequent information (Verhulst, Lodge, & Lavine, 2010; Hassin & Trope, 2000). One example of this phenomenon is well demonstrated by Hassin & Trope (2000), who show that the same behaviors can be interpreted differently depending on the physical appearance of the person being evaluated. In their study, a video is shown to participants in which a woman is featured sitting quietly in a meeting, while others talk about her work. When the person featured in the video had a face others perceived to be dominant, her silence was viewed as powerful. When the person's face looked less dominant, her silence was

viewed as a form of weakness and submission. And similar findings have been demonstrated in the study of the appearance of business leaders during a PR crisis (Gorn, Jiang, & Johar, 2008). Importantly, this effect took hold across the participant group, suggesting that all voters may be susceptible to source cues in their interpretation of political information.

To date, very few studies have attempted to investigate the interaction between candidate photographs and other relevant types of information about the candidate. Some notable exceptions do exist. Hoegg & Lewis (2011) utilized theories from marketing to determine whether candidates benefit more from their physical appearance when their perceived traits match the traits commonly associated with the party they represent. Evidence from this study suggests that when candidates match partisan stereotypes they are more resilient to negative attack ads.

In addition to being resilient to negative attack ads, when a candidate's message matches the traits conveyed by their physical appearance, the message is more persuasive (e.g. Lausten & Bang-Petersen, 2016). In their study, Lauseten and Petersen morphed the faces of real politicians in Denmark to look more or less dominant. Participants were then presented with two prompts, one explaining a rise in gang violence and another offering the policy position of the candidate to address the issue. The policy position advocated for harsh punishments for offenders. When this proposal was paired with a photo of a dominant looking politician, individuals were more likely to support the tough approach than when the proposal was accompanied by a less dominant looking photo.

## Experimental Evidence that Voters Use Appearance

As Hoegg and Lewis (2011) state in response to the Todorov et al.'s (2005) finding, "it is widely accepted that candidate appearance influences election outcomes" (p.3). But what do we actually know about the ways visual information impacts electoral decision making? Is it simply that some voters use the appearance of candidates as their only metric, either because they lack access to more relevant information or because they disregard alternative criteria for making their decision? When written descriptions match the impressions formed from photographs is the effect redundant or additive? The importance of flushing out theories of how appearance impacts election outcomes cannot be overstated. A handful of studies have attempted to directly test whether voters use photographs under experimental settings.

Experiments have been the preferred approach for testing the causal impact of candidate appearance on decision making. Experiments offer many advantages over correlational analysis based on election results. In particular experiments allow the researcher to control the type of information a subject has access to when making their decision.

One of the earliest attempts to systematically test the influence of candidate photographs on vote-choice was conducted by Shawn Rosenberg and his colleagues (1986). Rosenberg took black and white photographs of 20 men from the chest up and asked 40 raters to assess the "candidates" along several dimensions including competence and attractiveness. Unlike more recent studies participants were not explicitly asked to rate competence, but rather to assess "Is this the kind of person you feel could get a job done properly?" (p.112).

The three lowest rated and highest rated images were then used to create Campaign flyers which contained a candidate's name, photograph, party affiliation, and the political office for which he was running (U.S. Congress), and a three line statement of the candidates position on campaign issues. Candidates in the same election were always presented as opposites on

ideology and partisanship (i.e. Conservative Republican vs. Liberal Democrat) and always consisted of one high quality photograph and one low quality photograph.

Rosenberg et al. (1986) then presented university students (N=104) with a pair of flyers and asked them to pick for whom they would vote. A chi-square analysis was then conducted to determine whether the more attractive candidate was favored across all election contexts (e.g. when the partisan and ideological positions of the candidates were switched). Their results indicated that those with a favorable appearance garnered more votes across a composite of all the elections.

The Rosenberg study represented an important first step in understanding the role of candidate appearance in electoral choice. However, certain methodological considerations were overlooked which impact the strength of their results. For example, when the particular elections were distinguished, in the first of three elections the candidate labeled "Liberal" always garnered more votes, even when paired with unattractive photographs. Furthermore, conservative Republican candidates only won two of the twelve elections, and lost some of the races where they had an attractiveness advantage. This suggests that there was some influence of ideology and partisanship at play. However, Rosenberg and his colleagues did not measure the ideological or partisan preferences of their participants. Furthermore, because respondents were drawn from a student population they may have been less politically active, and thus less motivated by partisanship, than the general public. This thesis builds on the work and study design of Rosenberg to correct for some of these weaknesses. But before getting to the present study it is worth looking at what scholars have done since Rosenberg.

One of the most recent attempts to quantify the impact of candidate appearance on vote choice came from Douglas Alher and his colleagues (2017). In their experiment they recruited

actual voters from the 2012 California Primary Election. Participants were randomly assigned to one of two treatments. The first treatment consisted of a standard ballot with the candidates' names and party affiliation. The second treatment added photographs next to the candidate description. These were actual candidates, and the survey was conducted in the days prior to the actual elections. The appearance of candidates was rated by a group separate from those participating in the hypothetical election. Similar to Rosenberg, competence was assessed by asking raters "How good of a congressperson do you think this person would be?". The dependent variable in this study was the difference in vote share the candidate received under the two conditions (i.e. Photo Condition Vote Share minus No-Photo Vote Share).

The findings of the Alher study suggest that appearance can have a direct impact on voting behavior. Candidates with an appearance advantage over competitors gained votes when their photo was displayed, relative to what they would have received without a picture. Candidates at an appearance disadvantage lost votes when their photo appeared on the ballot.

However, there are at least two issues with this study. First, within the United States candidate photos do not appear on the ballot. While an attractiveness advantage was observed in the presence of candidate photos, it is unclear whether voters would be similarly influenced by their recollection of candidate appearance. Additionally, as with Rosenberg, participants were randomly assigned to the treatment and control ballots and no measures were taken of their partisan or ideological dispositions. This means that it is impossible to tell how much change in vote share was influenced by including photographs and how much was attributed to changing demographics between the treatment and control group. As Ahler himself notes, "our research design cannot tell us precisely how much candidate appearance really matters to election outcomes, but that it could matter" (p.92).

Both Ahler et al. (2017) and Rosenberg et al. (1986) included the candidates' partisanship in their experiments. This is very important given that studies linking appearance to election outcomes have analyzed highly partisan races, such as those for governor (Ballew & Todorov, 2007) and Congress (Todorov et al., 2005). Furthermore, several scholars have cited partisanship as a key variable in determining the influence of candidate traits on vote choice, making it an important consideration in studies of electoral decision making.

At least two prominently cited studies in the field of candidate appearance - Barrett & Barrington (2005) and Stockemer & Praino (2015) – did not include partisan information in their experiments. The stimuli used in Barrett & Barrington (2005) was a fake newspaper article for a non-partisan election. From their results the researchers concluded that photographs "impact voter's preferences, even when more relevant information is available". However, they also recognized that, "Certainly, partisan affiliation and ideological position will be defining factors in the choice of candidates for many voters" (p. 109). Similarly, Stockemer & Praino (2015) including background information about the candidates such as job qualifications, but excluded any mention of issue positions or the candidate's partisanship. The current study seeks to remedy some of the shortcomings of prior research in this area, and it is to this endeavor that we now turn our attention.

## Present Study: Hypothetical Election

As discussed previously, the literature has highlighted the importance of competence in electoral decision making (Miller, Wattenberg, & Malanchuck, 1986; Mondak, 1985; Sussman et al., 2013). And the evaluations of competence from photographs of candidates has been consistently successful in predicting election outcomes (e.g. Olivola & Todorov, 2010; Todorov

et al., 2005). Attractiveness has also consistently shown predictive power in elections (e.g. Berggren et al., 2010; King & Leigh, 2009). The current study builds on the work of Rosenberg et al. (1986) by replicating their procedures, but controlling for factors such as the partisanship, ideology, and the sophistication of participants. Additionally, rather than simply measuring a participant's proclivity to vote for one hypothetical candidate over another, this study also presses respondents to consider the degree to which they support the candidate they selected. From the literature reviewed in this thesis, two main hypotheses are formed:

**H1:** True Independents will be more likely to vote for candidates on the basis of physical appearance, but will be less likely to convert their preference into meaningful electoral behavior.

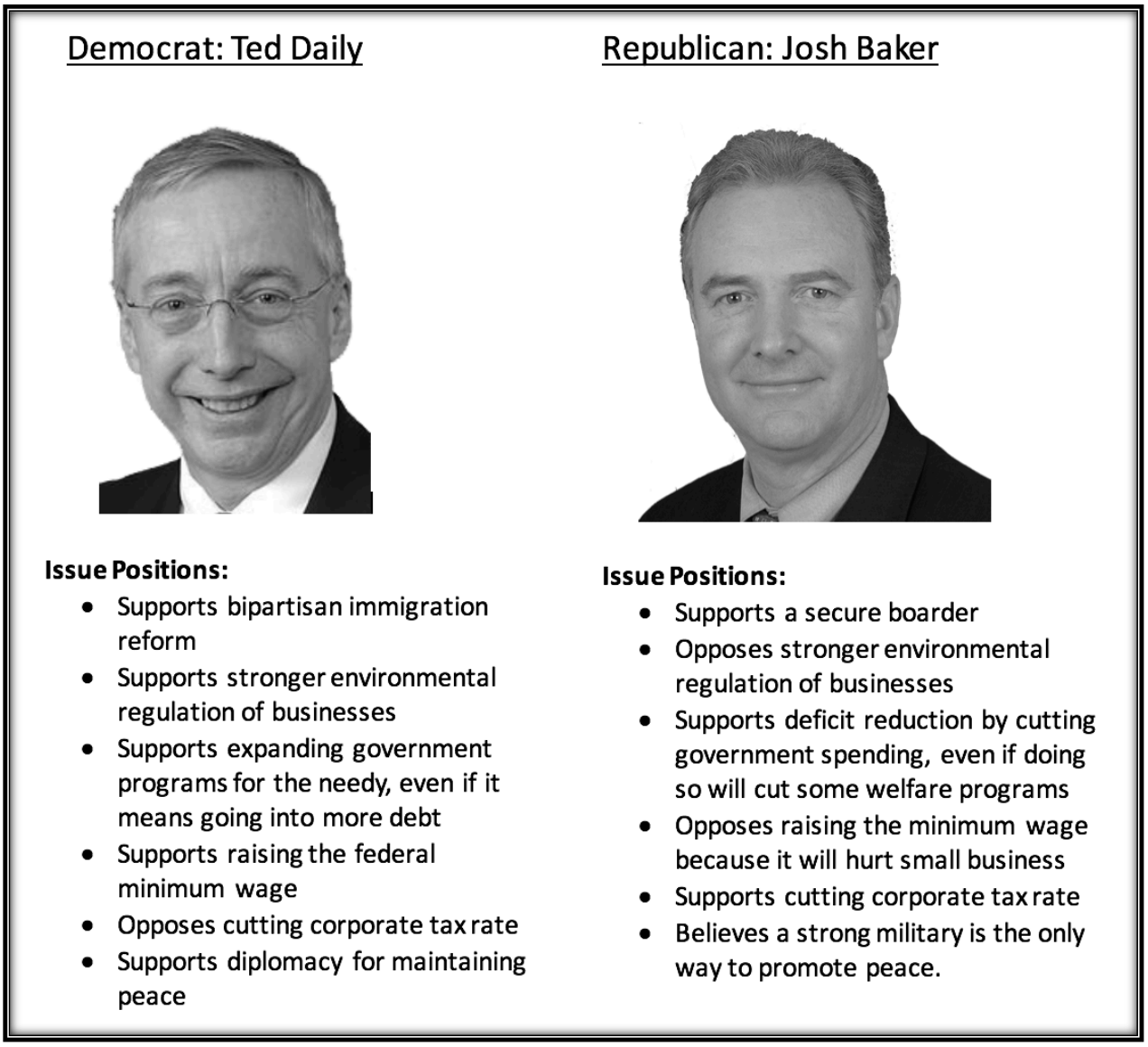
**H2:** Voters of all types will be more enthusiastic about a candidate when the candidate from their own party is paired with an image of high quality than when the image is of low quality or no image is presented.

## PROCEDURE

Participants were asked a series of demographic questions including questions about their party affiliation and position on a series of issues that have traditionally been shown to differentiate the parties on ideological grounds. A sample of these questions can be found in Appendix A. Participants were then prompted with the text:

> This survey is interested in your opinion of politicians running for the United States House of Representatives. Previous research has shown that voters often have more knowledge of one candidate when deciding how to vote. We are interested in how individuals vote when they have equal information about the candidates.
> You will be presented with information about two candidates facing each other in one of the 2018 midterm elections. Under each photo you will see the candidates' party, policies, and a brief description. We would like you to consider this information and then answer the questions that follow.

The participants were then presented with the following "Meet the Candidate" style article. This mimics the format of online news stories about elections. For examples of this type of news coverage see Appendix A.




## INDEPENDENT VARIABLES

### *TREATMENTS*

For the purposes of this analysis Candidate A was always a member of the participant's own party and always the subject of the manipulation. The treatments were as follows:

- **Treatment 1** [No Photo]: Participants were presented with information about the issue positions and party affiliation of two candidates, but no photo was presented.
- **Treatment 2** [Low Quality Photo]: Participants were presented with information about the issue positions and party affiliation of two candidates. A low quality photo was presented alongside the candidate that matched the partisanship of the respondent while a high quality photo was presented alongside their opponent.
- **Treatment 3** [High Quality Photo]: Participants were presented with information about the issue positions and party affiliation of two candidates. A high quality photo was presented alongside the candidate that matched the partisanship of the respondent while a low quality photo was presented alongside their opponent.

For "pure Independents" (i.e. those that did not lean toward a party, their response on the ideological questions dictated to which party pairing they were assigned. The order in which the candidates were presented (i.e. which candidate was featured on the left vs. the right) was randomized.

The photos that were selected to be the "High" and "Low" quality were chosen from the Forced Choice photo trial discussed in Chapter 3. There was consensus among Democrats (80%) and Republicans (100%) as to the better looking and more competent member of the pair.

*MEDIA SOURCE*

This study employed a similar approach to media consumption as Keeter (1987) who categorized participants on the basis of where they "get the most campaign information from or rely on most for news about political and current events" (p.346). The wording of the question in

this study was, "Thinking about a typical election year, where do you receive the *majority* of your information about candidates?". The options included: a) talking with other people, b) traditional print newspapers, c) online from social media, d) online from news outlets, e) from television. The exact wording of the question can be found in Appendix A. For the purposes of this study the two forms of online media consumption were combined.

### *Political Sophistication*

As noted previously, there are several ways in which political sophistication can be measured. For the present study, political sophistication was defined as a combination of education (attaining a college degree or not), political involvement (how active a person was in politics) and how often a participant discussed politics in her daily life. These variables were treated as additive and were not assigned weights. In other words, participants received [+1] for attaining a college degree, for one unit increase in the time they spent talking about politics, and for each additional political activity they participated in. The exact wording of these questions can be found in Appendix A.

### *Ideological Proximity to Candidates*

In Congressional races it has been shown that the magnitude of the difference between candidates on issues can dictate the impact of issue preferences (Buttice & Stone, 2012; Ensley, 2007; Ensley & Bucy, 2010). While Congressional races can vary in the ideological proximity of the candidates the current environment of elite polarization means that often candidates sit on opposite sides of the ideological spectrum. Thus, candidates in this study were represented as liberal Democrats and conservative Republicans. Fluctuating the ambiguity and ideological proximity of the candidates' platforms would be an interesting manipulation for future studies.

To assess ideological proximity participants were asked a series of 6 questions derived from the Pew Research Institute's 2014 report *Political Polarization in the American Public*. For each question participants were asked to select between two positions on an issue (e.g. the environment). One choice represented a more liberal stance, the other a more conservative. In the hypothetical voting scenario the platforms of the Democrat and Republican are presented as "ideologically pure" and thus every liberal response to the 6 questions is coded as a +1 for ideological closeness to the liberal candidate and -1 for ideological closeness to the Republican candidate. These scores are then subtracted (liberal minus conservative). The negative scores are then multiplied by (-1), so that all high scores represent favoring one candidate over another (regardless of party) while low scores symbolize being more ideologically indifferent.

## PARTICIPANTS

Participants were recruited from Amazon Mechanical Turk (MTurk) (N=180). In order to look for the effects of partisan identification, quotas and screening questions were used to try and ensure that each level of the treatment had a roughly equal representation of partisans, leaners, and true Independents. The breakdown can be seen in Table 3. A chi-square test reveals no difference between the groups in the partisan identification of participants $\chi^2(4, N = 180) = 1.88, p = .757$

Table 3.

*Number of Participants by Partisanship and Treatment*

| | Partisan | | Lean | | Independent | Tota |
|---|---|---|---|---|---|---|
| Treatment | Democrat | Republican | Democrat | Republican | No affiliation | |
| No Photo | 17 | 14 | 8 | 9 | 12 | 60 |
| Low Photo | 15 | 20 | 7 | 7 | 11 | 60 |
| High Photo | 17 | 20 | 5 | 6 | 12 | 60 |

A similar approach was taken to ensure that the treatment groups did not significantly differ in their respondents' political orientation, ideological distance from the hypothetical candidates, and news source. The tables for these tests can be found in Appendix B.

In the section *When Do Voters Rely on Visual Cues* it was mentioned that voter traits (i.e. their level of sophistication, political knowledge, and partisanship) are often interrelated. Indeed, within our sample population true Independents were significantly less politically sophisticated than individuals who identified as leaning or partisan. Because the groups were unequal and Levene's test revealed that the assumption of homogeneity of variance was violated robust tests were run to confirm the ANOVA results. Additionally, the Games-Howell post-hoc test was utilized as it is robust to assumption of equal group size and homogeneity of variance.

Table. 4

*One-Way Analysis of Variance of Political Sophistication Across Partisan Affiliation*

| Source | *df* | *SS* | *MS* | *F* | *p* |
|---|---|---|---|---|---|
| Between groups | 2 | 72.20 | 36.10 | 13.02 | .000 |
| Within groups | 177 | 490.79 | 2.77 | | |
| Total | 179 | 562.99 | | | |

*Robust Test of Equality of Means*

| Test | Statistic | df1 | df2 | *p* |
|---|---|---|---|---|
| Welch | 22.794 | 2 | 83.31 | <.001 |
| Brown-Forsyth | 13.716 | 2 | 98.99 | <.001 |

Table. 5

*Means, Standard Deviations, and Post-Hoc Significance on Measures of Political Sophistication by Political Affiliation*

| | | | | Games-Howell | |
|---|---|---|---|---|---|
| | N | *M* | SD | Ind. | Lean |
| Independent | 35 | 3.11 | 1.08 | | |
| Lean | 42 | 4.83 | 2.02 | <.001* | |
| Partisan | 103 | 4.65 | 1.67 | <.001* | .863 |
| Total | 180 | 4.39 | 1.77 | | |

The candidates in this study were set up to be archetypes of the current polarized political climate. As a result, they were assigned issue positions in accordance with a conservative Republican and a liberal Democrat. To ensure that treatment groups were not imbalanced in their

ideological affinity for the candidates an additional ANOVA was conducted. Treatment groups did not significantly differ in the ideological proximity of respondents and candidates.

Table. 6

*One-Way Analysis of Variance of Ideological Distance from Candidates Across Treatments*

| Source | *df* | *SS* | *MS* | *F* | *p* |
|---|---|---|---|---|---|
| Between groups | 2 | 33.41 | 16.71 | .881 | .416 |
| Within groups | 177 | 3356.92 | 18.97 | | |
| Total | 179 | 3390.33 | | | |

Additional breakdowns of participants can be found in Appendix B.

## Dependent Variables

### *Vote Choice and Enthusiasm*

Participants were asked to cast a vote for one of the two candidates. In Treatment 2 voting for the participant's own party would mean voting for the less attractive candidate. In Treatment 3 voting for the participant's own party would mean voting for the more attractive candidate. Thus, an additional binary variable "HQPVote" which stands for "High Quality Photo Vote" was coded that simply assigned a "1" if a participant selected the more attractive candidate (regardless of treatment) and "0" if they chose the less attractive candidate.

After casting a hypothetical vote participants were asked, "When asked to choose between these candidates you said that you would vote for [Insert Candidate A/B]. How enthusiastic are you about your choice?". The question was based on a 5 point scale from "Unenthusiastic" [1] to "Very Enthusiastic" [5]. Each level included a description. For example, "Unenthusiastic" was followed by the sentence "It is unlikely that I would actually show up to

vote for this person" while "Very Enthusiastic" was followed by, "I would definitely vote for this candidate, and I would help with campaign activities ex: handing out candidate information". A full example of the question can be found in Appendix B.

## RESULTS

### *HYPOTHETICAL VOTING*

Following procedures outlined in Rosenberg et al (1986) we first examined whether participants were more likely to vote for a candidate that was rated more competent/attractive. However, unlike in Rosenberg the ideological and partisan orientation of participants was controlled for. This was achieved in two respects. First, as noted above, each treatment group was tested to ensure that they were ideologically balanced. Second, the treatments themselves were designed to control for partisan attachments. In Treatment 2, the low quality photograph was always matched with the candidate from the participant's own party. In Treatment 3 the high quality photograph was always matched with the candidate from the participant's own party. This procedure ensured that any participant who chose Candidate B (high quality photo) in Treatment 2 was doing so because of a preference for that photo, and not because of partisan allegiance.

Treatment 3 represented a different sort of control. Because high quality photographs were paired with a candidate from the participant's own party, defections to Candidate B represent decisions that were not made on the basis of partisanship, ideology, or candidate image. Whenever survey research is conducted there is some probability that respondents will make random choices[3]. This treatment acts as a balancing effect, offsetting similar behavior

[3] Choices based on criteria other than those presented in the study. For example, some respondents may have simply clicked through the survey to receive the reward.

which may have favored the hypothesis that defections from partisanship arise only from preference for the other candidate's appearance. The results from the chi-square support the theory that some respondents selected candidates on the basis of facial attraction $\chi^2(1, N = 120) = 53.87, p < .001$.

Table. 7

*Cross-Tabulation of Votes for Attractive Candidate by Treatment*

| | Voted for High Quality Photo | | |
|---|---|---|---|
| | No | Yes | Total |
| Party Photo: Low Quality (Treatment 2) | 47 | 13 | 60 |
| Party Photo: High Quality (Treatment 3) | 7 | 53 | 60 |
| Total | 54 | 66 | 120 |

It is interesting to note that some individuals voted against their party for the person with the lower quality photo (N=7). That being said almost twice as many defected when the alternative was a higher quality photo (N=13). The question now becomes, which people actually voted against their party in favor of the more attractive candidates?

Of the participants who selected a higher quality photo over partisan and ideological interests the majority were true Independents (54%), while leaners represented 31 percent and partisans were 15 percent. Additionally, a series of independent sample t-tests revealed that those who based their decision on candidate appearance were significantly less politically sophisticated $t(58) = 2.4$, $p = .02$, and less enthusiastic about their selection than participants who voted based

on partisanship t(58) = 3.47, $p < 0.001$[4]. These findings confirm **Hypothesis 1**, that while Independents are more likely to vote based on appearance, they are also less likely to convert those votes into meaningful political behavior (i.e. enthusiasm).

Table. 8

*Means, Standard Deviations Measures of Political Sophistication and Enthusiasm by Voting Behavior in Treatment 2*

| | Enthusiasm | | |
|---|---|---|---|
| | N | *M* | SD |
| Vote Party | 47 | 2.60 | .85 |
| Vote Appearance | 13 | 1.69 | .75 |
| | Political Sophistication | | |
| Vote Party | 47 | 4.64 | 1.85 |
| Vote Appearance | 13 | 3.31 | 1.37 |

*OVERALL ENTHUSIASM*

The findings above indicate that candidate appearance is unlikely to sway an election if it only works via "switching" Independents. However, an alternative possibility, and the one supported in this thesis, is that candidate image can work alongside partisan attachments by increasing individuals' motivation to both turn out for a candidate and persuade others to do the same. This is particularly important in congressional elections, where evidence suggests that voter mobilization has a larger impact on vote margins than persuasion (i.e. Hill, 2017). To test

[4] For both t-tests the Levene's measure of homogeneity of variance was not significant F = 3.411, $p$=.07, and F=.359, $p$ = .552 respectively.

this theory a simple One-Way ANOVA (Table 10) was conducted to look for differences in the levels of enthusiasm for candidates across treatments. As a reminder, the issue stands and partisanship of candidates did not change from one treatment to another, and it has already been demonstrated that participants in treatments do not vary in their ideological proximity to the candidates, their sophistication, or their levels of partisanship.

Table 9.

*Means, Standard Deviations, and Post-Hoc Significance on Measures of Political Sophistication by Political Affiliation*

| | | | | Bonferroni | |
|---|---|---|---|---|---|
| | N | *M* | SD | Treatment 1 | Treatment 2 |
| Treatment 1 | 60 | 2.60 | .995 | | |
| Treatment 2 | 60 | 2.40 | .91 | .72 | |
| Treatment 3 | 60 | 3.18 | .892 | <.001* | <.001* |
| Total | 180 | 2.73 | .985 | | |

*$p$ <.05

Table. 10

*One-Way Analysis of Variance of Enthusiasm for Vote Choice Across Treatments*

| Source | *df* | *SS* | *MS* | *F* | *p* |
|---|---|---|---|---|---|
| Between groups | 2 | 19.88 | 9.94 | 11.44 | .000* |
| Within groups | 177 | 153.79 | .87 | | |
| Total | 179 | 173.66 | | | |

## DISCUSSION

This chapter has taken a more nuanced look that the way candidate photographs can function to influence electoral outcomes. Rather than simply functioning to persuade Independent voters, candidate appearance may actually exert its effect across the entire electorate, by also altering the enthusiasm with which voters support their candidates.

# CHAPTER 5
# ACCURACY OF PHOTOGRAPHIC INFERENCES

## INTRODUCTION

Christopher Olivola once referred to the practice of using facial cues in electoral decision-making as using, "the wrong cue to infer the right attributes" (Olivola & Todorov, 2010 p.87; see also Lenz & Lawson, 2011). This chapter highlights some of the reasons why assessments of trait attributes might be useful for voters. In the chapter I take a closer look at the first part of Olivola's assertion, and consider whether voters' use of facial cues help or hinder them in their vote choice.

Several scholars have investigated the accuracy of voter impressions based on physical appearance. Yet inquiry into the consequences of appearance-based information has been conspicuously ignored by political scientists. More often, advantages gained through physical traits are seen as "bias" in what should be an otherwise rational decision process (e.g. Lev-On & Waismal-Manor, 2016, p.1758). While political scientists have been squeamish about ascribing any utility to trait inferences derived from physical appearance, other disciplines have been less reluctant to do so. In psychology, studies have shown that participants can use images of neutral faces to accurately infer traits related to trustworthiness (Stirrat & Perrett, 2010), prejudice (Hehman, Carpinella, Johnson, Leitner, & Freeman, 2014), propensity to cheat (Geniole et al., 2014; Haselhuhn & Wong, 2012), the big 5 personality dimensions (Penton-Voak, Pound, Little, & Perrett, 2006), and aggression (Carre et al., 2009) at rates greater than chance.

Despite the old adage "you shouldn't judge a book by its cover", there are several theoretical justifications – some more intuitive than others - for why photographs might offer

some accurate insight into the politically relevant behaviors of candidates. However, it is not the goal of this chapter to prove or disprove any one of these theories. Instead, the theories are laid out to demonstrate that the use of visual cues should not be dismissed as irrational out of hand, as Hall et al. (2009) did when he referenced such heuristics as "dubiously rational" (p.74). As other scholars have noted, it is often easier to assume the utility or irrelevance of a heuristic than to demonstrate it (review in Kuklinski & Quirk, 2000 Kuklinski & Quirk, 2000; Lau & Redlawsk, 2001, 2006).

## Support for Accuracy of Trait Inferences from Photographs

According to the ascription-actuality trait theory of leadership (Antonakis, 2011; Wyatt & Silvester, 2018), there are two routes through which traits can influence the success of a leader once in office. The first is that individuals can attribute certain traits to the leader regardless of whether they actually possess those traits (ascription) and the second is that leaders objectively embody the traits (actuality). As we will come to see, the line between ascription and actuality is not always clear, especially when the way a person is perceived can help them accomplish position relevant tasks.

### Biological Arguments

Physiognomy, or the inference of behavior from facial appearance, has a dark history in the social sciences (Todorov, 2017). As noted in Chapter 3, the face holds a special place in the cognitive processing of human beings. The face represents people's primary source of visual information for identifying others and reading their emotional and mental states (Todorov & Oosterhof, 2011). The most common theoretical framework employed in studies of accurate facial impressions is the ecological theory of heuristics (a close relative of signaling theory),

which asserts that "perceiving is for doing" (Zebrowitz et al., 2002). In other words, the cognitive ability to infer character traits from faces would not have evolved unless, at some point in our species' evolutionary history, such a cognitive mechanism served a purpose. When discussing voters' use of candidate appearance in elections Riggio & Riggio (2010) similarly suggest that such evaluations are, "evolutionary adaptive (and thus genetically-based) perceptual processes that are reinforced by automatic cognitive associations learned from the environment" (p.120).

One of the fundamental assumptions of the ecological theory of facial cues is that humans possess stable behavioral dispositions. If they do not, then it would be unreasonable to assume that signals based upon stable physical appearances could be accurate. The reasoning goes that while expressions may convey temporary emotions, stable facial structure can convey information about stable behavioral dispositions (Kramer & Ward, 2012).

The presence of stable behavioral dispositions has found strong support in the literature (reviewed in Gerber et al., 2011). These stable dispositions--what some authors have called behavioral "syndromes" --are more commonly referred to as personality. As previously noted, personality traits are defined as habitual patterns of behavior, thought, and emotion (Kassin, 2003; in Garzia, 2011). Personality differences are most pronounced in social species, suggesting that it may be the social environment that provides the different adaptive niches in which different personality strategies can succeed. Phylogenetic evidence for the evolution of stable personality differences in social animals is strong (reviewed in Mehta & Gosling, 2008; McNamara et al., 2009). Moreover, stable, heritable, behavioral dispositions are observed in our closest living relative - chimpanzees (Pan troglodytes) (Dutton, 2008; Kramer, 2012; Weiss et

al., 2000) whose personalities appear structurally similarly to our own (King & Figueredo, 1997).

The presence of specific cognitive mechanisms for perceiving trustworthiness and competence in others is supported by neuroscientific studies of brain regions associated with facial processing. These studies reveal that the human brain contains regions in the visual system which specialize in the processing of facial stimuli (reviewed in Re & Rule, 2015). Additional studies have demonstrated that the amygdala is required for accurate social judgments, particularly those relating to the approachability and trustworthiness of others (Adolphs et al., 2002; McGaugh, 2004, Todorov, 2008). Furthermore, the cognitive mechanisms involved in forming social impressions from faces have been shown to be functionally independent from those used to recognize the individual identity of others (Todorov & Duchaine, 2008).
These findings make a strong case for the universality of peoples' propensity to use faces as a "conduit to the soul", and suggests an evolutionary origin for the heuristic (for a compelling case of the evolutionary origins, see Riggio & Riggio, 2010). At the heart of these findings is the assumption that people with similar behavioral dispositions have similar looking faces. But how is this possible? One of the most prevalent theories offers testosterone as a possible mechanism linking appearance and behavior.

### *TESTOSTERONE*

Testosterone is a sex hormone, which in men is produced mainly by the Leydig cells of the testes, but which is also secreted by the adrenal cortex in both sexes (Eisenegger et al., 2011). In recent years testosterone has gained attention for its role in regulating several socially relevant behaviors including dominance (Mehta & Josephs, 2010), trustworthiness (Stirrat & Perrett,

2012), maintenance of social status (Eisengger et al., 2011), and impulse control (Mehta & Beer, 2010).

In addition to influencing behavior, testosterone has also been shown to influence facial bone development in consistent ways (Lefevre, Lewis, Perrett, & Penke, 2013; Mareckova, Weinbrand, Chakravarty, 2011; Penton-Voak & Chen, 2008). A high testosterone-to-estrogen ratio is associated with lateral bone growth in the zygomatic bones (cheekbones), the mandible (jaw and chin), a forward growth of the eyebrow ridge, and the lengthening of lower face bones (Fink & Penton-Voak, 2002; Farkas, 1996). These measures are commonly pooled together and referred to along a masculine-feminine dimension. If the underlying bone structure of faces reliably correlates with socially relevant behavioral tendencies, then Signaling Theory suggests that individuals should evolve psychological mechanisms that take advantage of this "free information."

For much of our evolutionary history humans have lived in small-scale societies. While social living provided many advantages it also presented challenges surrounding acquisition and division of resources. Through most of human history physical ability dictated access to resource, mating opportunities, and - by extension- who occupied the top positions in social hierarchies (Hehman et al., 2015). Today, the ability to judge physical strength from facial features may seem unimportant, yet during the Pleistocene--when much of our cognitive architecture was evolving--it was useful to assess who was at the top of a social hierarchy without having to engage in direct, and potentially costly, interactions (Van Vugt, 2009). Because testosterone has been shown to increase physical formidability, but also has an immune-suppressant effect (making it costly to fake), structural changes to the face associated with higher testosterone function as an "honest" evolutionary signal of physical ability (Hehman et al.,

2015). And strength has been shown to correlate with facial masculinity (Fink et al., 2007; Sell et al., 2009). From their position atop a social hierarchy, physically dominant individuals were more likely to dictate the behavior of the group. As a result, "forces of natural selection selected for psychological mechanisms regulating whom to follow and grant decision-making authority to" (Lausten & Petersen 2018, p.3).

Importantly for conversations regarding the present day utility of facial inferences, increases in testosterone are thought to influence more than an individual's strength. It is also thought to influence an individual's psychological disposition, driving them toward behavior that (at least in our evolutionary path) would take advantage of their increased physical ability. These cognitive, emotional, and motivational manifestations are commonly bundled together and referred to as "trait dominance," and some authors have argued for the inclusion of dominance as a sixth broad personality dimension (i.e. Sellers et al., 2007).

Trait dominance is commonly associated with a greater "sense of power" (Haselhuhn & Wong, 2012), an increase in "fearlessness," a state of low anxiety and stress (Geniole et al., 2014), a strong desire to seek and maintain high status positions (Eisengger et al., 2011), and finally--a greater propensity to use anger and aggression to resolve conflict (Sell et al., 2009). Each of these psychological dispositions would be very costly if not also accompanied by the physical prowess to back them up.

As was discussed in Chapter 3, competence and dominance are perceptually interrelated. For much of human history strong individuals *were* the most able to accomplish important tasks, and it is likely that many individuals link who they think will lead (i.e. assertive, decisive people) with who they think should lead (i.e. possess the best set of skills for the job). As Riggio & Riggio (2010) note, "It seems that even a well- informed voter who is trying to make a choice

based on an objective evaluation of expertise and qualifications may feel emotionally drawn to a vote based on an implicit perception of strength, perhaps without awareness" (p.27).

While it makes sense that judgements of strength made from facial perceptions in our evolutionary past would correlate with actual success, it is less clear how this link would exist today. One possibility is that the psychological traits associated with higher testosterone (trait dominance) drive individuals to behave in ways that result in successful outcomes. There is good reason to assume that traits--particularly those associated with dominance-- can make a difference for legislators' success in Congress. First, testosterone's role in mediating social interactions is most pronounced in face-to-face encounters and when resources are at stake (Eisenegger et al., 2011). Members of the U.S. House of Representatives engage in a competitive social environment in which they sit on committees, hold meetings, take votes, and debate in-person, all in an attempt to "win" as much of the government's finite time and money as possible. Given the propensity of people to view dominant individuals as more competent and assertive, they may gain an advantage in a world of negotiations.

On the other hand, the "double-edged sword" of dominance may decrease legislative effectiveness if bi-partisanship is a necessary part of the job. For example, a flexible and cooperative persona may help increase the number of allies a legislator can recruit to support her or his legislation. When speaking about the potential of working with Paul Ryan, Senate Democrat Harry Reid said of the Republican Ways and Means Chairman, "he appears to me to be one of the people over there that would be reasonable; I mean look at some of the other people". Moreover, Politico described Ryan's work with Sen. Patty Murray (D-Wash) as a "bipartisan highlight for a Congress otherwise beset by gridlock" (Politico, 2015). Furthermore,

being able to show bi-partisan support on legislation may increase a bill's appeal to House leadership, making it more likely to make it onto the agenda and subsequently pass (Kroger, 2003).

In their study of highly effective lawmakers, Volden and colleagues (2014) found qualitative support for the idea that being open to compromise is an important trait if legislators want to be successful. For example, Hamilton Fish (R-NY) was cited for his unique ability to find common ground with Democratic priorities. In a battle over the Fair Housing Act Amendment and the Americans with Disabilities Act in 1990, both parties cited Fish for his ability to work across the aisle, with one observer noting that Fish played, "a pivotal role in reaching compromises" (Baron and Ujifusa, 1993; p.909). Another example is Paul Rogers (D-FL), whose colleagues cite his effectiveness as a subcommittee chairman as deriving from his ability to ignore party affiliations and solicit and process criticisms and feedback in positive and productive ways (Waxman and Green, 2009). As Volden notes, and these anecdotes can attest to, there is value in "actively seeking out potential opportunities for compromise and consensus."

However, this is a highly debated area of research, and several scholars have raised concerns about methodological distinction between perceptions of competence and leadership and actual task effectiveness (i.e. Kaiser et al., 2008; Morgeson et al., 2007). This is a point that will be returned to in the section on socialization.

Research linking testosterone to facial morphology and behavior is controversial, and meaningful challenges have been raised. It is not the goal of this chapter to explore the nature of the testosterone – behavior – perception link in depth. Others have undertaken such work and with greater adeptness than a political scientist can offer (for summary and challenges to biosocial links with testosterone see Booth et al., 2006; Granger et al., 2004; Mehta et al., 2010).

Instead, the goal here is to offer a plausible defense for why appearance based heuristics should not be dismissed out of hand as irrelevant to voters' decision strategy.

### *Overgeneralizations*

Evolved cognitive mechanisms are not meant to be exact, they are meant to help individuals survive. This means that most of our evolved psychology "plays it safe." As Riggio & Riggio (2010) note, "During our evolutionary past, whether one's immediate judgment of a situation is accurate or not is irrelevant; the point is survival, not accuracy, and retreat from potential threat that is very quickly recognized in the face is not a bad strategy most of the time." (p.121). While the link between facial morphology and certain adaptive information may very well exist, there is little doubt that people tend to overgeneralize this information and apply it to targets incorrectly. However, the errors produced by these overgeneralizations are presumed to be less maladaptive than the consequences that might result from failing to respond appropriately to the behavioral cues of potential social partners (Zebrowitz & Montepare, 2008).

The propensity of the physiognomic systems in our brain to overgeneralize is one reason that studies into the accuracy of these perceptions are referred to as "kernel of truth" studies. Most research that looks at people's ability to judge faces (with no other information) find correlation coefficients between 0.2 and 0.4 (Zebrowitz & Collins, 1997), though many are not even that strong (Re & Rule, 2015). However, there is an important caveat to this point. As the next section demonstrates, biology many not be alone in driving the connection between facial cues and behavior, leaving open the possibility that such connections may grow stronger rather than weaker with time.

## Social Arguments

Ecological theory doesn't stop at making inferences; it assumes that face perceptions evolved to guide the behavior of the perceiver. Whether the evolved relationship between facial structures and behavior has persisted into modern times is debatable, but there is little doubt that physiognomy is an integral part of our social cognition (Hassin & Trope, 2000). Faces which remind us of infants elicit protection responses (Berry & McArthur, 1986; Zebrowitz, 1997), while dominant or angry looking faces drive avoidance and defense responses (Marsh et al., 2005; see Zebrowitz & Montepare, 2008). In short, "Trait inferences from faces are important because they often predetermine the course of social interactions" (Engell et al., 2007, p.1508). The fact that facial cues continue to prompt individuals to alter their behavior toward one another means that there are social pressures for people to conform to their appearance. For example, the perception that unattractive people are not as socially competent can drive individuals to act in ways that perpetuate the type of social interaction that elicit such behavior (Snyder, Tanke, & Berscheid, 1977). This phenomenon is commonly referred to as the self-fulfilling prophecy effect.

Evidence for the self-fulfilling prophecy effect in facial perceptions has been demonstrated for facial width-to-height ratios and aggression (Haselhuhn, Wong, & Ormiston, 2013), as well as for honesty (Zebrowitz et al., 1996). One of the most striking examples of the self-fulfilling prophecy effect is seen in education, where attractive students are perceived as being more intelligent and possessing greater potential by teachers. When teachers perceive a student as having high potential they invest more time and effort in that student. This added attention in turn produces better results from the student and in doing so the student conforms to the teacher's original expectations (Ritts et al., 1992).

However, people do not always conform to others' perceptions. Sometimes the opposite effect from the self-fulfilling prophecy occurs. For example, there is strong evidence that social perceptions of babyfaceness in men can result in men with more juvenile looking faces becoming more aggressive and delinquent than their more mature looking peers (Zebrowits et al., 1998; Andreoletti & Zebrowitz, 2001).

Returning to the ascription-actuality theory discussed at the outset of this chapter, the core distinction between biological and social arguments for "kernel of truth" models is the question of whether the in-role performance of leaders (i.e. their actual success or task competence) requires that they *actually* possess certain abilities, or whether they only need others to think they possess key abilities (ascription). Importantly for discussions of the utility of appearance based heuristics, the route to legislative success is irrelevant, it only matters that a candidate perceived as competent actually performs once in office. The distinction between actuality and ascription simply represents two plausible routes by which this connection could be attained.

## Evidence for the Accuracy of Trait Assessments in Politics

> "Unfortunately, when such primary judgements are used to make decisions with real-world implications-decisions that should be based on rational assessments of as much information as possible-such automatic perceptual judgements are not adaptive and are by definition highly superficial and based on peripheral information that may have no relevance to complex, rational, thoughtful judgements" (Riggio & Riggio, 2010, p.120).

Are trait perceptions irrelevant distractions in political decision making? Systematic investigations into this question are lacking. While several studies have found that individuals

are able to accurately[5] judge the partisanship of candidates from their facial features alone, even when controlling for race and gender (i.e. Olivola et al., 2012; Olivola & Todorov, 2010; Rule & Ambady, 2010), few studies have broadened their investigation to ask whether voters' perceptions can accurately infer political behavior.

To date, Wyatt and Sulvester (2018) is the only study that I am aware of which specifically investigates the accuracy of trait inferences of politicians. In their study, Wyatt and Sulvester measure whether trait inferences made from photographs can accurately predict the leadership effectiveness ratings ascribed to politicians by their colleagues. Findings from this study demonstrated that while ascriptions of competence helped politicians get elected, they did not correlate with in-office performance as determined by the assessments of colleagues. The current study builds on this work by testing whether perceptions of competence are related to objective scores of success, operationalized as the ability of members of the House of Representatives to move bills through the legislative process.

## Present Study: Accuracy of Perceptions of Competence

This study attempts to determine whether voters' use of facial cues in their election decisions could produce meaningful legislative outcomes. As we saw in Chapter 2, an ecological theory of trait perceptions assumes that cognitive mechanisms for detecting socially-relevant traits from faces would not have occurred unless at some point in our evolutionary past these traits correlated with actual behavior. Thus, it is possible that selecting candidates along those same trait dimensions through the use of visual cues could have an effect on the type of Representative voters place in office.

[5] At rates statistically above chance.

**H1**: Congressmen who are perceived to be more competent and/or more attractive will be more effective at passing legislation.

## METHODS

The stimuli for this study was comprised of photos of 59 male Caucasian freshman legislators (mean age = 48.5, SD=7.83) collected from the 108th and 109th U.S. House of Representatives (2003-2009). The procedure for collecting competence and attractiveness ratings for the congressional faces was covered in Chapter 3 under the section on "continuous trait ratings". The time period was selected for several reasons. Due to the fact that the project relied on secondary photographs of representatives collected from the internet, images of Congressmen collected after 2003 were far superior to those available prior to this date. This study also relied on Volden & Wiseman (2014) scores of legislative effectiveness to measure competence. This dataset terminated in 2013. By only collecting photos of legislators up to the 109th Congress, I was able to ensure that all subjects would have at least 5 years of data on which they could be assessed.

## DEPENDENT VARIABLES

The overarching goal of this experiment was to look into the utility of appearance based heuristics for voting decisions. Some of the most prominent scholars in the field of voting heuristics are Richard Lau and his colleagues. Lau argues that you need three types of information to determine whether a voter using a heuristic made a "correct vote"; a measure of a voters' preferences on a number of different issues by which the candidates can be distinguished, measures of which of those issues are most important to the voter, and some defensibly objective

measure of where the candidates actually stand on those same issues or dimensions of judgment (Lau et al., 2008).

As Mondak (1995) aptly summarizes, "All voters share a common interest in maximizing the quality of representatives in the House…simply put, we want representatives whom we can trust, and we want representatives who can get the job done" (p.1045). The electorate's wide agreement on the first two of Lau's criteria thus leaves us with a single dimension for assessing the utility of a heuristic, whether it helps the electorate choose representatives who embody a desirable trait, in this case competence. The only question now is how this outcome should be measured? While several studies have discussed how voters use their impressions of the competence to guide their voting decision, few have dealt with how those characteristics translate into meaningful political behaviors (notable exceptions include: Mondak, 1995; Kulisheck & Mondak, 1996).

### *COMPETENCE*

While there are many dimensions along which competence could be measured, it has been shown that legislative effectiveness (an ability to get bills passed) is an important part of the job in the eyes of constituents and fellow members of Congress. For example, Mondak (1995) found evidence that constituents hold legislators electorally accountable for poor legislative performance. Similarly, Volden & Wiseman (2014) note that legislatively accomplished members are often referred to by their colleagues as, "legislative giants", "great leaders", and "effective lawmakers". Thus, it seems fair to assume that while legislative effectiveness may not be the totality of what makes a competent representative, it is a necessary component.

To measure competence, Legislative Effectiveness Scores (LES) were obtained from the publicly available data provided by Volden & Wiseman (2014). To generate LES scores a

computer program was used to collect bill information from the Library of Congress website, THOMAS, for every public House bill (H.R.) that was introduced into the 108th – 113th Congresses. Fifteen indicators were used to measure a Representative's ability to advance a bill through several stages of the policy process including action in committee, action on the floor of the House, passage of the House, and becoming law. The bills are weighted by their importance with commemorative bills ($\alpha = 1$), substantive bills ($\beta = 5$), and substantive and significant bills by ($\Upsilon = 10$) (For more details see Volden & Wiseman, 2014).

There are several structural aspects of Congress that can impact a legislator's ability to advance a bill. For this study, each legislator's scores were converted to within-party, within-congress z-scores. Thus, Congressmen were being judged based upon their performance vis-à-vis other similarly situated legislators. These scores were then averaged across all of the years a Congressperson was in office in an attempt to create a variable that accurately reflects a legislator's relative effectiveness, holding several situational factors constant. While seniority was not directly measured, by averaging across the career of the legislator the competence construct captures the fact that more senior legislators may be more productive.

## ANALYSIS & RESULTS

The analysis consisted of a simple regression in which mean trait ratings (competence and attractiveness) were regressed on the averaged Legislative Effectiveness Scores. Two Congressmen had LES that were greater than 2 standard deviations above the mean, and they were dropped from the analysis to prevent undue influence on the model. The results of the regressions are presented in Figure. 3

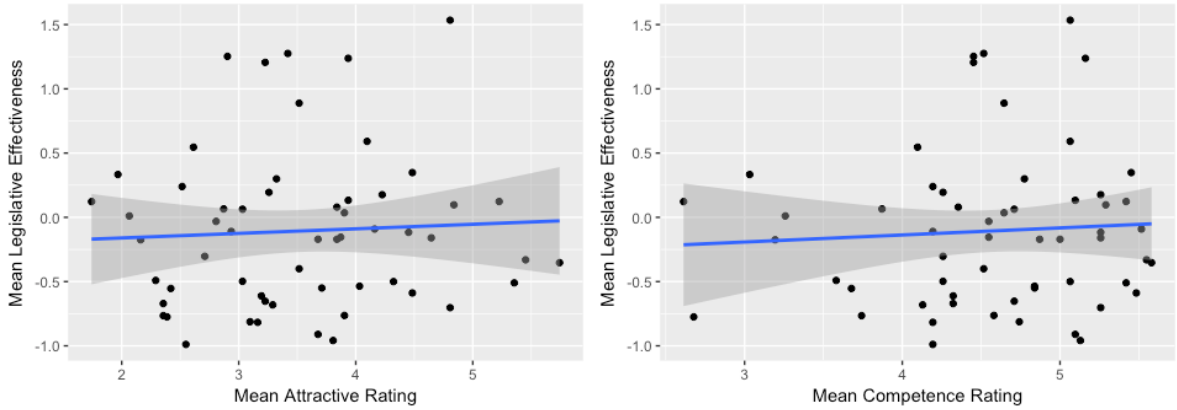



*Figure 3* Regression of mean trait ratings by mean legislative effectiveness scores. Top: Competence, Bottom: Attractiveness

From the above plots it is clear that ratings of competence and attractiveness fail to predict actual legislative performance. Indeed, the correlation between trait ratings and legislative outcomes were close to zero (competence: r = .064, attractiveness: r = .055). However, one potential issue is the distribution of legislative effectiveness scores seen in Figure 4. The skew present in the histogram demonstrates that there are a handful of highly effective legislators, while the rest perform at or below average.

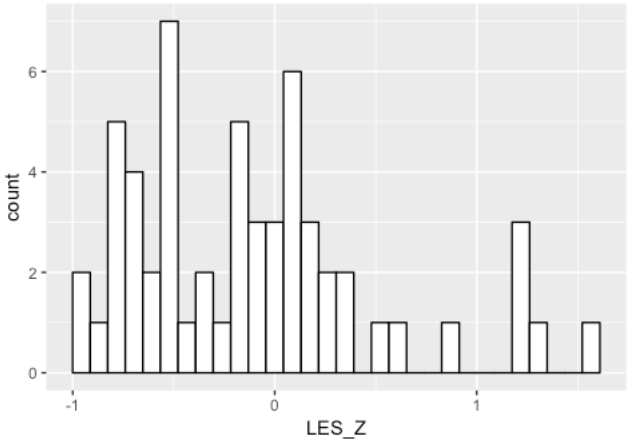



*Figure 4*. Distribution of average legislative effectiveness scores across the tenure of a legislator

With the distribution of legislative success in mind, a visual reexamination of the regression outputs reveals a high degree of heterogeneity in perceived competence ratings among legislators at the low end of LES, while the handful of higher performing legislators appear to also receive higher than average ratings of facial competence. To check for this effect, legislators were binned into three distinct categories – High LES (those scoring greater than .5 SD, N=10) above the mean), Medium LES (those scoring within .5 SD of the mean, N=31) and Low LES (those scoring less than .5 SD below the mean, N=18). Additionally, the legislators previously dropped because they were outliers in their legislative success were returned to the analysis (N=59).

The results presented in Table 11 show that not only did high performing legislators fail to have higher mean ratings of facial competence, they actually had lower ratings than either the low or medium LES groups. The discrepancy in the results from the ANOVA and the visual analysis of the regression plots is due to the inclusion of the previously dropped legislators, who scored very high on LES but were in the bottom half of legislators for measures of facial competence.

Table 11.

*Means and Standard Deviations of Competence by Legislative Effectiveness Category*

| | | Perceived Competence | |
|---|---|---|---|
| LES Category | n | *M* | *SD* |
| High | 10 | 4.47 | .70 |
| Medium | 31 | 4.56 | .79 |
| Low | 18 | 4.51 | .55 |
| Total | 59 | 4.53 | .722 |

*One-Way Analysis of Variance of Facial Competence by Legislative Effectiveness*

| Source | *df* | *SS* | *MS* | *F* | *p* |
|---|---|---|---|---|---|
| Between groups | 2 | .064 | .032 | .059 | .94 |
| Within groups | 56 | 30.24 | .54 | | |
| Total | 58 | 30.3 | | | |

*DISCUSSION*

There are several potential explanations for why ratings of competence and attractiveness failed to predict political performance. From a methodological perspective it might be that elections produce a selection bias (well documented in this thesis) that narrows the variance in facial competence among legislators. More precisely, because elections favor competent and attractive looking politicians there is not enough variability among sitting Congressmen to detect an effect. This challenge is dampened by looking at a distribution of the facial perceptions, which range from a low of 2.6 (competence) and 1.74 (attractive) to a high of 5.6 (competence) and 5.7 (attractiveness).

A second issue might be that as politicians progress in their careers, their success becomes more dependent on actual performance and inter-personal relationships than how they look. This line of reasoning would suggest that trait perceptions would be most predictive of legislative performance during a Congressman's first year. While this is indeed a valid suggestion, it is empirically difficult to assess. This is because almost every legislator is ineffective at moving legislation in their first year. Looking at the unstandardized LES scores, the mean among freshman legislators was .42 with a standard deviation of .63. The range of LES scores across seniority levels was 0 to 5.62.

The most obvious answer as to why a weak association between appearance and success among sitting Congressmen is simply that Congressional success has little to do with how a politician looks. This is likely a comforting thought to many who study and appreciate the legislative branch. More importantly, it does suggest that scholars are correct to assume that deciding to vote for someone on the basis of first impressions is unlikely to produce meaningful results.

# CHAPTER 6
# SUMMARY AND FUTURE WORK

## SUMMARY OF FINDINGS

Hall and her colleagues (2009) once said, "Studies on actual voting decision processes will be crucial to delineate the causal influence of appearance on elections" (p.18). This thesis has taken a small step in that direction, seeking to offer a more nuanced understanding of the impact of visual media – in the form of candidate images – on the decision-making structure of U.S. voters.

Chapters 2 and 4 offered evidence from the field of election studies demonstrating that assumptions about the diminishing role of partisanship in elections is largely unfounded. Instead, this thesis proposed an alternative mechanism for the influence of candidate traits. Specifically, that candidate appearance can act to magnify enthusiasm for a candidate, even among partisans. This was supported by evidence that appearance is intrinsically bound-up with other more traditional political variables (e.g. partisanship, issues, incumbency, etc.), and thus is capable of impacting a broader demographic than previous candidate appearance studies have suggested. This theory was supported by studies presented in Chapter 4, which demonstrated that candidate appearance has a stronger impact on voter turnout and activism than on switching voters between parties. In fact, it was demonstrated that those voters most likely to make voting decisions based on the physical appearance of the candidates were also the least likely to convert this decision into meaningful political action (i.e. turn out to vote, contribute to campaign efforts, etc.).

In addition to offering new insights into the mechanism by which candidate appearance can influence electoral outcomes, this thesis also took a closer look at the underlying

assumptions in many studies linking appearance advantages to electoral success. In Chapter 3, the thesis demonstrated the need for research utilizing naïve ratings of candidate appearance to be explicit about the term "rater agreement", and to more fully consider how different demographic variables, such as partisanship, can influence levels of consensus. More importantly, the chapter highlighted how much of the work on candidate image has neglected concerns about the variety and quality of visual images to which the electorate is exposed. Indeed, this represents a fruitful avenue of future research for the field as a whole.

Finally, Chapter 5 delved into the often noted but largely untested assertion that appearance represents an irrelevant source of information about candidates. This chapter contributes to the ongoing conversation between evolutionary psychologists and democratic theorists regarding the utility of evolved cognitive mechanisms for leadership selection in today's society. Specifically, Chapter 5 demonstrated that in political domains, such as the U.S. Congress, ascriptions of competence and attractiveness made on the basis of candidates' photographs are unrelated to the actual success of politicians once in office.

## Future Work

Understanding how visual images of candidates influence voters' electoral decisions is an important and growing field of research. This is especially true as more citizens turn to the internet as their primary source of political information, where campaigns can incorporate visual content into their messaging more cheaply and easily than ever before. I propose two key areas for future work.

First, there is a dearth of research on how social networks influence the way in which visual images of candidates are disseminated. This is a particularly relevant question for studies

of young voters who may rely on social media for political information. Are online voters exposed to the same proportions of positive and negative candidate images as those who watch network TV, or is their exposure filtered by the social circles they form online?

Second, over the course of this thesis research a pilot study was begun which sought to answer the question – are "un-voters" (i.e. unaffiliated, uninformed, unsophisticated) as cognizant of the appearance of candidates as some models suggest? Chapter 4 of this thesis noted that congressional midterm elections are often covered by the media at rates much lower than a presidential election. This raises the possibility that uninterested voters are not exposed to images at rates high enough to make a meaningful impression or to even allow them to remember how candidates differed in appearance.

As a supplement to the current research a pilot study was conducted during the 2018 Colorado Gubernatorial Primary. The goal of this study was to determine whether voters could differentiate between the candidates on the basis of physical appearance. This primary presented a unique opportunity for the study of image cues for several reasons. First, as a primary election the influence of issue distance and partisan variables are greatly reduced. Second, the unique nature of the 2018 Colorado primary presented a novel opportunity to look at partisan and independent voters. Generally, election literature suggests that primaries attract highly motivated and partisan voters. However, in 2016 Colorado citizens voted to allow unaffiliated voters in either of the two party primaries. As the first election to allow independents to exercise this new right, their participation was expected to be fairly high. Indeed 24 percent of the ballots cast came from this new voting bloc. Third, this election saw unprecedented spending by candidates and outside interest groups on advertising, but there was strong differentiation among the balloted candidates in their advertising budgets.

For theories that individuals are aware of candidate appearance when they enter the voting booth, the 2018 Gubernatorial primary represented a low bar for voters to clear, given that Congressional House elections are unlikely to garner this level of media attention and ad revenue. Additionally, the current governor is term limited, meaning that there are no incumbents currently in the race which evens the playing field among the candidates in terms of prior-recognition and familiarity among voters.

To begin to test this theory an online survey was conducted in the two weeks prior to the 2018 Colorado Gubernatorial Primary. To reduce the complexity of the analysis[6] the survey targeted Democrats and Independents who either leaned toward the Democratic party or were pure independents. Each participant was asked to fill out a brief demographic questionnaire followed by two questions designed to test the participants knowledge of the candidates running in the primary. Following these questions participants were shown a grid featuring the photos of seven candidates from both the Democratic and Republican primaries along the left-hand side and the names of the candidates along the top. Participants were asked to match the image of the candidates to their name. An "I Don't Know" choice was included in the response options. Only correct answers were counted for the participants final scores, meaning the survey was agnostic to whether participants selected "Don't Know" or simply answered incorrectly. Data from this pilot study is currently being analyzed, and a follow-up survey will be conducted in the lead-up to the November midterm election.

[6] This study was designed as an addendum to the thesis when it became clear that the Colorado Gubernatorial primary presented a unique opportunity. However the limited time line and funds to conduct the study necessitated a narrow scope, and thus only one party was investigated.

## FINAL THOUGHTS

In 2013 the New Yorker released an article titled, "On the face of it: The psychology of electability", which introduced the public to the work of Alexander Todorov and his research linking candidate appearance to electoral success. In this article the author states, "except for those people who have hard-core political beliefs, the reasons we vote for particular candidates could have less to do with politics and more to do with perception". Just one year earlier in The Guardian columnist Leonard Mlodinow penned an article titled, "A candidate's looks count for far more than voters like to believe" in which he states, "recent research tells us that a candidate's appearance can lead to a greater vote swing than even the cynics imagined".

The idea that the electorate is filled with uninformed and uninterested voters looking for the path of least resistance when making electoral decisions is an old trope and an easy one for psychologists studying perceptual bias to fall back on. As studies linking candidate appearance to electoral success proliferate, the notion of the appearance reliant voter seeps into popular culture. But there is little evidence to suggest that the correlation between appearance and outcome finds its origins in a mass of unreasoning voters just waiting to be swept off their feet by the dreamiest politician. Instead, this effect is likely driven by the enthusiasm a candidate can generate among those who already share some fundamental agreement with him/her on the issues. This is a positive finding for those concerned with American democratic norms, as it suggests that a pretty face can't hide an unpopular platform. And for all those political scientists studying voter behavior, it's not all over, your life isn't a sham, and the American electorate is not hopelessly broken[7].

[7] See first paragraph of the introduction. It's been a long read, I don't blame you for not remembering.

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**APPENDIX A**

# ALL CONGRESSIONAL PHOTOS USED IN THESIS: N=59





# 1] Image Comparisons

We are interested in your first impression of candidates. Based on your first impression, how **competent** is this candidate?



| Very Incompetent | 2 | 3 | 4 | 5 | 6 | Very Competent |
|---|---|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |

---

Please select the candidate you think looks more **competent**.



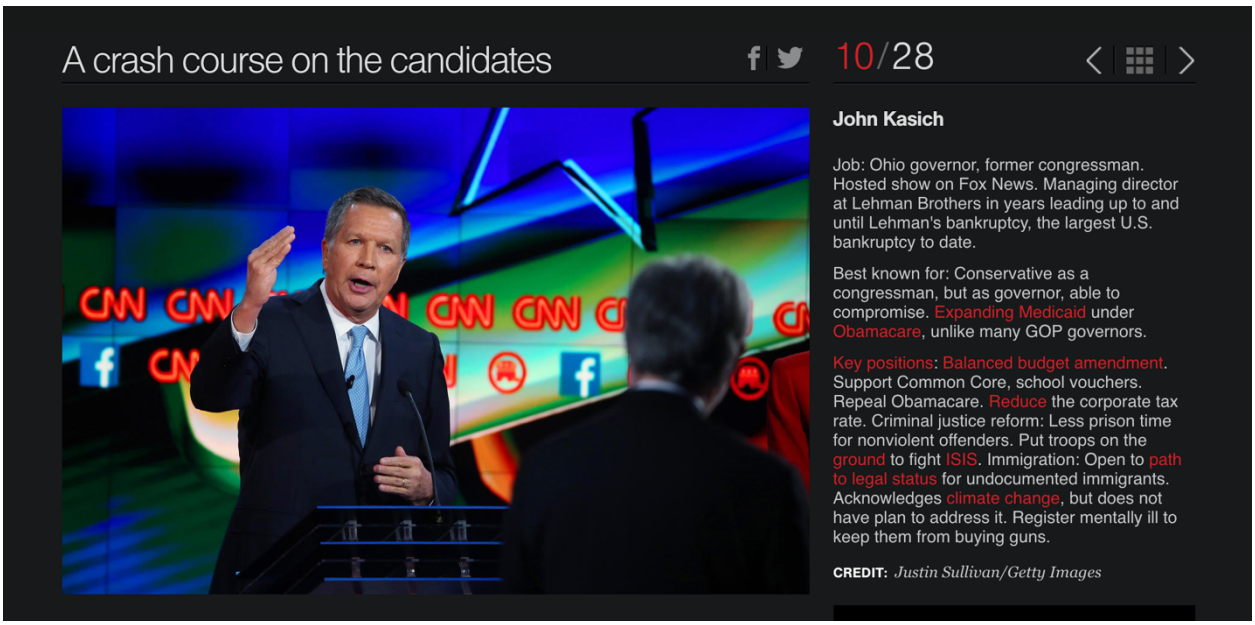
Candidate A

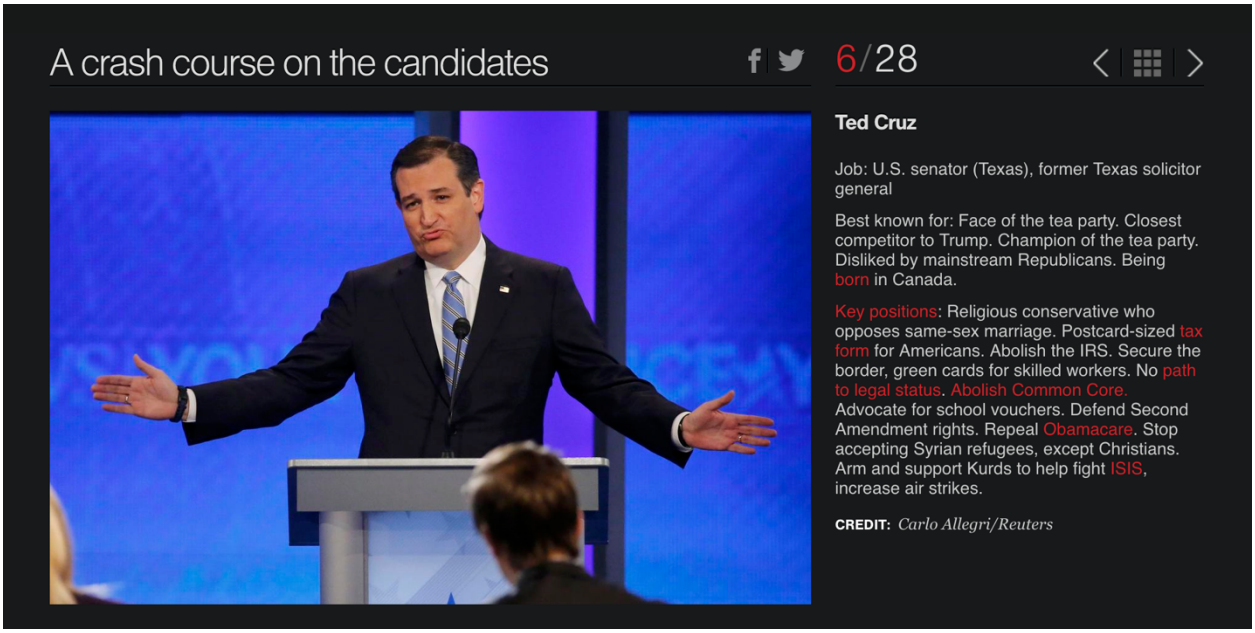


Candidate B

# 2] HYPOTHETICAL VOTE

## 2.1 Examples of "Meet The Candidate" Articles



## 2.2 Demographic Questions

---

Within the context of American politics, how do you think of yourself ideologically?

Extremely Liberal [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] Extremely Conservative

---

Which answer best describes your partisan affiliation?

Democrat [1]

Republican [2]

Independent [3]

Other [3]

---

*If "Independent" or "Other" was selected:

Do you lean more toward one party?

Yes – The Democratic Party [1]

Yes – The Republican Party [2]

No [3]

---

How often do you participate in political conversations?

Several times a week [4]
At least once in a week [3]
At least once in a month [2]
Only few times a year [1]
Practically never [1]

*Due to the low number of respondents answering “Only a few times a year”(N=3) this category was collapsed with “Practically never”.

---

Thinking about a typical election year, what type of activities are you likely to take part in

[Check all that apply]

Always or Nearly Always Vote [+1]

Display a political sign in my yard [+1]

Write a letter to an elected official or attend political events (e.g. rally, debate, etc.) [+1]

Volunteer for a political campaign [+1]

Donate Money [+1]

---

Thinking about a typical election year, where do you receive the *majority* of your information about candidates?

From news networks on TV [4]

Online – Social Media (i.e. Twitter, facebook, etc.) [3]

Online – Candidate and News websites (i.e. CNN, FoxNews, etc.) [3]

Print newspapers [2]

Talking with other people (i.e. friends or family) [1]

*The online news sources were originally coded separately, but then collapsed to simplify the analysis

---

## 2.3 Issue Positions

Please select the option that best describes your views on the following issues: [each issue pair was presented one at a time].

Government is almost always wasteful and inefficient [-1]
Government often does a better job than people give it credit for [+1]

Government regulation of business usually does more harm than good [-1]
Government regulation of business is necessary to protect the public interest [+1]

The government today can't afford to do much more to help the needy [+1]
The government should do more to help needy Americans even if it means going deeper into debt [+1]

Immigrants today are a burden on our country because they take our jobs, housing, and healthcare [-1]
Immigrants today strengthen our country because of their hard work and talents [+1]

The best way to ensure peace is through military strength [-1]
Good diplomacy is the best way to ensure peace [+1]

Stricter environmental laws and regulations cost too many jobs and hurt the economy [-1]
Stricter environmental laws and regulations are worth the cost [+1]

[+1] indicates an ideological move toward the liberal candidate

[- 1] indicates an ideological move toward the conservative candidate

*There is a running joke in electoral studies that academics always code Republicans and conservatives in the negative, it seems that I am not immune to this effect.

---

## 2.3 Hypotheticals

---

Thinking about Candidate A/B [Hypothetical Candidate's Name], how would you rate their **competence**?

Very Competent [3]
Competent [2]
Somewhat Competent [1]
Neither Competent nor Incompetent [0]
Somewhat Incompetent [-1]
Incompetent [-2]
Very Incompetent [-3]

6 = Strong Preference Candidate A, 0 = No Difference, -6 = Strong Preference Candidate B

---

"When asked to choose between these candidates you said that you would vote for [Insert Candidate A/B]. How enthusiastic are you about your choice?"

**Very Enthusiastic [5]**
(I would definitely vote for this candidate, and I would help with campaign activities ex: handing out candidate information)
**Enthusiastic [4]**
(I would definitely vote for this candidate, and I would encourage people I spoke with to vote for this candidate)
**Somewhat Enthusiastic [3]**
(I would definitely show up to vote for this candidate)
**Not Very Enthusiastic [2]**
(I would probably vote for this person)
**Unenthusiastic [1]**
(It is unlikely that I would actually show up to vote for this person)

# APPENDIX B

## CHAPTER 4: HYPOTHETICAL TREATMENTS

### PARTISANSHIP

*Number of Participants by Partisanship and Treatment*

| | Partisan | | Lean | | Independent | Total |
|---|---|---|---|---|---|---|
| Treatment | Democrat | Republican | Democrat | Republican | No affiliation | |
| No Photo | 17 | 14 | 8 | 9 | 12 | 60 |
| Low Photo | 15 | 20 | 7 | 7 | 11 | 60 |
| High Photo | 17 | 20 | 5 | 6 | 12 | 60 |

### IDEOLOGICAL DISTANCE FROM CANDIDATES

*Means and Standard Deviations on Measures of Ideological Distance from Candidates by Treatment*

| | | Ideological Distance | |
|---|---|---|---|
| Treatment | n | *M* | *SD* |
| No Photo | 60 | .92 | 4.236 |
| Low Photo | 60 | .80 | 4.422 |
| High Photo | 60 | 1.77 | 4.405 |
| Total | 180 | 1.16 | 4.352 |

*One-Way Analysis of Variance of Ideological Distance from Candidates Across Treatments*

| Source | *df* | *SS* | *MS* | *F* | *p* |
|---|---|---|---|---|---|
| Between groups | 2 | 33.41 | 16.71 | .881 | .416 |
| Within groups | 177 | 3356.92 | 18.97 | | |
| Total | 179 | 3390.33 | | | |

*Test of Homogeneity of Variances Ideological Distance*

| Levene Statistic | df1 | df2 | Sig. |
|---|---|---|---|
| 1.618 | 2 | 177 | .201 |

*Means, Standard Deviations Measures of Ideological Distance from Candidates by Political Affiliation*

| | Ideological Distance | | |
|---|---|---|---|
| | N | *M* | SD |
| Independent | 35 | 3.49 | 1.77 |
| Lean | 42 | 4.33 | 1.82 |
| Partisan | 103 | 4.17 | 1.96 |
| Total | 180 | 4.08 | 1.91 |

## POLITICAL ORIENTATION

*Means and Standard Deviations on Measures of Political Orientation by Treatment*

| | | Political Orientation | |
|---|---|---|---|
| Treatment | n | *M* | *SD* |
| No Photo | 60 | 5.38 | 2.66 |
| Low Photo | 60 | 5.95 | 3.01 |
| High Photo | 60 | 4.88 | 3.07 |
| Total | 180 | 5.41 | 2.934 |

*One-Way Analysis of Variance of Political Orientation Across Treatments*

| Source | *df* | *SS* | *MS* | *F* | *p* |
|---|---|---|---|---|---|
| Between groups | 2 | 34.18 | 17.09 | 2.01 | .137 |
| Within groups | 177 | 1507.22 | 8.52 | | |
| Total | 179 | 1541.39 | | | |

*Test of Homogeneity of Variances Political Orientation*

| Levene Statistic | df1 | df2 | Sig. |
|---|---|---|---|
| 1.618 | 2 | 177 | .201 |

## NEWS SOURCE

*Source of News Within Treatment*

| Treatment | n | News Source | | | |
|---|---|---|---|---|---|
| | | Talking with others | Traditional print newspapers | Online (social media or online newspaper) | Television |
| No Photo | 60 | 11.7 | 18.3 | 46.7 | 23.3 |
| Low Photo | 60 | 8.3 | 21.7 | 40.0 | 30.0 |
| High Photo | 60 | 11.7 | 13.3 | 46.7 | 28.3 |

*Numbers represent the percent of individuals within a given treatment who got the *majority* of their news from the designated news source

The chi-square test revealed no significant difference between treatments in the type of news they consumed $\chi^2(6, N = 180) = 2.54, p = .864$

*Source of News Within Age Group*

| Age Range | n | News Source | | | |
|---|---|---|---|---|---|
| | | Talking with others | Traditional print newspapers | Online (social media or online newspaper) | Television |
| 18-24 | 11 | 9.1 | 0 | 90.9 | 0 |
| 25-34 | 62 | 11.3 | 6.5 | 71 | 11.3 |
| 35-44 | 58 | 10.3 | 22.4 | 39.7 | 27.6 |
| 45-54 | 28 | 7.1 | 35.7 | 7.1 | 50 |
| 55 and over | 21 | 14.3 | 23.8 | 4.8 | 57.1 |

*Numbers represent the percent of individuals within a given age range who got the *majority* of their news from the designated news source

*Source of News Within Education*

| College Degree | n | News Source | | | |
|---|---|---|---|---|---|
| | | Talking with others | Traditional print newspapers | Online (social media or online newspaper) | Television |
| No | 90 | 11.1 | 6.7 | 48.9 | 33.3 |
| Yes | 90 | 10.0 | 28.9 | 40.0 | 21.1 |

*Numbers represent the percent of individuals within a given educational background who got the *majority* of their news from the designated news source

The chi-square test revealed a significant difference between education level in the type of news individuals consumed $\chi^2(3, N = 180) = 15.82, p < .001$