

Confounding classic models of voter behaviour: *The challenge of automatic cognition*

Tim Abrey-Nyman, PhD Candidate
Department of Political Studies, Queen's University

Paper prepared for the Canadian Political Science Association Conference, Victoria, BC, June 6, 2013
**not to be cited until final publication online*

Abstract

This paper examines the dissonance at the intersection of classic, social-psychological models of voter behaviour and contemporary, multidisciplinary investigations of non-conscious – or automatic – cognitive processes. Taking inspiration from researchers such as Paul Quirk and James Kuklinski, the paper explores the assumptions at work in classic social-psychological voter-behaviour research and suggests a reassessment of those models in light of contemporary cognitive science.

While significant advances have been made, the dominant mode of voter-behaviour inquiry remains largely within the sphere of the Michigan tradition – a tradition rooted in classic social psychology that focuses on models of active, systematic cognition, heavily influenced by classic models of social and economic interaction. What these studies do not take into account – in Canada and elsewhere – is the influence of non-conscious, automatic processes of cognition.

This paper explores readily available avenues of investigation into phenomena often miscategorized as, for example, instances of irrationality or voter error. This paper demonstrates that this mode of inquiry is ripe with explanatory and predictive potential – not for the purposes of depriving voters of their essential, rational humanity but, rather, to improve our understanding of our innate strengths and weaknesses when engaging with such a complex and demanding process as participatory democracy.

This paper is the first installment in a course of ongoing theoretical and experimental research intended to incorporate contemporary models of cognition into our theories of voter-behaviour and political communication.

Introduction

I think that what happens is that when people hear campaign rhetoric about an issue, they first make very quick, almost automatic judgements as to their preferences about the policy... (Quirk in Althaus et al. 2008, 457).

Although in the past decade of consumer research there has been increasing attention to the possibility that there may be automatic or non-conscious influences on choices and behaviour, the field still appears dominated by purely cognitive approaches, in which decisions and actions are made deliberately (Bargh 2002, 280).

In 1960, one of the most influential and enduring works of voter-behaviour research was released. *The American Voter*, authored by a team of researchers based at the University of Michigan, established a new benchmark for examinations of American citizens' interactions with democracy at the ballot box. *The American Voter's* deep, comprehensive analysis of the factors affecting vote choice – and its powerful use of field theory methods to analyze those variables in discrete cross-sections of time – set the standard for research over the next 50 years (Anderson and Stephenson 2010, 2–5; Bartels 2008a, 10). While some researchers have taken issue with aspects of the model, the scope of *The American Voter* is so great that the majority of the work that has followed over the last five decades could not-unfairly be categorized as a refinement or elaboration of the model aimed at increasing its explanatory or predictive power (Bartels 2008a, 10).

While one of the opening quotes to this paper was written about research in the field of consumer behaviour, Bargh's words could, quite easily, have been written about the general state of voter behaviour research. This is because the dominant mode of enquiry remains within the parameters established by the Michigan tradition – a tradition rooted in classic social psychology that focuses on models of active, systematic cognition, heavily influenced by social and economic factors. Given that focus, what most of the studies do not take into account – and this is most particularly true of the most influential studies at the epicentre of Canadian research in the field – is the potential effect of non-conscious, automatic processes of cognition on the choices voters make.

The primary purpose of this paper, then, is to explore the opportunities available in applying contemporary research into human cognition – specifically, the vein of research dealing with automatic or non-conscious processes – to the study of voter behaviour. This exploration will be engaged with the express purpose of suggesting that there may be more useful and insightful explanations for instances of what traditional voter-behaviour research categorizes as “voter error.” The paper will need to do a number of things in order to clearly map out this territory and make clear the opportunities that exist in marrying traditional voter-behaviour research with experimental work in automatic cognition:

- First, it will examine, briefly, the Michigan tradition, outlining the dominant body of work that has emerged from that tradition and the predominant assumptions and implications of traditional voter-behaviour research;

- Second, it will describe key findings of automatic cognition and existing unorthodox political science research that call into question some of the major assumptions of voter-behaviour studies rooted in traditional, rational, linear causal analysis; and,
- Finally, it will propose potential avenues of investigation that could help to integrate models of automatic cognition within the tradition of Michigan-inspired research by proposing a rudimentary re-imagining of the “Funnel of Causality” that recognizes the contributions of automatic cognition to our decision-making processes.

Part 1.0 – Examining the Dominant Orthodoxies of Voter-behaviour

For decades, the primary work in voter-behaviour research has focused on socio-psychological explanations in the mode of classic macro-economic analysis (Anderson and Stephenson 2010). First and foremost among these approaches is the dominant “Michigan model” of voting behaviour, named for the work originated by Campbell, et. al., at the University of Michigan in the late 1940's and '50's.

The model is rooted in the work of the pioneers in field of voter behaviour – Lazarsfeld, Berelson, Gaudet and McPhee – who, in the 1940s, originated the so-called Columbia model of voter behaviour. The Columbia model posits that voter affiliations are essentially fixed by the time an individual reaches adulthood, his or her preferences determined by a combination of three socialization factors: socioeconomic status, religion and area of residence (Anderson and Stephenson 2010, 3).

What the Michigan model adds to this set of relatively static profile criteria is the recognition of the possibility of change in individual vote choice with no change in the status of any of these three central criteria, i.e, a means of explaining why someone would change their vote choice without a major shift in one of these criteria. Fundamental to the Michigan model is the inclusion of a series of variables that have frequently been categorized as “socio-psychological” in nature. The model acknowledges the formative influence of major socio-economic forces but also suggests more proximate influences that could help determine voter choice at a given moment in time. This relationship between socio-economic influences and more temporally proximate influences is most commonly expressed in the form of a conceptual causal chain diagram: a visual representation of the Michigan authors' “Funnel of Causality” (Fig. 1).

The Funnel is precisely that: a funnel-like sequence of grouped influences that gradually narrows the evaluation criteria until, ultimately, the voter lands on a choice that, theoretically, reflects the contents of those criteria sets. The Michigan model begins with the influences outlined in the Columbia model and expands on them. This stew of socio-economic forces is then distilled into a broadly conceived “party identification.” It forms a basic, “natural” starting point for the decision-making process – perhaps best understood as an initial preferential bias – the voter arrives at any given point in time with this general affinity already in place (Campbell 1960).

The major innovation of the Michigan model is to account for more proximate variables' influence on the decision-making process. This innovation arose from a failed attempt in 1948 by the Michigan group to replicate the findings of the Columbia studies. What the Michigan investigators found

was that the model did not hold up well at all in the new political circumstances of the post-war era (Campbell 1960). The Columbia model provided no explanatory mechanism for short-term shifts in vote outcomes. The dynamic, integrated nature of the Funnel of Causality is designed to provide that increased explanatory and predictive power (Campbell 1960, 18–24).

Working from the Columbia-inspired sociological foundation, the Michigan model posits that a voter's choice will be heavily influenced by this socio-economic foundation but will test those dispositions against more proximate influences and, in the end, produce a voting decision appropriate to the particular time and place the voter occupies. This process is the other significant innovation introduced by *the American Voter* authors: the adaptation of a form of temporal analysis from “field theory” which amounts to taking a cross-section of time and analysing the contents of the funnel in that moment (Campbell 1960, 33). The importance of this mode of analysis cannot be overemphasized. As the authors note:

It assumes that whatever effect distant events (being unemployed in 1933) may have on current political behaviour (deciding to vote Democratic), this effect must be present and measurable in some form (suspicion of Republican domestic policy) just prior to the dependent event (Campbell 1960, 34).

This conception is extremely important not just to the analysis in the *American Voter* but also to the arguments presented in this paper. The re-imagining of the Funnel proposed later is in keeping with this understanding of the decision-making process and the relative influence of vote-shaping variables at any given moment in time. However, a more complete exploration of the Funnel and traditional voter-behaviour research will be necessary before a meaningful discussion of the implications of contemporary cognitive science can be engaged.

The Michigan investigators recognized the potential chaos that could come of trying to account for every input into any given moment of time and set about narrowing the scope of their analysis early, dividing potential inputs into two groups: those things they considered to be “exogenous variables;” and, those things they considered to be “relevant conditions” (Campbell 1960, 25). Explicitly outside of their scope of analysis, however, is the influence of unconscious psychological phenomena: “We assume that most events or conditions that bear directly upon behaviour are perceived in some form or other by the individuals prior to the determined behaviour, and that much of behaviour consists of reactions to these perceptions” (Campbell 1960, 27). It is important to note that the authors provide no foundation or authority for this claim. They simply assert it while simultaneously recognizing, in a footnote, that “it cannot be said that all behaviour toward a class of objects is determined by conscious attitudes.” The authors of *The American Voter* believe, generally, that it is “fruitful to analyze behaviour as a function of the individual's own 'definition of the situation'” (Campbell 1960, 27). In retrospect, as we will come to see later, it would appear the authors' faith in voters' definitions may not be resting on very firm scientific foundations.

Part 1.1 – Exploring the Funnel: the search for explanatory variables

The Michigan investigators divided their potential contributing variable list into two primary categories: “exogenous variables” and “relevant conditions.” As the authors, themselves, note: the list of potential contributing factors is long, perhaps approaching infinite. But the Michigan authors narrow the potential scope of variables by applying a fairly strict standard of proximate relevance – that is, a potential variable is only relevant if evidence of it can be located in the slice of time just preceding the moment in question (Campbell 1960, 34).

Many researchers have been inspired by the Funnel's potential goldmine of significant independent variables. The projects generally fall into two categories: those trying to refute or criticize the major claims of *The American Voter* (Nie, Verba, and Petrocik 1979; Pomper 1972; Jackson 1975); and, those attempting to reaffirm its relevance in their particular time and place (Converse 1964; Markus 1979; Lewis-Beck et al. 2008).

Gerald Pomper was a prominent critic of *The American Voter* and an advocate of the theory that voter-behaviour had shifted during the tumultuous years of the 1960's. In 1972, Pomper published a spirited defence of the voter's ability to sort through complex information and make coherent, rational voting decisions on the basis of a careful weighing of the issues (Pomper 1972). In his paper, “From Confusion to Clarity: Issues and American Voters, 1956-1968,” Pomper chastises other students of politics (from Plato to Marcuse, no less) for “frequently sneer(ing) at the inability of the 'masses' to discern political reality” (Pomper 1972, 415). The thrust of this vein of research is, of course, to demonstrate that issues and ideas matter more to politics than do the intellectually unsophisticated, social-psychologically-based political attachments of voters. But another interesting by-product of this discussion is the increased attention it brought to the idea of “voter error” – the perceived misalignment between voters' value sets and the choices they make at the ballot box.

This growing concentration of research into the area of the Funnel of Causality most proximate to the vote encompasses a set of influences that is often collected under the category of “campaign effects.” To this day, some contemporary authors place campaign effects at the centre of voter decision-making (Kam 2006) while others dismiss them entirely as irrelevant to electoral outcomes (Bartels 2008b). If the objective is to produce models of greater explanatory and predictive power, then the proliferation of contradictory results dealing with just this one small cross-section of the Funnel did not obviously bring investigators closer to resonant explanations or magnified predictive power.

Part 1.2 – Voter Error and Competence

A close cousin of the campaign effects debate is the ongoing discussion about the role of voter error and its twin debate, voter competence. The concept of voter-error deals with the perceived misalignment between an individual voter's objective self-interest and her ultimate vote choice. This dilemma was well-captured during a roundtable discussion amongst Paul Quirk, John Bullock, Arthur Lupia and Scott Althaus at the annual meeting of the American Political Science Association (APSA) in 2008 (Althaus et al. 2008).

In the published proceedings of the conference – "Homo Politicus: Ignorant, Dogmatic, Irrational," John Bullock characterizes the thrust of research into voter error in this way: "The dominant approach takes voters' interests as given and then asks whether their choices correspond to those interests" (Bullock in Althaus et al. 2008, 450). Bullock, like many of his co-panelists, sees nothing wrong in evaluating voters' motivations and judging whether or not they correspond to their choices at the ballot box. He makes a normative claim, suggesting that simply lining up explicitly stated interests with vote choices is "too permissive a standard to be meaningful" (Bullock in Althaus et al. 2008, 450). In Bullock's view, "Sometimes, on some matters, voters' views should be ignored" (Bullock in Althaus et al. 2008, 450). Putting aside the potentially deep and rich philosophical discussion that could emanate from that claim, for the purposes of this paper it is important to focus on Bullock's identification of "the murkiness of the normative premises that underpin our research" and his suggestion that it would be useful "for empiricists who study voter error to be more explicit about their normative assumptions. That's what I'm suggesting: that empirical work on voter error take a normative turn" (Bullock in Althaus et al. 2008, 450).

Bullock's co-panelists explicitly embrace this notion, and proceed to provide their own definitions and standards. Of particular interest here is Althaus's definitions of ignorance, error and competence: "Ignorance concerns knowledge, and error concerns judgement, and competence concerns the relationship between particular types of knowledge and the validity of particular types of judgement" (Althaus in Althaus et al. 2008, 452). It is the "validity" piece of this standard that most concerns this paper. Implicit in this invocation of "validity" is the kind of normative claim that Bullock believes empiricists need to be more explicit about. Althaus goes on to reinforce this point:

Less of the literature that's been written on this topic has been very deeply entwined in the actual writings of political philosophers than probably should be the case If the origins of our theoretical commitments were more front and centre in our conversation, then we could begin talking about the assumptions that are lurking behind implied connections between political knowledge and citizen competence (Althaus in Althaus et al. 2008, 453).

It is precisely those assumptions that are the concern of this paper. Throughout much of the voter behaviour and campaign effects literature there is an assumption that the ideal exercise of democracy involves an active giving and taking of information – communication and idea exchange between political actors and potential voters – that ultimately contributes, to some degree, to the choice voters make at the ballot box. But as George Marcus highlights toward the end of the APSA roundtable (in a comment from the floor): "What we're assuming, incorrectly, is that all citizens ought to rely only on semantic information" (Marcus in Althaus et al. 2008, 460). By semantic, Marcus is referring to information that can be represented visually. This could be anything from printed matter, to television advertisements, even aural communication (as this could be transcribed or otherwise captured in a visual communicable form). What semantic information does not include is the kind of information that comes from automatic, non-conscious cognitions. These are the sorts of processes that occupy the greater part of our cognitive resources at any given time – generally, about 95 per cent of those resources (Baumeister et al. 1998, 1252).

Marcus points, significantly, to the importance of these automatic processes in our decision-making. Marcus uses the example of an experiment conducted with an amnesiac who, while unable to consciously recall the identity of a visitor after a 15 minute absence, will remember the pain of a pin-prick while shaking that visitor's hand and avoid shaking that same visitor's hand on subsequent visits.

Which brings us to the central concern of this paper: exploring the potential connections between these sorts of automatic, non-conscious processes and voter choice.

Part 2.0 – Theoretical Elaboration and Problematic Causal Chains

Many voter-behaviour investigators have attempted to bridge explanatory gaps in the Michigan model by proposing theoretical refinements that introduce new or more elaborate mechanistic explanations for variations in voter choice. But with few exceptions, these explanations reside fully within the Michigan tradition of relying upon individuals' conscious evaluations of their decision-making processes – most often obtained through large-scale survey data, such as the Canadian Election Study (CES). One example of this kind of investigation was produced by a group of Canadian researchers examining the relationship between perceptions of political scandal and the effects of those perceptions on vote choice.

At the 2005 Annual Meeting of the American Political Science Association, Andre Blais, Joanna Everitt, Patrick Fournier, Elisabeth Gidengil and Neil Nevitte delivered a paper entitled, “The Political Psychology of Voters' Reactions to a Corruption Scandal” (Blais et al. 2005). For this study, Blais, et. al., drew on data from the 2004 CES to examine the impact of a major political scandal – the so-called “Sponsorship Scandal” – on the choices voters made in the 2004 Canadian general federal election. The data were gathered as a part of the 2004 CES through direct interviews with voters and reflects their explicit answers to direct questions. The findings of the paper were interesting: 1) that the Sponsorship Scandal had a significant effect on the vote; 2) that partisan loyalties (the cornerstone of the Michigan model) were important but did not significantly colour responses to the scandal; and, 3) an emotional reaction (anger in this particular case) was not a necessary or sufficient condition for individual voters to punish the government (Blais et al. 2005). These first two conclusions are interesting enough when viewed within the context of the traditional debates surrounding voter behaviour. They appear to simultaneously confirm aspects of both *The American Voter* (the importance of partisan loyalties) and critiques that support the centrality of individual issues and their role in determining voter choice. Neither of these outcomes is particularly surprising. For decades, studies have both confirmed and disproved portions of the two dominant streams: partisan affinity (or momentum) – versus issue deliberation (or active debate). The third conclusion of Blais, *et al*, is also of great interest to debates within the tradition of voter-behaviour studies. It suggests that affect – or emotion – played very little part in guiding individual vote-choice. This is particularly surprising in light of how often investigators cite affect as the most likely psychological mechanism behind many voters' choices (Civettini and Redlawsk 2009).

All of these conclusions merit significant debate. What is of greater interest for the purposes of this paper, however, is the set of assumptions that underpin the Blais, *et al*, investigation. In the section

of the paper devoted to explaining the researchers' method and analytical model, the investigators explicitly lay out those assumptions:

We assume that the reactions to the scandal followed the kind of causal sequence illustrated in Figure 1 (Fig. 2, here). First, people formed a view about how serious the scandal was, that is, how much corruption there had been under the Chretien government which was responsible for the sponsorship program. Then they focused on Paul Martin's implication in the scandal. Next they considered how he had dealt with the issue when he became Prime Minister and what he would do in the future. These perceptions and evaluations, in turn, influenced people's emotional responses, that is, whether or not they were angry about the scandal. Finally, these reactions, we speculate, formed the basis of the decision to punish, or not to punish, the Liberals at the ballot box (Blais et al. 2005, 6).

This causal chain formulation clearly follows in the tradition of the Michigan mode of analysis. The researchers establish a linear, sequential chain that begins with general partisan affiliations and then moves from those general predispositions through more proximate influences. The responses are gathered from a specific slice in time, using evidence from a survey administered at a time not-too-distant from the event under examination: all necessary components of Michigan-style causal analysis. It is extremely important to note that the only evidence presented to support this assumed causal chain is based on the respondents' explicit responses to the election study questions. The important point to make here is that the evidence for what actually happened in the decision-making process is based on what participants *say happened*. No other authority or evidence is offered to support the validity, accuracy or feasibility of this – as the authors admit – speculative decision-making process. In other words, the analysis is based entirely on evaluations of voters' conscious, systematic, rational, explanations of their own behaviour. What is not examined or entertained are the potential influence of non-conscious, automatic psychological processes that – as we shall see – undoubtedly contribute to those choices and, ultimately, the rational explanations of those choices, post hoc.

Part 2.1 – Assumptions of linear causality

This paper began with a quotation from John Bargh. The article it is drawn from is not concerned with voter behaviour but, rather, explores the growing focus on non-conscious processes in consumer behaviour research. For many decades, consumer behaviour dealt, primarily, with explicit inputs into consumer decision-making. Individuals were asked questions about their behaviour and their responses were used to as the source data for analyzing that behaviour. The primary reason for this will be familiar to researchers of voter behaviour. According to the three most-recent, major surveys of research in the field (Cohen and Chakravarti 1990) (Jacoby, Johar, and Morrin 1998) (Simonson et al. 2001) , consumer research has been dominated by attempts to explain specific purchases made by consumers – not unlike the attempts within the Michigan tradition to explain individual voters' choices. (It is important to note here that, for some, the comparison of decisions at the retail counter with decisions made at the ballot-box is unseemly. Research, however, has shown quite clearly that the comparison of consumer brands and products with political actors and parties (i.e., political brands and products), is legitimate and

equivalent, particularly when talking about them as objects of individual evaluation and choice (French and Smith 2009).)

According to the above-cited surveys of consumer behaviour research, there are two dominant modes of analyzing choice: through the filter of social cognition and through the filter of behavioural decision theory (Bargh 2002, 280). Within the realm of social cognition, there are two dominant models, the elaboration likelihood model (ELM) (Petty, Cacioppo, and Schumann 1983) and the heuristic-systematic model (HSM) (Chaiken 1980). The ELM posits that there are two main tracks to processing communicated information: one, the so-called central route that is systematic and logical; and, a second route that is less-intensive (although still conscious) that uses pre-existing knowledge and observation of superficial qualities to arrive at an evaluation (Petty, Cacioppo, and Schumann 1983). Plainly put, the ELM says that our minds have two tracks: one that disposes with evaluations quickly based on heuristic evaluations and another that intensively sifts the available information in an effort to produce the most relevant and rigorous assessment. The HSM is similar but does not conceive of the systematic and heuristic efforts occurring separately. Rather, the HSM simply posits that the least amount of effort will be expended in order to preserve cognitive resources and systematic processing (or, also called on-line processing) will be reserved for more detailed evaluation (Chaiken 1980) – in other words, it is a system that tries to explain the integrated mechanism that allows us to prioritize which things we give our attention to, given that our ability to concentrate and systematically think about things is limited. It maintains that the two approaches (systematic and heuristic) are intertwined and work together to carry out the most efficient evaluation possible in a given situation. The subtleties of the two models are less important for the purposes of this discussion than are their common understanding that people process information both intensively and heuristically (see Fig 3) – but always as economically as possible – and arrive at decisions based on those two types of evaluations. Crucially, both models account for only *conscious* inputs. Neither model accounts for inputs provided by *non-conscious* processes. A third explanatory model, Behavioural Decision Theory, attempts to explain behaviour in terms of *rational explanations* of actual behaviour and optimal choice. The most important thing to keep in mind about all three of these models is, as Bargh puts it, that they “posit consciously made, deliberate choices and decisions” (Bargh 2002, 280).

The causal chain of reasoning assumed by Blais, *et al*, is fully in keeping with the traditions of classic voter behaviour analysis: it lays out a clear sequence of decision-making that is consistent with the principles of the three most influential social cognition models. What it does *not* do is account for unreported, non-conscious behaviour. The study of non-conscious processes entails getting past the conscious, rational, post-hoc explanations that, generally, provide the primary data of survey-based research and examining, instead, actual individual behaviour under carefully controlled conditions – not unlike the basic experiment with the handshake and pin-prick of Marcus’s illustration, earlier in this paper.

It has become clear to cognitive and behavioural researchers over the last 30 years that non-conscious modes of cognition cannot be ignored when attempting to reconcile the differences between conscious explanations of behaviour and actual behaviour. Increasing research into cognitive processes has begun focusing on the “substantial role played by non-conscious processes (and the minimal role

played by deliberate, effortful processes) in psychological and behavioural phenomena and the central and modifying role of needs and goal pursuits” (Bargh 2002, 281). In better understanding the relationship between our conscious choices and needs- and goals-activated processes, we may also come to better understand the apparent disconnects between reported political behaviour and actual political behaviour (e.g., telling people you voted for one person while actually voting for someone elseⁱ or “errors” such as voting for a candidate or party that appears to support policy positions that are seemingly inconsistent with an individual's explicitly stated interests). Before we can fully explore the potential in that relationship, we need to take a closer look at what is meant by “needs and goals pursuits.”

Part 2.2 – The important influence of goals

The idea of “goals” is central to many contemporary behavioural, social and cognitive models of human decision-making. It is related to the idea of “motivation” which has traditionally acted as the basic explanatory tool for behavioural dynamics (Atkinson 1970). The basic concept is simple: people do things and make choices based on their individual goals – both conscious and unconscious:

It is the desired end-state the individual reaches for; it is the ultimate aim of one's adopted action, the very cause of the action; it is the purpose toward which one is striving; it is the reason for doing and thinking (Moskowitz and Grant 2009, 1).

All actions then, in some way, are believed to be motivated by a specific, underlying goal. Some may object that such a claim is tautological. Simply stated, the objection might be put this way: “Of course all things could be said to be rooted in goals – as opposed to what? Nothing?” This is a problem of both vague terminology in the field (perhaps a word more unique than “goals” would be helpful) and the relative simplicity of the idea. For those concerned with automatic processing, a goal is a very specific thing: safety, food, contentment, challenge, etc. It is these goals that help govern our non-conscious cognitions – they are the brain's version of autopilot protocols for various situations we have either encountered repeatedly or came pre-fitted with by virtue of evolution or genetics (preserving our own life, seeking pleasure, even, potentially, collaboration (see Alford and Hibbing (2004) on humans as reluctant collaborators).

Goals are cognitive constructs, which means they become structured points of reference, not unlike the cognitive constructs we hold of “table,” “chair” and “sunny day” (Kruglanski and Kopetz 2009, 28). Goals, however, are different from other cognitive constructs in that they appear to hold a special or unique meaning to the individual (Kruglanski and Kopetz 2009, 28). Unlike the construct of a “table” or “chair,” then, there may be no immediately comparable construct of a particular goal from one person to the next. Thus, even with similarly-defined goals – being “fiscally prudent,” for example – there will be unique, individual variations from person to person. This uniqueness of goals and the manner in which they function should be of critical interest within the context of political decision-making. A better understanding of the basic goals that motivate political behaviour may help to explain how two people with similarly-stated goals can appear to pursue them in such divergent ways. If an individual's understanding of the goal is unique to them, then their mode of pursuing that goal may also

be unique to them. This understanding of goals can be overwhelming – suggesting a vast sea of differentiation that will not allow for any commonality or purpose or understanding. That is one possible interpretation and a line of investigation that will, no doubt, be pursued by cognitive researchers for some time. But it is the reverse implication that is of interest here: people may hold subtle variations of specific goals, but similar goals may be triggered by common stimuli – words, situations, sensory inputs – that create a sense of identification or common purpose. “Security,” for example, is a common trope in contemporary political platforms that may, for example, map onto commonly-held safety and self-preservation goals and serve as a powerful, difficult-to-resist anchor that helps to bind an otherwise disparate group of people together in common purpose.

We are, however, obviously quite aware that some goals are expressed in conscious ways – we regularly set out explicit objectives or have clear, conscious mental representations of the things we need and desire (Moskowitz and Grant 2009, 3). But many others are not so clearly, consciously expressed: “Goals have consequences that do not require consciousness of either the goal or the consequences” (Moskowitz and Grant 2009, 3). It is this second aspect of goals that is the main interest here. If goals are understood as the fundamental touchstones for much of our non-conscious behaviour, they have the potential to become critical pieces of information in decoding seemingly incongruous political choices. It may be that the third-party observer who has judged a given political choice as incongruous simply *does not understand the implicit goals motivating the observed person's explicit behaviour* – and it's entirely possible that the subject may not be consciously aware of those goals either – let alone the potentially complex over-layering and interaction of multiple motivating goals – and will, more than likely, inaccurately describe them when asked explicit questions about their behaviour (Schachter and Bem in Fiske and Taylor 1991, 41).

Part 2.3 – Observing the non-conscious

Implicit, non-conscious goals are, typically, activated in research subjects in various, indirect ways. As Bargh explains, these experiments usually occur in circumstances more closely resembling everyday life, rather than as the explicit object of a laboratory protocol (Bargh 2002). In these experiments, participants are most often asked to carry out a specific task, ostensibly as part of an experiment. Meanwhile, outside the context of the explicit task the subjects are performing, researchers manipulate a variable and observe the effects of that manipulation on the subjects' subsequent choices and behaviour. Bargh provides the example of subjects who were asked to complete a word task that is sown with words and concepts related to politeness. After completing the word task, participants are then subjected to a wait outside of the investigators' offices, prior to receiving instructions for the next phase of the supposed experiment. The subjects who had been exposed to the “patience” words would wait significantly longer, on average, than control group subjects before interrupting the investigators to ask what else was expected of them (Bargh 2002, 281). The implicit goal that Bargh's investigation was testing was one of “patience” – a commonly held and generally valued personal quality. Priming the subjects with the words related to patience activated the patience goal (the theoretical source of fluctuations in the dependent variable in this experiment) within the target subjects. That activation was

observed in their subsequent efforts to remain patient while waiting for the researchers to finish their conversation.

The differences between this sort of experiment and typical, large-*N* survey-based investigations are, likely, readily apparent. Subjects in the experimental scenarios are largely unaware of what is being tested. They do not have the opportunity to actively engage with the explicit subject matter of the investigation and, as a result, are not cued to devote explicit, systematic cognitive processes to the task - unlike subjects of investigations carried out in the traditional modes of survey-based research. Subjects in these non-conscious scenarios, therefore, respond largely on the basis of their routine, ingrained, automatic cognitive responses. Unlike conscious, rational models of cognition, the automatic cognition model does not presume that priming makes the subject more conscious of the importance of being patient. It says that the priming activates an implicit goal that adjusts behaviour – completely beyond the conscious awareness of the subject.

Part 2.4 – Re-problematizing traditional causal chain analysis

The implications of such non-conscious activations for political behaviours are significant. First, they suggest that assuming a causal chain of rational deliberation like the one put forward by Blais, *et al*, may be overly optimistic, provide incomplete information, miss some of the most significant motivating variables behind an individual's vote choice and, as a result, yield problematic results. Second, asking someone to rationally analyze their own behaviour and choices is quite different than observing that person's behaviour. Individuals are, by definition, extraordinarily unlikely to attribute their choices to something like the activation of a non-conscious goal. Even though they may, by chance, attach it to something similar in their conscious awareness, they would still be unaware of the non-conscious activation's specific effect on their behaviour. What is far more likely, is that the individual will offer an explanation that is in keeping with their perceptions of themselves, their understanding of other people's perceptions of them and whatever social expectations they believe others have of them (Fiske and Taylor 1991) (Moskowitz and Grant 2009). Indeed, individual's perceptions of their own choices and behaviour tend to be far less accurate than third-party assessments of the same behaviour (Wilson 2002).

Ultimately, a survey-based investigation of the kind carried out by Blais, *et al*, will provide interesting and valuable data. But that information may only be said to be informative about people's perceptions of their own activities and behaviour rather than being informative about the key motivating factors involved in a particular voter's ballot box decision. It may also lead investigators to inaccurately identify some data points (the votes cast by individuals) as error.ⁱⁱ

To play this out a little more explicitly, a traditional analysis of a voter's options may suggest one logical choice based on their personal history and the explicit policy positions of individual candidates. The unconscious motivations of needs/goals-driven behaviour, however, may suggest another choice based on particular words or themes used by candidates during the course of a campaign and their correlation with the non-conscious goals and motivations of the audiences hearing them.

In order to further ground this analysis, this paper will now turn to some examples of psychology-based research into voter-behaviour and suggest potential points of commonality between these – as Bartels calls them – “eclectic and opportunistic” investigations (Bartels 2008a, 29). Then, in the final sections, we will explore the implications for traditional voter-behaviour models and suggest some potential avenues of investigation that may help validate or invalidate a goals-based theoretical approach to examining voter choice.

Part 3.0 – Eclectic and opportunistic... and unfocused?

In the last thirty years, voter-behaviour investigators have begun to examine a range of more plainly psychological mechanisms at play in the decision-making processes of voters. As summarized by James Kuklinski, these investigations have ranged widely, generally sparked by the particular interests of the researchers involved – and more often than not, there is no distinct, overriding theoretical framework guiding or binding these investigations together (Kuklinski 2002, 2). Kuklinski, however, divides these investigations into three general categories, loosely representing – in his estimation – particular eras in the development of political psychology:

- Studies of personality;
- Attitude theory and change; and,
- Human cognition and information processing.

While many of these investigations appear designed to explore particular curiosities or anomalies that have been observed in the results of more mainstream research projects, a great many of them, at their core, fundamentally grapple with the question of voters' competence. Kuklinski and Quirk reinforce this perception in their essay, “Reconsidering the Rational Public: Cognition, Heuristics, and Mass Opinion” (Kuklinski and Quirk 1998). In enumerating the various explorations of human political interaction, the authors regularly weigh the value of a given piece of research against its value in furthering the debate over voters' ability to make coherent, rational decisions. They come down quite firmly on the side of the sceptics, pointing particularly to research that appears to demonstrate that voters are more likely to identify with a candidate based on his skin colour, regardless of his policy positions (Kuklinski and Hurley 1994) and again in discussing the finding that easy (simple, affect-based), negative arguments are much more persuasive than hard (complex, multi-point), positive arguments (Kuklinski and Quirk 1998, 32) – a result they characterize as indicating “dysfunction.” Indeed, the authors explicitly state their belief that more scepticism is necessary in pursuing psychological explanations for political behaviour, suggesting that “we should not expect a great deal of ordinary citizens' political judgements” (Kuklinski and Quirk 1998, 22).

As Kuklinski points out, the current era of political psychology appears to be focused primarily on investigations of cognition and cognitive effects. A recent investigation into the effects of perceptions of facial features on vote choice is a good example of this trend (Mattes 2010). This study demonstrated a correlation between a subject's perception of relative “competence” in photographs of two candidates and those candidates' chances of winning in a head-to-head electoral contest. This finding appears to be in keeping with those of Kuklinski's investigations into the role of race in determining voter preference.

These kinds of studies point to an observed effect but, as many observers have pointed out, do not necessarily contribute to any new, overarching conception of voter behaviour (Kuklinski 2002; Althaus et al. 2008; Hatemi and McDermott 2012; Sears and Funk 1991; Monroe et al. 2009).

Part 3.1 – The desire for an integrated political psychology

Arthur Lupia has spent a great deal of his career attempting to tackle the issue of voter error and competence and place it within a coherent theoretical framework. His 2002 investigation, “Deliberation Disconnected: What It Takes to Improve Civic Competence,” (Lupia 2002) is a clear example of this approach. Lupia is uninterested in what he calls the “flawed analogies” – such as comparing political argument with legal argument – and “folk theories of learning” – any theory not grounded in empirical research – that seem to dominate discussions of error and competence (Lupia 2002, 149). What interests him is generating evidence that supports “specific competence-generating mechanisms” (Lupia 2002, 149). During the APSA roundtable dealing with error and competence, Lupia took his colleagues to task for engaging in discussions that do little to serve this purpose:

'Voters don't know this, voters don't know that...' I think that those comments are entertaining but ultimately have little social value. What we want to know is, 'Which voters?' and 'What do they need to know – under what conditions?' If we are not asking that question, then I think we're just entertaining each other and not making a lot of progress (Lupia in Althaus et al. 2008, 447).

This formulation of the problem seems almost a tailor-made invitation to engage in psychological investigations of political behaviour. What better purpose could political psychology be put to than contributing to robust theories of voter behaviour by helping to delineate the boundaries of what voters can and cannot do and can and cannot know under specific sets of conditions.

Part 4.0 – Potential avenues of investigation

Persuasion and the role of rational evaluation are central to many debates about how voters decide on which candidate or party to vote for. As we have seen from the earlier portions of this essay, while there is some question as to how engaged voters become in the decision-making process, most investigators suggest some form of conscious evaluation. It might, however, be appropriate to question not only how conscious voters are of their reasons for choosing one candidate over another but also whether or not they can be fully conscious of the key influences on their own voting behaviour.

Evidence of one example of this kind of non-conscious effect can be found in a 2007 study of consumer reactions to advertising. In this study, Peter Darke and Robin Ritchie examined the effects of deceptive advertising on consumer-behaviour (Darke and Ritchie 2007). They carried out four experiments in the course of the study, but the experiment of particular interest for this paper focused on “defensive reactions” – that is non-conscious, cognitive defence mechanisms that are triggered by negative experiences. A defensive reaction is a reaction to a known threat – in this case, a threat of being misled. In the experiment, two groups were shown the same two advertisements for products of different brands. After each ad, participants were asked to provide an evaluation of the products, based

on the material they had seen in the corresponding advertisement. The control group did and provided largely consistent evaluations of the products. Members of the target group, however, were provided with impeaching information after the first ad, and before the second, that demonstrated inaccuracies in some of the product claims made in the first ad. The target group then carried on with the experiment, evaluating the same second advertisement that was shown to the control group. It is important to note, again, that the products depicted in the advertisements were unrelated by brand.

What Darke and Ritchie found was that, while evaluations of the first advertisement were comparable in the control and target groups, the target group's evaluations of the second advertisement were markedly more negative than those of the control group. What Darke and Ritchie found was an automatic defensiveness in the second group – even though they were made fully, consciously aware that the products were dissimilar and were aware of no explicit reason to be more sceptical than the control group of the claims being made in the second ad. In subsequent studies, the investigators extended the period between ads by as much as 24 hours and found that the effect was still present, albeit lessened.

What the Darke and Ritchie experiment shows, if nothing else, is that not all seemingly irrational choices are truly irrational – we, as investigators, are just evaluating those choices with an incomplete understanding of the subject's evaluative inputs; their decisions may be motivated by deeper, non-conscious cognitive processes that cannot be neutralized by a simple act of will, processes that may contribute powerfully to the voting decisions individuals ultimately make.

Conclusion – The Funnel of Causality Revisited

It has been the primary goal of this paper to draw attention to some potentially fruitful avenues of investigation for political science, focusing particularly on adding new information and potential theoretical foundations for an improved debate around voter competence and error. What this paper has not endeavoured to do is to draw into question the foundations upon which our current understanding of voter behaviour and choice have been built. What this paper does endeavor to do, is to highlight areas within the traditional theoretical framework of voter behaviour that may not have kept pace with developments within the relevant cognitive and behavioural sciences.

Re-visiting the study into the effects of scandal on voter choice (Blais et al. 2005), it is possible to imagine the same study being carried out within only a slightly revised theoretical framework and arriving at potentially dramatically different results. While contemporary cognitive research suggests, quite clearly, that causal chains of the kind described by Blais, et. al., cannot and do not accurately describe decision-making processes, it might well be possible to reformulate Blais' causal chain to incorporate the impacts of relevant automatic processes. Indeed, the Funnel of Causality lends itself quite well to a re-tooling based on contemporary insights into decision-making processes. Imagine a funnel, for example, that considers attribution effects, goal-based priming, and defensive processing as potential “relevant conditions” (Fig. 4) and weighs the impact of those variables against more traditional, consciously rational influences. The result would, undoubtedly produce more nuances and multi-dimensional interpretations of voter-behaviour. It would certainly open the door to a larger array

of potential variables that are, as the Michigan authors specify, “present and measurable in some form just prior to the dependent event” (Campbell 1960, 34). Ultimately, such an approach might imaginably reduce dependence on the category of “voter error” to explain seeming anomalies in survey data.

Also, to echo the urgings of Bullock in section one of this paper, we cannot hope to produce more precise, coherent, defensible models of voter behaviour until we begin to incorporate, more explicitly, the normative assumptions that ground our work. For example, it is generally accepted that ideal conceptions of democratic functioning place a premium on the importance of trust and open dialogue – what Brandom describes, concisely, as the “demanding practice of giving and taking reasons” (Brandom in Habermas 2005, 385). Under this normative conception, to use it as an example, the absence of trust would contribute to the erosion of a key link in the chain of democracy. If this is a normative assumption of much voter-behaviour literature, then it follows quite reasonably that researchers concerned with analyzing the patterns of voter choice should be concerned with documenting practices that might contribute to an erosion of trust.

It would be difficult to deny there is strong interest in improved psychological insights. As Kuklinski observes, a major proportion of the contemporary literature focuses on psychological explanations for voter behaviour (Kuklinski 2002). Take Jeffery Mondak's recent exploration of the effects of personality types on political behaviour. In *Personality and the Foundations of Political Behaviour*, Mondak advances an interesting argument about the fundamental importance of a person's basic personality traits in determining their political habits and choices (Mondak 2010). The familial relationship with Columbia/Michigan style, social-psychological explanations are unmistakable. What is missing from his analysis, however, is a clear mechanism or mechanisms by which a person's fundamental traits assert themselves. As a result, his analysis provides an interesting interpretive lens, but fails to root itself in anything concrete that might explain changes or shifts in those fundamental dispositions. In the end, Mondak is left in much the same place as the Michigan researchers – in possession of a compelling explanatory model that lacks a compelling mechanistic foundation.

It is important to acknowledge that there are some serious and important implications to fully opening the door to this type of mechanistic, psychological investigation within political science. The first and most obvious implication of admitting and integrating this kind of evidence is that it could no longer be considered adequate to take ideal conceptions of political speech for granted in voter-behaviour analysis. Evidence of automatic behaviours, such as defensive processing, draw into question the reliability of those claims and suggest that human beings may not be capable of perfectly, consciously regulating their reactions to and evaluations of communicated information. The implication here is that, perhaps, we should focus in the shorter term on proscriptions rather than prescriptions. In other words, it may be impossible, for now, to identify the conditions under which ideal speech can, indeed, occur. So, perhaps we should focus on identifying the conditions under which it clearly cannot occur. For example, if the Darke and Ritchie conclusions hold in a political setting, it might well be said that negative or deceptive political advertising clearly undermines an individual's ability to participate freely in the giving and taking of ideas.

The second major implication of admitting mechanistic explanations is that it could no longer be considered reliable to draw inferences from causal chain analyses that presume explicitly rational, linear causality. In the face of evidence that the human mind may not always be capable of processing information in this way – no matter how explicitly the subject insists they are capable of it – purely rational, conscious, causal chain analysis would, at a minimum, have to be considered incomplete.

Third, the implications for future research in voter-behaviour would be significant. The incorporation of automatic cognitive processes into the design of voter-behaviour studies opens up a rich new vein of investigation that would, potentially, add a significant layer of explanatory and predictive power to the our models of voter behaviour.

Finally, it must be said that opening the door to experiments that begin to set limits on the mechanistic capacities of the human mind would and should be greeted with some trepidation. Mechanistic explanations of human behaviour – even partial ones – can evoke strong responses from scholars who view the human capacity for conscious rational thought as essential to most conceptions of democratic functioning. It will be the responsibility of researchers who pursue investigations of these mechanisms to ensure they are properly integrated into the extant body of knowledge and not viewed purely as exercises in disruption.

In keeping with the discussion of Lupia's work in section 3.1 of this paper, adding concrete information about the specific capacities and vulnerabilities of human political cognition could only help to better-focus strategies aimed at enhancing voter competence and improving the function of our democratic institutions.

Endnotes

¹ This appears to be particularly common in Canada, with some studies finding that as many as 17 per cent of the population engages in deception about something as simple as whether or not they cast a vote (Norris 2002, 85).

² Readers familiar with survey-based assessments of vote accuracy will be familiar with this sort of error allocation. *The American Voter* devotes a section to the issue of error, including errors the authors believe were generated by individual voters in whom "the relative importance of the several attitudes departed so widely from what was usual that we were led to make a wrong prediction" (Campbell 1960, 76).

References

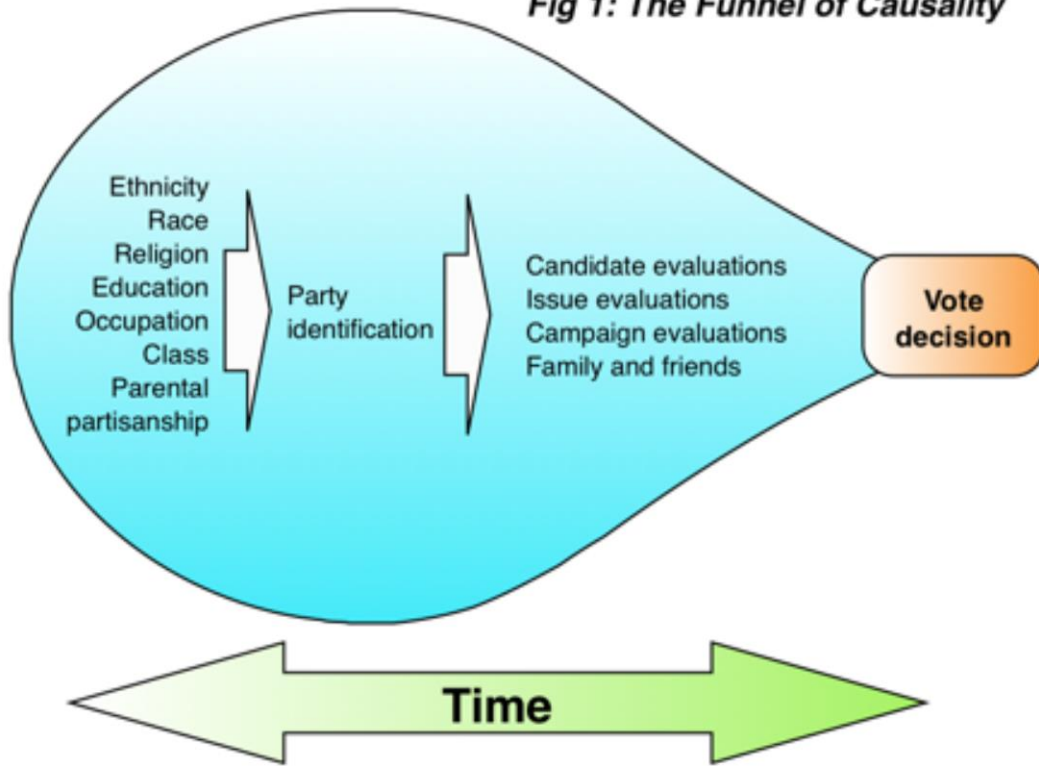
- Alford, John R., and John R. Hibbing. 2004. "The Origin of Politics: An Evolutionary Theory of Political Behavior." *Perspectives on Politics* 2 (4) (December 1): 707–723.
- Althaus, Scott, John Bullock, Jeffrey Friedman, Arthur Lupia, and Paul Quirk. 2008. "ROUNDTABLE 2: IGNORANCE AND ERROR." *Critical Review* 20 (4) (January): 445–461. doi:10.1080/08913810802642968.
- Anderson, Cameron D., and Laura B. Stephenson. 2010. *Voting Behaviour in Canada*. UBC Press.
- Ansolabehere, Stephen. 1995. *Going Negative: How Attack Ads Shrink and Polarize the Electorate*. New York: Free Press.
- Asher, Herbert B. 1976. "'Nie, Verba, and Petrocik', *The Changing American Voter* (Book Review)." *Political Science Quarterly* 91 (3) (January 1): 510.
- Atkinson, John William. 1970. *The Dynamics of Action*. New York: Wiley.
- Bargh, John A. 2002. "Losing Consciousness: Automatic Influences on Consumer Judgment, Behavior, and Motivation." *The Journal of Consumer Research* 29 (2) (September 1): 280–285.
- Bartels, Larry M. 2008a. "The Study of Electoral Behaviour - Long Version." In *The Oxford Handbook of American Elections and Political Behavior*, ed. Jan E. Leighley. The Oxford Handbooks of American Politics. Oxford ; New York: Oxford University Press.
- . 2008b. "The Irrational Electorate." *The Wilson Quarterly* (1976-) 32 (4) (October 1): 44–50.

- Baumeister, Roy F., Ellen Bratslavsky, Mark Muraven, and Dianne M. Tice. 1998. "Ego Depletion: Is the Active Self a Limited Resource?" *Journal of Personality and Social Psychology* [PsycARTICLES] 74 (5): 1252. doi:<http://dx.doi.org.proxy.queensu.ca/10.1037/0022-3514.74.5.1252>.
- Blais, A, J Everitt, P Fournier, E Gidengil, and N Nevitte. 2005. "The Political Psychology of Voters' Reactions to a Corruption Scandal." In Vol. 1. Washington DC: American Political Science Association.
- Campbell, Angus. 1960. *The American Voter*. Wiley.
- Chaiken, Shelly. 1980. "Heuristic versus systematic information processing and the use of source versus message cues in persuasion." *Journal of Personality and Social Psychology* [PsycARTICLES] 39 (5): 752–766. doi:<http://dx.doi.org.proxy.queensu.ca/10.1037/0022-3514.39.5.752>.
- Civettini, Andrew J. W., and David P. Redlawsk. 2009. "Voters, Emotions, and Memory." *Political Psychology* 30 (1) (February 1): 125–151.
- Cohen, J B, and D Chakravarti. 1990. "Consumer Psychology." *Annual Review of Psychology* 41 (1): 243–288. doi:[10.1146/annurev.ps.41.020190.001331](https://doi.org/10.1146/annurev.ps.41.020190.001331).
- Converse, Philip E. 1964. "The Nature of Belief Systems in Mass Publics." In *Ideology and Discontent*, ed. David E. Apter. Vol. 005. International Yearbook of Political Behavior Research. Free Press of Glencoe.
- Darke, Peter R, and Robin J B Ritchie. 2007. "The Defensive Consumer: Advertising Deception, Defensive Processing, and Distrust." *JMR, Journal of Marketing Research* 44 (1) (February 1): 27.
- Finkel, Steven E., and John G. Geer. 1998. "A spot check: Casting doubt on the demobilizing effect of attack advertising." *American Journal of Political Science* 42 (2) (April): 573–595.
- Fiske, Susan T, and Shelley E Taylor. 1991. *Social Cognition*. McGraw-Hill Series in Social Psychology. McGraw-Hill.
- French, Alan, and Gareth Smith. 2009. "The Political Brand: A Consumer Perspective." *Marketing Theory* 9 (2) (June 30): 209–226. doi:[10.1177/1470593109103068](https://doi.org/10.1177/1470593109103068).
- Goldstein, Ken. 2002. "Campaign Advertising and Voter Turnout: New Evidence for a Stimulation Effect." *The Journal of Politics* 64 (3): 721–740.
- Habermas, J. 2005. "Concluding Comments on Empirical Approaches to Deliberative Politics." *ACTA POLITICA* 40 (3) (September 30): 384–392. doi:[10.1057/palgrave.ap.5500119](https://doi.org/10.1057/palgrave.ap.5500119).
- Hatemi, Peter K, and Rose McDermott. 2012. "Broadening Political Psychology." *Political Psychology* 33 (1) (February 1): 11–25. doi:[10.1111/j.1467-9221.2011.00867.x](https://doi.org/10.1111/j.1467-9221.2011.00867.x).
- Jackson, John E. 1975. "Issues, Party Choices, and Presidential Votes." *American Journal of Political Science* 19 (2) (May 1): 161–185. doi:[10.2307/2110431](https://doi.org/10.2307/2110431).

- Jacoby, J., G. V. Johar, and M. Morrin. 1998. "Consumer behavior: A quadrennium." *Annual Review of Psychology* 49: 319–44.
- Kam, Cindy D. 2006. "Political Campaigns and Open-Minded Thinking." *The Journal of Politics* 68 (4) (November 30): 931. doi:10.1111/j.1468-2508.2006.00479.x.
- Krosnick, Jon A., ed. 2002. "Is Political Psychology Sufficiently Psychological? Distinguishing Political Psychology from Psychological Political Science." In *Thinking About Political Psychology*, 187–216. Cambridge Studies in Political Psychology and Public Opinion. New York: Cambridge University Press.
- Kruglanski, Arie W., and Catalina Kopetz. 2009. "What Is So Special (and Nonspecial) About Goals? A View from the Cognitive Perspective." In *The Psychology of Goals*, ed. Gordon B Moskowitz and Heidi Grant, 27–55. Guilford Press.
- Kuklinski, James H, and Paul J. Quirk. 1998. "Reconsidering the Rational Public: Cognition, Heuristics and Mass Opinion." <http://igpa.uillinois.edu/system/files/WP71-RationalPublic.pdf>.
- Kuklinski, James H, ed. 2002. *Thinking About Political Psychology*. Cambridge Studies in Political Psychology and Public Opinion. New York: Cambridge University Press.
- Kuklinski, James H., and Norman L. Hurley. 1994. "On Hearing and Interpreting Political Messages: A Cautionary Tale of Citizen Cue-Taking." *The Journal of Politics* 56 (3) (August 1): 729–751.
- Lau, Richard R. 1999. "The Effects of Negative Political Advertisements: A Meta-Analytic Assessment." *The American Political Science Review* 93 (4) (December 1): 851–875.
- Lewis-Beck, Michael S, William G. Jacoby, Helmut Norpoth, and Herbert F. Weisberg. 2008. *The American Voter Revisited*. Ann Arbor: University of Michigan Press.
- Lupia, Arthur. 2002. "Deliberation Disconnected: What It Takes to Improve Civic Competence." *Law and Contemporary Problems* 65 (3) (August 1): 133–150.
- Markus, Gregory B. 1979. "A Dynamic Simultaneous Equation Model of Electoral Choice." *The American Political Science Review* 73 (4) (December 1): 1055–1070.
- Mattes, Kyle. 2010. "Predicting Election Outcomes from Positive and Negative Trait Assessments of Candidate Images." *Political Psychology* 31 (1) (February 1): 41–58.
- Mondak, Jeffery J. 2010. *Personality and the Foundations of Political Behavior*. Cambridge Studies in Public Opinion and Political Psychology. Cambridge ; New York: Cambridge University Press.
- Monroe, Kristen Renwick, William Chiu, Adam Martin, and Bridgette Portman. 2009. "What Is Political Psychology?" *Perspectives on Politics* 7 (4) (December): 859–882. doi:10.1017/S153759270999185X.
- Moskowitz, Gordon B, and Heidi Grant. 2009. *The Psychology of Goals*. Guilford Press.

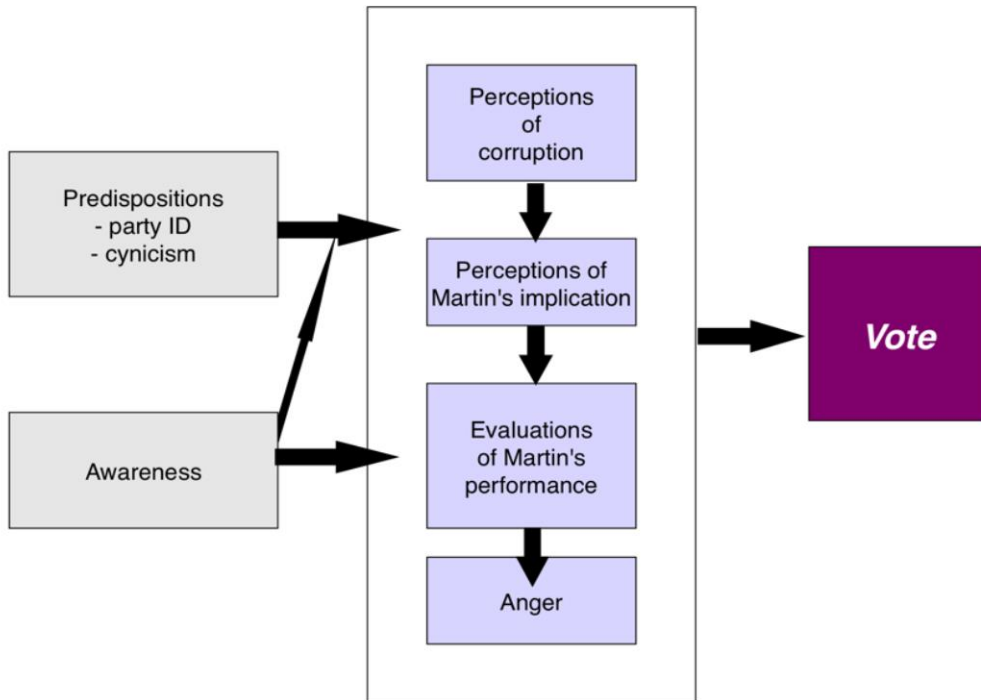
- Nie, Norman H., Sidney Verba, and John R. Petrocik. 1979. *The Changing American Voter*. Harvard University Press.
- Norris, Pippa. 2002. *Democratic Phoenix: Reinventing Political Activism*. Cambridge: Cambridge University Press.
- Petty, Richard E., John T. Cacioppo, and David Schumann. 1983. "Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement." *Journal of Consumer Research* 10 (2): 135–146.
- Pomper, Gerald M. 1972. "From Confusion to Clarity: Issues and American Voters, 1956-1968." *The American Political Science Review* 66 (2) (June 1): 415–428.
- Sears, David O., and Carolyn L. Funk. 1991. "Graduate Education in Political Psychology." *Political Psychology* 12 (2) (June 1): 345–362. doi:10.2307/3791469.
- Simonson, Itamar, Ziv Carmon, Ravi Dhar, Aimee Drolet, and Stephen M. Nowlis. 2001. "Consumer research: In search of identity." *Annual Review of Psychology* 52: 249–75.
- Wilson, Timothy D. 2002. *Strangers to Ourselves: Discovering the Adaptive Unconscious*. Cambridge, Mass: Belknap Press of Harvard University Press.

Fig 1: The Funnel of Causality



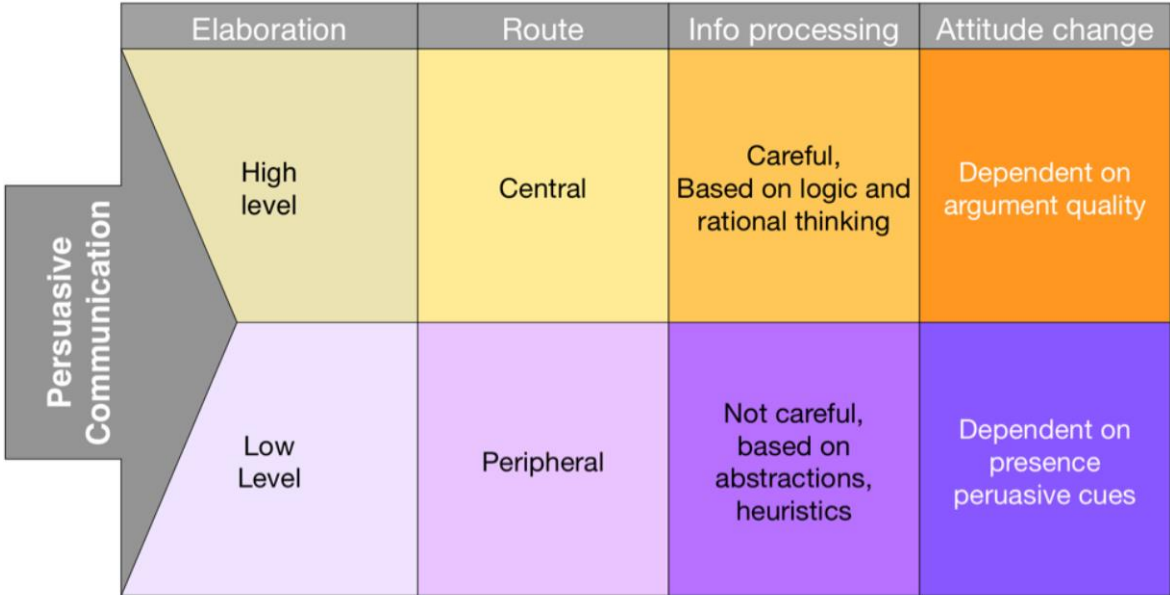
Derived from Anderson and Stephenson (2010), p. 5

Fig 2: Voter response to scandal, causal chain



Blais, et al (2005), p.22

Fig. 3: Models of Rational Decision-Making



Derived from Chaiken (1980) and Petty and Cacioppo (1983)

Fig 4: Re-imagined Funnel of Causality

