Feeling Like a Change: Affect, Uncertainty, and Support for Outsider Parties

Jason Seawright

j-seawright@northwestern.edu

Department of Political Science

Northwestern University

June 8, 2010

Abstract

Emotions are central to understanding how a new or outsider party's electorate emerges, providing a micro-level theoretical account that potentially reconciles diverse behavioral findings through a simple underlying psychological mechanism. When voters are broadly angry about the state of society, that anger reduces their degree of aversion to uncertainty. Because the risk and uncertainty connected with supporting an outsider who often has little political organization or track record is a central impediment to voting against established parties, attitudes toward uncertainty affect citizens' choice to support a new as opposed to an established party. Hence, anger becomes a crucial proximate cause of electoral support for outsider candidates; other, more remote causes can potentially be evaluated at least in part in terms of their effects via this anger-based causal pathway. The paper first develops the theoretical justification for this hypothesis, then tests the theory using an experiment in Peru that randomly influences subjects' emotional state and then asks them to participate in a simulated election.

Why do voters, sometimes in very large numbers, decide to abandon a country's traditional parties and support an outsider candidate? Such a decision inherently involves substantial uncertainty (Downs 1957, Stokes 2001, Magaloni 2006). Candidates from outside the political system typically have little governing experience, and often have a scant political reputation against which the credibility of campaign appeals may be evaluated.[1] Furthermore, voting for a presidential candidate, in particular, that does not come from an established party carries a heavy risk that one's vote will be wasted; the presidency is a one-seat office, and hence voters who are averse to uncertainty will face severe strategic-voting pressures against opting for a candidate that does not represent a traditionally winning party (Duverger 1954, Cox 1997).

An explanation of the psychological mechanisms by which voters sometimes choose to accept these risks is needed, both because it fills a central gap in the current theory of new-party emergence and because it may help distinguish between the kinds of negative events to which voters respond by supporting an outsider candidate and those for which citizens instead adopt other strategies, including voice or loyalty (Hirschman 1970) in conjunction with a vote for the incumbent party, support for the traditional opposition, or abstention. Empirically, these strategies for responding to disappointment with the political status quo appear to have quite different relationships with contextual variables such as ethnolinguistic fractionalization and economic performance (Powell and Tucker 2009). While this finding is in some ways odd if we regard all forms of political discontent as fungible, it is easy to understand if diverse forms of political dissatisfaction correspond with divergent emotional states, which in turn activate contrasting decision-making processes in voters.

This paper argues that emotional states are central to understanding how a new or outsider party's electorate emerges. When voters are broadly angry about the state of society, that anger reduces their degree of aversion to uncertainty. Because the risk and uncertainty con-

[1] This study uses the terms "outsider party," "new party," and "non-traditional party" effectively as synonyms. The theory envisions a continuum reaching from an ideal-typical new party — involving leaders, candidates, and activists with no partisan experience, little organization, and no alliances or established patterns of interaction with traditional parties — over to the opposite extreme of an ideal-typical traditional party — with a well-institutionalized organization, experienced and highly visible leaders, a pattern of routinized interaction with other parties, and so forth. The key claim relating to this continuum is that uncertainty increases as the new-party pole is approached.

nected with supporting an outsider who often has little political organization or track record is a central impediment to voting against the established parties, attitudes toward uncertainty have a causal effect on citizens' choice to support a new as opposed to an established party. The discussion below first develops the theoretical justification for this hypothesis. Subsequently, the discussion turns to an experiment regarding the effects of anger on propensity to support a candidate from outside the party system. The experiment randomly exposes Peruvian subjects to one of three film clips selected to affect their emotional state and then asks them to participate in a simulated election between a fictional traditional-party candidate and an equally invented outsider candidate. The experimental results will show that voters randomized to feel anger are significantly more likely to support the outsider candidate than are those assigned to the control group. Before discussing these findings, however, it is important to explore the theoretical reasons why such a result is to be expected.

1 Deciding to Vote Against the Parties: Framing the Puzzle

Voters' role in the emergence of new, often anti-party-system parties is not yet thoroughly understood. Party theorists often treat the issue in passing while analyzing organizational factors and other aspects of the elite decision-making that is unquestionably a necessary ingredient in the emergence of outsider parties. Such theorists tend to offer imprecise generalizations regarding voters' motives and decision-making process in supporting new parties, for the entirely sensible reason that the focus of analytic attention is elsewhere. For example, Cox argues that some voters may regard the leading parties or candidates in an election as roughly equally bad and much worse than a less credible minor-party candidate; in this case, Duverger's Law-style constraints on the number of viable candidates may not hold because "trailing candidates would be reduced, not to zero support, but to their 'hard-core' support" (Cox 1997: 76). Clearly, this is an important caveat, but also one that is rather psychologically underspecified.

How much difference between the major candidates or parties can be perceived without undermining the rationale for supporting a less viable option? What kind of attachment to the political outsider is required to support such behavior? How can a voter judge whether the standard strategic voting logic applies in her case, or whether they are rationally free to vote sincerely?

In a somewhat different vein, Hug argues that, "when new issues become more important, the likelihood of new parties emerging increases" (Hug 2001: 55; for a similar perspective, see Meguid 2005). Here, citizens' decision-making processes are almost entirely obscured. Presumably, voters are involved in the process by which issues emerge and gain prominence, but little attention is given to how this comes about. When and how do citizens conclude that a new issue is potentially important enough to overshadow the existing set of issues that structure choice among the established party system?

These unanswered questions regarding the psychological process through which citizens decide to support a new political movement do not represent shortcomings in the works just discussed, each of which makes a major contribution in terms of thinking about the causal structure of decisions made by elites in established parties and potential new parties.[2] Rather, they highlight a domain in need of exploration and integration into the more established and successful components of the theory of party emergence.

One might expect behaviorally-oriented researchers working on support for new parties to contribute to this process of exploration, and indeed they have, generating an extensive list of factors that may contribute to voters' decisions to defect to new parties. Thus, Rosenstone et al. argue that voters support parties or candidates from outside the party system when the established parties neglect their preferences on a long-standing issue; when the established parties neglect a newer issue about which they care deeply; when the country experiences agricultural adversity, or alternatively more general economic trouble; when the candidates of newer parties are attractive to them; when they have developed a loyalty to the outsider

[2]Cox's work also offers an extensive exploration of some of the many strategic pressures against voter support for new parties in a variety of institutional contexts.

party; when they have a weak or nonexistent sense of attachment to the established parties; when they have a relatively weak sense of connection to the political system as a whole; and when structural constraints to learning about and supporting a new party are low (Rosenstone, Behr, and Lazarus 1996: 125-50; see also Rapoport and Stone 2005: 26-33). To this list, one might add, for example, that voters may be motivated to support anti-party-system parties or candidates by specific anti-party sentiment in the sense that they reject the established parties but are not opposed to party politics in general (Bélanger 2004); by long-term unemployment (Perella 2005); or by divergence between regional and national issue agendas (Lago, Montero, and Torcal 2007).

This broad collection of themes and motives is clearly a substantial contribution to the task of theorizing about citizens' decision to support an outsider party or candidate, yet in an important sense these findings remain poorly integrated. Scholars have developed little theoretical logic showing why these factors matter and not others, or whether they share a common psychological logic at a finer grain of analysis. As a result, it remains unclear how voters resolve cross-pressures among the many factors listed above, or what criteria are used to determine the appropriate tipping point for supporting a new political party. For example, imagine a voter who cares a great deal about the issues that structure the established party system and who feels that one of those parties does a fairly good job of representing her preferences. At the same time, she also cares a great deal about a newer issue that, in her perspective, is being ignored by the political establishment. In this not particularly far-fetched hypothetical, the voter has one motive for supporting the established parties and one for turning to an outsider party. How will she decide which motive to follow?

This question is important not only as a way of sharpening the predictive capacity of behavioral variables with respect to support for new parties, nor only as a means of improving theoretical accounts of how voters contribute to political elites' calculations regarding the formation of outsider movements, but also as an important further step in the project of understanding the details of the psychological process through which voting decisions are made (e.g., Lau and Redlawsk 2006). Findings in this body of research present an additional re-

quirement that must be met by a successful theory of outsider voting: the decision rule must be simple and must largely require information that citizens acquire automatically during the course of everyday events. After all, most voters are not particularly informed about the details of politics (Downs 1957: 207-59; Delli Carpini and Keeter 1997). In place of extensive information, citizens typically — indeed, by some accounts, almost universally — rely on relatively simple cues and decision rules, often broadly grouped together as heuristics (Popkin 1991; Sniderman, Brody, and Tetlock 1991; Lau and Redlawsk 2007: 229-52). It would be unrealistic to expect voters who support outsider candidates to depart fundamentally from these broad patterns. Instead, we should seek, as a mechanism synthesizing the various strands of research on voters' choices about outsider candidates, simple psychological explanations that rely on easily-accessible information and that are capable of generating the empirical regularities that constitute the collection of behavioral findings considered above. The next section develops one solution to this problem: voters support outsider candidates when their political perceptions cause them to feel anger. This affective state causes decision-makers to become more tolerant of uncertainty, in turn removing a central psychological barrier to supporting an outsider party or candidate.

2 Affect, Uncertainty, and the Decision to Support an Outsider

Affect and uncertainty form a plausible mechanism linking voter perceptions to the decision to support a non-established, and often anti-party-system, party or candidate in an election. In brief, the affect-uncertainty theory of support for outsider parties is as follows. Citizens more or less passively collect perceptions and evaluations of the state of the country, their own lives, and political leaders. These perceptions and evaluations form the basis for an overall mood or affective tone with respect to politics and the great issues of the day, a mood that will resurface whenever political themes assume prominence in citizens' minds. In particular,

citizens' affective mood with respect to politics will assert itself during the process of electoral decision-making. If citizens feel angry, that mood will predispose them to accept uncertainty in decision-making, thereby removing a central obstacle to supporting a new party. By contrast, if they feel anxious, their affect will orient them away from uncertain choices, increasing the probability of a vote for an established party (or, perhaps, abstention). The theory is summarized in Figure 1.

2.1 Sketching the Affect-Uncertainty Theory of Support for Outsider Parties

Each step in the affect-uncertainty theory deserves somewhat closer scrutiny and more careful explanation. Is it plausible to regard citizens' general mood regarding politics as influenced by a variety of political perceptions, or are affect and these perceptions products of entirely separate cognitive systems? Why does the theory focus narrowly on anger and anxiety, omitting other affective states? What is the basis for the claim that anger and anxiety influence attitudes toward uncertainty, and what might the mechanism be? Finally, why should acceptance of uncertainty increase the probability of voting for an outsider candidate? Research in psychology and political science offers guidance with respect to each of these issues.

What kinds of connections between political perceptions and affect are plausible, in light of what is known regarding emotions? Research has suggested that emotions are intimately involved in the processes of political evaluation and judgment (e.g., Forgas 2000, Lodge and Taber 2000, Neuman et al. 2007). Affective evaluation of new political information may begin even before specifically rational evaluation takes place, and explicit rational evaluation of political information often results in emotional associations that persist long after the relevant information is forgotten. Citizens' political thought processes thus have constant access to emotion as an implicit running tally of past political information, a prompt to engage in rational deliberation when most needed, and a heuristic decision rule for determining when to set aside habitual standing political decisions and accept riskier alternatives (Marcus, Neuman,

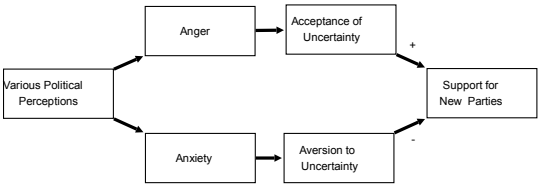

Figure 1: The Affect-Uncertainty Theory of Support for Outsider Parties.

and MacKuen 2000). Thus, it seems only sensible to regard political mood as being affected by the social and political context as filtered through the citizen's perceptions.[3]

In order to theorize the connection between emotions and the decision to vote for an outsider party, it is necessary to systematically conceptualize the set of relevant emotions. Obviously, people in everyday language differentiate among scores of negative emotions, creating the potential for a massive failure of parsimony in theory building. Fortunately, research in various disciplines — including neuropsychology, cognitive psychology, and political psychology — has found that this vast array of emotions can be thought of as the product of a much more limited number of emotional systems (Davidson 1995, Cacioppo et al. 1999, Watson et al. 1999, Marcus, Neuman, and MacKuen 2000), although the specific number of systems remains a subject of some debate. In these approaches, specific emotional states are seen as the result of different degrees and combinations of activation of the brain's small set of emotional pathways. Two categories of emotion that emerge as central to virtually all typologies are anger and anxiety; some form of positive affect also always appears, but these emotions are likely to be much less relevant than various negative emotions in explaining the decision to vote against the established political parties. Hence, this discussion focuses specifically on anger and anxiety, the most universally recognized major modes of negative affect.

Emotion does not have uniform effects on citizens' decision-making processes, although there is substantial debate about how to characterize the heterogeneity of emotion with respect to its effects on decision-making. A great deal of research has explored differences in decision-making between those with positive and those with negative emotions, treating emotion as characterized by nearly independent positive and negative dimensions and categorizing together experiences as seemingly diverse as hatred, fear, anger, and despair (e.g., Cacioppo et al. 1999, Marcus 2003). Yet other research suggests that negative emotions can differ in how

[3]This appeal to emotion as a mediator between the situations regarding which voters have preferences and electoral decision-making is intended to supplement, rather than challenge, an informal rational choice perspective on understanding voters. The idea that emotional considerations can provide a foundation for predicting which kinds of preferences might matter most in voters' decisions does not imply that those decisions fail to be strategic and goal-driven — the criteria for what is sometimes described as "thin" rationality.

they relate to decision-making processes (e.g., Lerner and Keltner 2000, 2001; Druckman and McDermott 2008).

In particular, experimental research has shown that angry individuals, in comparison with anxious or sad controls, form more optimistic assessments of risks and are more acceptant of risk and uncertainty in their decision-making (Lerner and Keltner 2000, 2001; Huddy, Feldman, and Cassese 2007; Druckman and McDermott 2008). One theoretical explanation for this persistent pattern is the Appraisal-Tendency Framework, which argues that "specific emotions give rise to specific cognitive and motivational properties, each expressed at the biological and behavioral level" (Lerner and Tiedens 2006: 117). Anger, on this account, involves assessments that harm has been done to the self or a valued other, that the cause of the harm is certain, and that blame attaches to a known individual or group of individuals. Fear, by contrast, entails harm that is assessed to be uncertain in causes and for which blame is hard to assign.[4] Importantly, these divergent appraisals carry over to other thought processes and decisions made in the immediate aftermath of the emotion-inciting event: "emotions not only can arise from but also give rise to an implicit cognitive predisposition to appraise future events in line with the central appraisal dimensions that characterize the emotion" (Lerner and Tiedens 2006: 119). Angry people are thus more prone to certainty in inferring causation and assigning blame, and by implication can be more risk-acceptant in decisions made while the emotion lingers. By contrast, anxious people begin with a cognitive orientation toward uncertainty which will tend to increase risk aversion in subsequent decisions.

This aspect of the Appraisal-Tendency Framework is important for the present argument in two ways. First, it gives a sense of why anger and fear may diverge in terms of their effects on attitudes, providing a theoretical underpinning for the central causal relationships of interest in this study. Second, these characterizations of anger and anxiety in terms of identifiability and certainty of blame give important clues regarding the macro-political and -economic contexts

[4]These cognitive appraisals may sometimes play a causal role in bringing about an emotion, but such a role is not empirically universal. Nor is it necessary for the Appraisal-Tendency Framework, which assumes instead that the process of feeling an emotion entails these cognitive assessments — whether as causes, consequences, or corollaries, it makes little difference (Keltner, Ellsworth, and Edwards 1993).

in which one of these emotional responses might be expected to predominate. Problems of corruption or failures of ideological representation should generally make people angry, because the harm in question is clearly caused by specific individuals who are failing to live up to a recognized moral duty. Economic trouble, in contrast, should generally produce anxiety, inasmuch as it typically involves systemic factors for which blame often seems less certain and less individualized. Of course, economic crisis can also lead to anger, especially if a convenient villain can be connected with the underlying fundamental problems (e.g., Bernie Madoff in the context of the late-2000s financial crisis in the U.S., or "speculators" in many other crises). Nevertheless, even when economic difficulties are such that they produce anger, they should also bring about substantial anxiety — the easily-identifiable bad actors cannot usually be known with certainty to have brought about the entire economic crisis, so there is typically a reserve pool of hard-to-attribute negativity which should produce an anxiety or fear response. The concluding section of this paper provides initial evidence of these relationships between macro-level events and emotional responses.

Returning to the ways that emotions alter attitudes regarding uncertainty and decision-making, these effects can occur even when the subsequent decisions are unrelated with the source of the anger or anxiety (Bodenhausen 1993; Loewenstein and Lerner 2003: 628-30), and may persist in spite of heightened stakes in the subsequent decision (Lerner, Small, and Loewenstein 2004). Hence, it seems important to distinguish between anger, on the one hand, and anxiety, on the other hand.[5], although it may be less important to differentiate among kinds or causes of these two emotional states. Thus, while the theoretical development here deals largely with anger or anxiety caused by social conditions, the experimental test of the affect-uncertainty hypothesis discussed below will rely on entirely non-political modes of emotion. This allows a more pure test of the proposition that emotion per se, rather than information connected with the causes of emotion, plays a causal role in the process of supporting an outsider candidate.

[5]Marcus et al. also make such a distinction, arguing that aversion is a negative product of the disposition system (Marcus, Neuman, and MacKuen 2000)

In deciding whether to support a non-traditional party, a voter is centrally confronted with problems of uncertainty. What motivates such a voter to accept the uncertainties of supporting a candidate with little or no political track record, representing a party that often has little or no politically-relevant existence outside of its support for that candidate? As mentioned above, a state of anxiety is causally connected with aversion to such uncertainty. Thus, feelings of fear and confusion related to a perceived or real decline in a country's quality of life, in general, or economy, in particular, become an ambiguous influence on decision-makers. Such anxiety surely motivates voters to seek change in the country's government. Yet anxiety will also predispose voters to avoid high-risk varieties of change. Because outsider candidates and parties are inevitably high-risk modes of political and social change, anxiety is unlikely to serve as voters' primary motivation for supporting outsider candidates.

If not anxiety, then what affective state could take the lead? Unlike anxiety, anger is associated with a marked increase in acceptance of uncertainty during decision-making. Therefore, anger is a plausible emotional state to serve as the motive behind voters' final decision to abandon the traditional parties and support an outsider candidate. Hence, for a citizen to vote in favor of a previously unknown party, fear and anxiety should generally be less salient than political anger.

This discussion has remained silent on one important issue, an issue that the study in general will bracket: how voters decide which non-traditional candidate or candidates to support during a process of party-system collapse. Certainly, a voter could not support an outsider if there were no supply of non-traditional candidates. Yet electoral history suggests that the supply of outsider candidates is generally not a constraint; most elections, especially in developing democracies, feature at least one outsider. When the strategic space for outsider victory emerges through the processes of voter alienation described above, charismatic outsiders are often in ample supply. Voters who have chosen to reject the traditional parties thus need to solve a coordination problem (Cox 1997) regarding the choice of which of the available outsider candidates they should support. However, for the purposes of the present study, this set of issues is largely disregarded. Instead, the focus will be strictly on the narrower decision to

abandon the traditional parties.

In summary, then, there is good reason to hypothesize that citizens' emotional states have a causal role in the decision about whether or not to support a candidate from a previously unknown party. The theorized causal connection is not one in which citizens check the valence of their emotions regarding the traditional parties and vote against those parties if they feel negatively toward all of them. Rather, feelings of anxiety increase voters' aversion to uncertainty and thus probably reduce the probability of a vote against the traditional parties. By contrast, anger reduces voters' attention to uncertainty, thereby increasing the likelihood of a vote for a previously unknown party.

Scholars of major Latin-American episodes of party-system change have offered three theoretical suggestions about the psychology of support for outsider candidates that fit well with this theory. For voters who are particularly risk- and uncertainty-acceptant, the uncertainties raised above may not be a substantial deterrent to supporting a candidate from outside of the traditional party system (Morgenstern and Zechmeister 2001).[6] However, as we have seen, attitudes toward risk and uncertainty are themselves potentially endogenous to the political process; citizens' emotional states regarding the existing parties, and the existing social and political system more generally, affect their broad attitudes toward the uncertainties associated with change, and as a result make a causal contribution to the decision to vote against the system of known parties. Nonetheless, the emphasis on attitudes toward uncertainty as a precondition for votes against the established parties in Morgenstern and Zechmeister's account is highly compatible with the theory developed and tested here. So also is Coppedge's (2005) suggestion that "moral outrage" is essential to at least some instances of party-system change, although the affect-uncertainty theory would emphasize outrage at the expense of the focus on

[6]Morgenstern and Zechmeister's analysis suggests that there may be a relatively large number of voters who are risk-acceptant, a point that this paper supports but qualifies by characterizing the emotional conditions that are likely to lead to such a situation. However, Peruvian focus groups suggested that Morgenstern and Zechmeister's survey measure, asking whether it is better to rely on "the devil you know" rather than the "saint you don't," may be contaminated by party evaluations and vote intentions. Specifically, several focus group participants suggested that "the devil you know" referred to politicians from the incumbent party. While this central survey measure may stand in need of some improvement, Morgenstern and Zechmeister's theoretical argument regarding the importance of risk acceptance is supported by the present analysis.

moral conceptions.

Finally, Weyland's (2002) application of prospect theory (Kahneman and Tversky 1979) to the politics of neoliberal reform shares this study's emphasis on attitudes toward risk as a central component of politics. Prospect theory posits that individuals become risk acceptant when they face losses relative to the status quo, but risk averse when they have the opportunity to gain. Hence, the key variable predicting attitudes regarding risk for this theoretical tradition involves whether at-risk benefits are currently in the individual's possession. The theory regarding emotion and decision-making that underpins the affect-uncertainty theory of support for outsider parties involves a far more general cause of attitudes regarding risk: people's degree of anger and/or anxiety. The two theories are certainly not incompatible; indeed, the emotion and decision-making theory might provide a finer-grained mechanism for prospect theory findings, to the extent that the domain of potential losses is associated with feelings of anger and/or the domain of potential gains is connected with anxiety or fear.

This affect-uncertainty theory of support for outsider parties has low information requirements: citizens' affective states regarding politics are simply present when voting decisions are made, and they seemingly take effect even if decision-makers are not consciously aware of them. Likewise, the affect-uncertainty theory offers a unifying mechanism that potentially makes sense of the many findings of behavioral researchers regarding motives for supporting new parties. The various issues, attitudes, and perceptions mentioned in such research may produce feelings of anger — especially when framed in this way by new-party candidates and spokespeople — thereby reducing voters' attention to uncertainty and thus increasing the odds of a vote against the established party system.[7] Hence, this theory satisfies the major requirements posited in the previous section. As the discussion below will show, there is also initial experimental support for the affect-uncertainty theory.

[7]Some impressionistic evidence from Peruvian research subjects suggests that the affect-uncertainty theory may raise new puzzles for findings that economic crisis lead to votes against the established parties; in at least some contexts, economic crisis leads to anxiety, and therefore should tend toward reinforcing the party system although perhaps hurting the incumbent party.

2.2 Affect, Uncertainty, and the Larger Political System

While the affect-uncertainty theory places central emphasis on individual-level psychological processes, the causal mechanism explored here is clearly deeply interconnected with system-level social, economic, and political factors, the effects of which on the causal relationships of interest will receive initial and tentative theorization in this section. In the first place, as just discussed, such factors may often cause the anger which drives the subsequent causal process of interest. Furthermore, system-level factors are likely to shape the magnitude of the causal effect of anger on levels of support for new parties, even if the effects of those factors on citizens' emotions are set aside.

The final key step in the causal process considered here revolves around the idea that supporting an outsider party or candidate entails greater uncertainty in comparison with supporting an established party. In most political systems, this is probably the case because established parties almost by definition have a longer and more visible track record than new or outsider parties, but the degree of difference in uncertainty can clearly vary across countries. When a country's party system is weak, volatile, and highly personalistic, supporting an established party involves a great deal of uncertainty, so the differential between established and outsider parties is narrowed.

Voting for a new leader within a highly personalistic established party can, for example, produce large and sometimes difficult-to-predict changes in policy direction. A classic case in point is Mexico under the leadership of the PRI, where each new party leader/president was granted essentially unilateral power to implement his policy agenda (Weldon 1997), and the agendas implemented by consecutive presidents often differed sharply in overall orientation. When considering this kind of established party, a voter faces many of the uncertainties connected with new parties: in particular, neither category of party offers a past ideological or policy record that can reasonably support inferences about future behavior in government. Even so, there is probably more uncertainty associated with a new party than with such a highly personalistic established party, because a new party generally lacks a large network of

connections within the state and among social elites, an organization, and political experience. Hence, weaknesses of various kinds in the established parties can reduce the size of the uncertainty differential between established and outsider parties, but generally do not eliminate that differential.

If the difference in degrees of uncertainty associated with new and established parties shrinks, then the relative importance of anger and the affect-uncertainty mechanism in accounting for outsider votes may theoretically decline or increase. A decline in explanatory power would be expected if the reduction in the uncertainty gap changes the criteria that citizens use in selecting a party or candidate but does not change the size of the subset of voters who at least consider supporting an outsider. By contrast, an increase in explanatory power for the affect-uncertainty theory may occur if the major result of established parties' relatively high levels of uncertainty is to increase the size of the subpopulation of voters that take seriously the new-party alternative.

These contextual details should not, however, affect the direction of the causal effect. As long as a political system has some established parties and at least some supply of outsider candidates or parties, then the causal effect of increased rates of anger among citizens should be to increase the vote share of the outsiders at the expense of the established parties. Thus, the magnitude, but not the direction, of the causal effect should depend on traits of the established political parties.

3 Research Design

As an empirical test of the affect-uncertainty theory developed in the previous section, an experiment has been designed and implemented that evaluates the proposed individual-level causal linkage between anger and the decision to vote for an outsider candidate, via attitudes regarding uncertainty. An experimental design is plausible because affective states can be readily manipulated, in a variety of different ways, during the research process (Coan and Allen 2007). Hence, subjects can be randomized to treatments that will tend to push their affective

mood in a given direction. Emotions cannot be entirely assigned, as will be seen below, but the component of research subjects' affective mood that cannot be affected by the treatment should be neutralized by random assignment: the treatment and control groups should be approximately equivalent in terms of the mood that they would have if assigned to each treatment condition. Randomization, of course, generally minimizes problems of confounding; psychological and other variables that might cause support for outsider parties apart from affective state should on average be equivalent between the treatment and control groups. Hence, causal inference is easier than it would be with a non-experimental design.

Furthermore, by insuring that the stimuli used to induce affective states are non-political in nature, an experiment can distinguish between the affect and uncertainty theory developed above and the effects of political information. Such would not be the case for an analysis based on observational survey data, for example. In such data, respondents' emotional state would likely be caused in part by politically-relevant information such as opinions about the economy, evaluations of social policy, and so forth — information that might well have an independent causal effect on electoral decision-making. For these reasons, the experimental design discussed below offers in many ways a stronger test of the affect and uncertainty theory than would be true under an observational study.

As is well known, experimental designs are primarily intended to achieve internal validity in causal inference; external validity remains a matter for conjecture and testing by way of future research. For the present theory, the scope for future testing is enormous, given that the hypothesized mechanism should be substantially general: it should apply wherever there is reason to regard established parties as less risky than unknown politicians. Furthermore, such future testing could illuminate the ways that party-system traits alter the size of the electoral causal effect associated with anger, as discussed in the previous section.

3.1 The Mechanics of the Experiment

The empirical test of the affect-and-voting theory described above relies on data generated via a computerized experiment carried out in internet cafes in Lima and Cuzco, Peru, during the months of July and August, 2009. Subjects, after the consent process, are invited to sit at a computer in the internet cafe. A research assistant then loads up the initial web address for the study and leaves the subject alone to watch an emotion-inducing video, participate in the simulated election, and complete a post-experimental questionnaire. Randomization and data collection are performed through the web site. In addition to practical advantages regarding reduced costs and errors, this approach increases the naturalism of the experiment. For most Peruvians, internet cafes are a natural and familiar venue, as compared with, for example, a laboratory room in a university.

Upon beginning the experiment, a subject is immediately randomized to one of three affective treatments. In the anger treatment category, a clip from the film *My Bodyguard* is shown, in which one teenage male intimidates, attacks, and destroys the motorcycle of a second. For the anxiety treatment, a segment of the Stanley Kubrick version of *The Shining* is shown, in which a child plays with toys on a carpet and is then surprised by a ball which is rolled down a hallway in which nobody is evidently present. These two clips have been previously validated and employed in psychological research on affect and decision-making (Gross and Levenson 1995); in this previous research, the anger clip was distinctly successful, while the anxiety film segment was less successful but nonetheless useful. As a preliminary check to ensure that the clips would be useful in a Peruvian cultural environment, they were shown to two focus groups before the experiment went into the field; the groups agreed that they produced the desired emotions. Nonetheless, as well be seen below, in practice the anxiety clip was far less successful with this study's group of subjects than had been the case in previous work or in the pretest. Finally, for subjects assigned to the control condition (calm), a slide show of waterfalls was used. After the initial emotional induction, the assigned emotions were maintained by playing selections of classical music previously validated to produce the desired emotions

(Kreutz, Ott, Teichman, Osawa, and Vaitl 2008).

After viewing the randomly-selected video clip, and while the music selections play, subjects proceed to learn about two fictional presidential candidates and finally vote for one or the other. The two candidates have positions on a range of important and less-important issues (corruption, crime, unemployment, inflation, free-trade treaties, indigenous communities, political experience, religious liberty and state support, poverty, agriculture, international politics, and public works) in Peruvian politics, all designed and focus-grouped to be ideologically centrist. The major difference between the two candidates is that, for each subject, one is randomly assigned to be a candidate of the incumbent Partido Aprista Peruano, while the other belongs to an invented party, the Movimiento Peru y Progreso. Thus, while subjects are not explicitly guided to pay attention to partisanship in choosing between the two candidates, there is little else of substance that differentiates them. Furthermore, analysis shows no evidence that the voting patterns discussed below depend in any way on which of the two candidates is from the traditional party and which is from a new party. Hence, it is reasonable to treat voters' choice between the candidates as substantively being a choice between the relatively lower-risk alternative of a traditional-party candidate and a higher-risk but otherwise similar outsider candidate.

The experiment includes only an established-party incumbent and an outsider; no established-party opposition candidate is provided. There are two reasons for this design decision, one related to Peruvian politics and the other connected with subjects' attention spans. In terms of Peruvian politics, it is not entirely clear which party (if any) would count as the established opposition. Apart from the incumbent Aprista party, the Peruvian party system has been remarkably weak and volatile since roughly 1990. As a result, several possibly established opposition parties exist, but none is obviously the right choice. In terms of attention spans, a pilot version of the study included three candidates, but subjects grew bored of the process of reading position papers before exploring all three to their satisfaction. Instead, they reported feeling dissatisfied with their decision-making due to the relatively challenging task of evaluating three brand-new politicians at once. A simpler, two-candidate campaign led participants

to report less boredom and dissatisfaction with the decision-making process.

After voting in the simulated election, subjects answer a brief questionnaire that asks about their current emotional state, their ideological ranking of the two candidates, their demographics, their degree of subjective risk acceptance, and their evaluation of the emotions that would most probably arise under a variety of hypothetical social, economic, and political scenarios. These variables will be discussed in greater depth below as they are used. As with all experiments, of course, the key inferential leverage derives from simple comparisons of treatment groups in terms of outcomes; the information derived from the post-experiment questionnaire is clearly secondary in nature.

3.2 Peru as the Research Context

Peru was selected as the context for research for a mixture of considerations related both to research design and to convenience. It is important, for purposes of experimental realism (Aronson et al. 1990), that participants in the experiment belong to a society in which the presence of both an important non-traditional candidate and at least one important candidate from an established party are common in presidential elections. This consideration tends toward ruling out as research contexts those countries with either a strong or an absolutely transient and volatile party system. Peru at present does not fall at either extreme; it has recently experienced substantial party-system turmoil and has a substantial recent record of non-traditional presidential candidates and even elected presidents, but it also has at least one strong, established party — the Aprista Party, which currently controls the presidency. Hence, an election between one party-system insider and one outsider candidate is plausible to even attentive Peruvian voters.

Additionally, of the set of countries that have a recent history of party-system instability and successful outsider candidates but nonetheless have at least one well-rooted traditional party, Peru was selected as a research context because it was convenient given the author's broader research agenda. In any case, if there is a general causal effect of emotion on willingness to vote for an outsider candidate via risk aversion, that effect should be as real in Peru as

in any other context. It is reasonable to hypothesize that Peruvians' emotions and cognition conform to experimental findings from other research contexts, and the party-system considerations just discussed suggest that the rest of the instantiating conditions for the hypothesis are met in this country.

That said, Peru's political system has some features which are clearly relevant to thinking about the generalizability and theoretical implications of the experiment's empirical findings. Of these, most noteworthy is the fact that Peru's party system has been quite weak for some decades. Two of the last three presidents of Peru (Alberto Fujimori and Alejandro Toledo) have been non-traditional politicians, supported by parties recently founded by the candidates themselves. Likewise, the second-place candidate in the most recent presidential elections, Ollanta Humala, was supported by two low-profile parties. Hence, Peruvians have substantial experience with candidates, and even presidents, from previously unknown parties.

This fact is convenient for the experiment in one respect, as discussed earlier: it enhances experimental realism, in that relatively few participants will reject out of hand a scenario in which one of the two main presidential contenders is from a non-traditional party. However, this history of non-traditional candidates and outsider presidents probably serves to reduce the degree of risk that most Peruvians would subjectively assign to the act of voting for an outsider candidate, relative to the choice of supporting a political insider. This, in turn, may either reduce or increase the magnitude of the causal effect of emotion, although the affect and uncertainty theory predicts that the effect will be in the same direction in Peru as in other political contexts. Replication of this analysis in countries with quite different party systems will probably be necessary in order to work through these issues.

Hence, generalization in the sense of projecting the causal effect found in this experiment to voters in other country contexts or time periods must be undertaken with substantial caution. Given the essentially neurological nature of several of the linkages in the theory driving this study, more theoretical application of this study's general ideas in other domains may nonetheless be fruitful, but the applicability of these findings to other contexts remains a topic for further empirical testing.

3.3 The Sample

The experiment was administered to a convenience sample of 150 subjects in Cuzco, Peru, and 300 in Lima, Peru — the much larger capitol city of the country. The subjects were recruited through NGOs operating in popular-sector areas within the two cities: Alternativa in Lima, and Arariwa in Cuzco. These NGOs carry out a wide variety of economic-development and community-building activities that reach a diverse collection of Peruvians. Some activities target the poor, while others include middle-class individuals. Subjects were recruited by selecting a variety of different programs whose clienteles had divergent education and economic profiles, and inviting participants in those programs during a defined window of time to participate in the experiment. While the resulting sample is obviously not broadly representative, it is nonetheless far more diverse and plausible as a basis for theoretical extrapolation than would be the case if the participants had been recruited on a university campus, for example.

When asked what social class they regard themselves as belonging to, 11% identified themselves as lower class, 78% said they were middle class, and 11% were upper class, although it should be noted that respondents are disproportionately likely to self-identify with the middle class in Peru as in many other countries. The mean age of participants is 31, with subjects as young as 21 and as old as 81 having participated. The median respondent in terms of education had completed college-preparatory studies but had not attended college, with the group of subjects including some who had only a primary-school education and others who had completed a university degree. The median respondent reports reading a newspaper a few times a week, with similar moderate levels of attention to other political information sources. Table 1 shows that these variables have satisfactory balance between the anger treatment group and the other two groups. The most problematic variable in this sense is social class, which has a small but almost statistically significant difference between the treatment and control groups; however, controlling for social class affects none of the results discussed below.

Compared with the Peruvian population in general, participants in this experiment are more likely to be middle class, more educated on average, and probably somewhat more likely to

Variable	Anger Mean	Anxiety/Calm Means	P Value
Age	31.5	31.0	0.64
Social Class	2.0	2.1	0.07
Education	6.8	6.8	0.97
Ideology	4.7	4.6	0.56
News Usage	2.0	2.1	0.86

Table 1: Treatment and Control Group Demographics

pay attention to political news. While the subjects in this experiment are thus not a representative sample of Peruvians, they are nonetheless a substantially diverse group and may therefore serve as a starting point for theoretical inferences, if not statistical generalizations. It is worth emphasizing that recruitment into the experiment was not based on association with any political party or movement, nor on connections with a university. Either of these recruitment strategies might differentially select people who think about politics in unusual ways, whereas it is less likely that this study's approach to recruitment will suffer from that limitation.

3.4 Effectiveness of Treatments

For this group of subjects, as will be shown below, the anger treatment was an effective manipulation, but the anxiety treatment was not. This unfortunate outcome limits the ability of this study to fully test the anxiety component of the hypothesis; instead, the analysis focuses on anger as the primary treatment.

Figure 2 shows the proportion of individuals in each treatment group who reported feeling angry in an omnibus self-report of emotional state included in the questionnaire at the end of the experiment.[8] Receiving the anger treatment more than doubles the proportion of respondents who report feeling angry at the end of the experiment, from 5.6% among people in the anxiety group to 14.0% among people in the anger treatment, with the calm group falling somewhat above the anxiety group. As the error bars in the figure suggest, differences between anger and either calm or anxiety are statistically significant at the 0.05 level, but the difference between calm and anxiety is not significant.

Of course, 14.0% is a low proportion in absolute terms, but this result is perhaps less problematic than it may initially appear. The treatment used in this study necessarily involves a relatively modest emotional stimulus; practical and ethical considerations preclude more powerful potential treatments. Furthermore, the indicator of emotional state used in this study is dichotomous, so subjects who felt a low level of anger may not have considered it salient

[8]The question asks, "How do you feel right now? (Mark all that apply)" The respondent is then presented with a list of nine emotional states, including anger and alarm/anxiety.

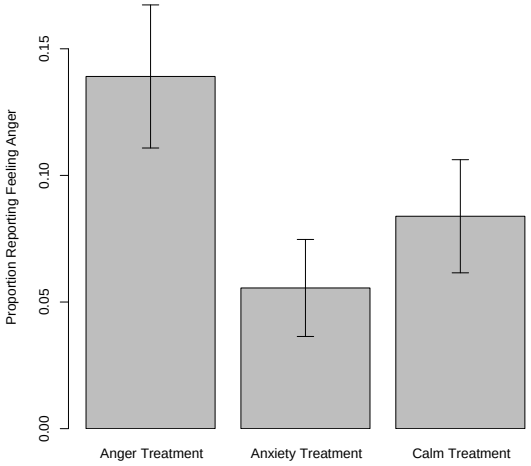

Figure 2: Effectiveness of Anger Treatment.

enough to report. Hence, it may well be the case that the treatment had a low-level effect on a broader group of subjects than those who reported feeling angry. In any case, the results here suggest that the manipulation had at least some effect in the right direction; if the compliance rate is regarded as somewhat low, this will make the treatment effects reported in the next section all the more impressive.

The anxiety treatment, by contrast, was essentially unsuccessful in spite of a weak tendency in the desired direction. Of the anxiety treatment group, 40.1% report feeling anxiety, while 34.4% of subjects in the other two groups report the same experience. The difference, of course, is not statistically significant. The video and music used in the anxiety treatment was much less effective for this experiment's group of subjects than it has been for prior experimental groups in the U.S. or for this study's Peruvian pretest group. A plausible explanation for this failure is that the venues used for implementing this experiment — public and often rather busy internet cafes — may not have provided an ambience compatible with the relatively subtle fearful mood of the selected film clip; this aspect of the setting could readily account for differences in treatment efficacy between this study and prior studies which did mood induction within a laboratory context, and also the contrast between the pretest (in a closed university computer center) and the actual experiment.

In any case, the anxiety treatment failed for this experiment, substantially limiting the ability of this study to speak to that aspect of the theory developed above. However, the results presented in Figure 2 above, as well as the causal efficacy of the anger treatment as discussed below, suggest that the anger condition was more successful. Hence, the discussion of experimental results below will focus on the contrast between the anger group and the combined control group made up of subjects assigned to the anxiety and calm conditions.

4 Findings

After this background regarding the mechanics of the experiment, the group of participants, and the efficacy of treatment, we now turn to a consideration of the results. What does this

experiment show regarding the theory discussed above? First, there is strong evidence that, for this group of subjects, there is a causal effect by which assignment to the anger treatment group produces an increased likelihood of voting for outsider candidates. Second, the results are compatible with, but not strongly supportive of, the hypothesis that anxiety reduces the likelihood of supporting candidates from unknown parties. Third, there is partial evidence compatible with the theoretical account postulating risk aversion as a central part of the mechanism linking citizens' affective state to their vote choice.

4.1 Affective States and Vote Choice: Direct Effects

The basic findings of the experiment are reported in Figure 3, which shows the mean rates of outsider candidate voting for the anger treatment group and for the combined two other groups.[9] These are simple sample proportions, with confidence intervals designed for pairwise comparison. No multivariate regression or comparable model is used; instead, the analysis relies on the experimental design to, on average, balance confounders across the treatment groups.[10]

Substantial numbers of subjects in all treatment conditions vote for the outsider candidate — a result that is not particularly surprising given the Peruvian context in which non-party-system candidates are routine competitors in elections at all levels and have frequently won the presidency in recent decades. The key finding, however, is that the rate of voting for outsider candidates among people assigned to the anger treatment is substantially, and significantly, higher than the rate for people assigned to the other two treatments. For the anger group,

[9] If the data are partitioned regionally, with separate results for Cuzco and Lima, the estimated causal effect is quite similar for both regions, although outsider voting is substantially higher for all treatment groups in Cuzco than in Lima. Because there is no significant evidence of regional heterogeneity in treatment effects, the regions are pooled in all reported analysis.

[10] There is at present some debate regarding the desirability of analyzing experiments using multivariate regression analysis, with Freedman (2008a, 2008b) showing that such analysis can produce bias in the estimate of the causal effect and can produce incorrect standard errors but with Green (2009) arguing that in practice the bias is very often negligible. This suggests that a desirable procedure is to first report simple intent-to-treat results, as is done in this analysis; analysts can then report any desired multivariate regression estimates, with the caveat that some degree of skepticism may legitimately attach to any results that differ substantively from the intent-to-treat findings. In any case, the intent-to-treat results remain the baseline, and as such are the center of attention in this analysis.

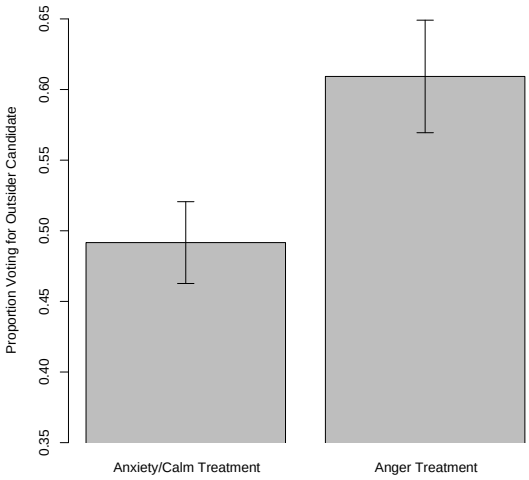

Figure 3: Affect and Vote Choice.

60.9% support non-party-system candidates, while the equivalent rate for the control group is 49.2%, a difference that is significant at the 0.05 level. Hence, there is support for the hypothesis that anger causes an increased willingness to vote for candidates from new parties.

The estimated treatment effect of 11.7% may be something of an underestimate of the theoretically desired effect of anger on support for outsider candidates, to the extent that the anger treatment did not work effectively for all subjects in the study and if the non-compliant subjects would on average be affected by anger if in fact they were made to feel that emotion. One common technique for estimating treatment effects in the context of partial compliance is instrumental variables, in which the treatment assignment is used as an instrument for the variable of theoretical interest (in this case, self-reported anger) in predicting the outcome (vote for the outsider candidate). If the key assumptions for this model are met, it can produce estimates of what the treatment effect would be if all subjects complied with assignment, i.e., if each person in the anger treatment group felt angry enough to report that emotion at the end of the study.

Unfortunately, in this application, at least one assumption of the instrumental variables model is unlikely to hold. The model assumes that, conditional on the variable measuring treatment compliance, the instrument has no effect on the outcome. In this context, that translates substantively to the assumption that, among people who report not being angry (alternatively, among those who report being angry), assignment to the anger treatment has no connection with vote choice. This assumption is unlikely to hold, because it is probable that many people in the anger treatment group feel some level of anger, but not enough to report on the dichotomous scale used to measure compliance. Hence, the instrumental variables approach to noncompliance is unlikely to be appropriate here.

Indeed, application of the instrumental variables estimator produces nonsensical results, estimating a treatment effect of anger on probability of voting for an outsider candidate of 170.9%, as can be seen in Table 2. The reason for this is that the intent-to-treat estimate of the effect of treatment on probability of voting for an outsider is almost double the intent-to-treat estimate of treatment on probability of reporting anger — most likely, as discussed above,

Variable	Coefficient Estimate (S.E.)	P Value
(Intercept)	0.372 (0.096)	< 0.001
Is Angry	1.709 (0.970)	0.079

Table 2: Instrumental Variables Analysis of Anger and Outsider Voting

because many people felt anger at a level too low to report. These instrumental variables results thus provide no real information about the treatment effect of interest, but they do provide indirect evidence that the anger treatment is more effective than the self-reporting data would suggest.

Regarding anxiety, no experimental results are really possible because the anxiety treatment failed, as discussed above. The best that can be done is a weak observational analysis, comparing people in the treatment conditions (anxiety and calm) who report feeling anxious with those who do not. Such a comparison (not reported here) shows a raw difference between anxious and less-anxious voters that points in the theoretically predicted direction but does not reach statistical significance. In summary, then, this study finds evidence of a positive causal effect of anger on the probability of voting for an outsider candidate, as well as evidence weakly consistent with the existence of a negative effect of anxiety on support for outsiders. At least one key claim of the affect-and-voting theory is thus empirically supported, raising the further question of whether that theory's proposed causal mechanism, regarding risk aversion or acceptance, is correct.

4.2 Exploring Causal Pathways

The experiment provides some leverage for thinking about the theorized linkage between emotional state, risk acceptance, and vote choice, although because aversion to uncertainty is not directly randomized the basis for the inference is necessarily somewhat weaker than for the anger-outsider vote causal connection discussed above. Even so, the experiment provides confirmatory evidence of the link between anger and attitudes toward uncertainty, as well as a suggestive finding pointing in the direction of a causal linkage through to outsider voting that may account for a substantial portion of the overall causal effect.

To begin with, Table 3 confirms prior findings connecting anger with acceptance/aversion regarding uncertainty. The anger treatment group is about 8.1 points more acceptant of uncertainty than the two control groups, on average; this difference is clearly statistically significant

Variable	Coefficient Estimate (S.E.)	P Value
(Intercept)	48.60 (1.45)	< 0.001
Anger Treatment	-8.11 (2.49)	0.001

Table 3: Affect and Aversion to Uncertainty

and is probably at least a substantively moderate effect on a 100-point scale. Hence, for this sample as for those used in prior experiments, anger reduces people's aversion to uncertainty.

Furthermore, there is some partial evidence based on an analysis of attitudes toward uncertainty as a mediating variable (Baron and Kenny 1986) between the experimental treatment and the outcome of supporting an outsider candidate, that aversion to uncertainty may be causally connected with the choice to vote for a candidate from an unknown party, although the inference requires stronger modeling assumptions because aversion to uncertainty is not directly randomized. In particular, the analysis entails linearity assumptions and an error model that are not justified by the experimental design alone; it also assumes that, conditional on treatment, there are no missing variable problems in the relationship between attitudes about uncertainty and vote choice. The strategy used here to test for mediation is to run a regression using vote for the outsider candidate as the dependent variable and two independent variables: attitude regarding uncertainty, and assignment to the anger treatment group. If attitudes regarding uncertainty capture a substantial part of the causal pathway connecting emotion and support for outsider candidates, then the coefficient for attitudes about uncertainty should be negative, substantively meaningful, and statistically significant, even controlling for experimental assignment. Furthermore, if uncertainty captures most or all of the causal connection between treatment assignment and vote choice, then the coefficient for assignment to the anger group should be small and statistically insignificant conditional on attitudes regarding uncertainty. Although the assumptions involved in this analysis render the results inevitably less than definitive, it is nonetheless useful to proceed with the analysis, in order to explore whether, given this set of assumptions, the uncertainty pathway is capable of accounting for much of the causal effect of affect on support for outsider candidates discovered above.

In fact, the results, shown in Table 4, are consistent with the proposition that attitudes about uncertainty are the major intervening variable between the experimental manipulation of emotion and the outcome of support for an outsider candidate. The coefficient for attitudes regarding uncertainty is highly significant and suggests that each point of aversion toward uncertainty corresponds to a roughly 1% decline in the probability of supporting an outsider

Variable	Coefficient Estimate (S.E.)	P Value
(Intercept)	1.02 (0.05)	< 0.001
Aversion to Uncertainty	-0.01 (0.001)	< 0.001
Anger Treatment	0.02 (0.05)	0.67

Table 4: Test of Anger-Uncertainty-Outsider Voting Causal Path

candidate. Conditional on attitudes about uncertainty, the effect of the experimental treatment is modest and statistically insignificant.

As seen in Table 3 above, there is a little bit more than an 8-point difference in mean risk acceptance levels between the anger treatment group and the other two groups. This information, in combination with the regression estimate of the effect of risk acceptance on outsider voting from Table 4, implies that the emotion-risk acceptance-outsider voting mechanism contributes a 8.6% increase in the probability of outsider voting for the anger group. Bootstrapping gives a standard error for the effect of this mechanism of 2.5%, and calculates a 95% confidence interval running from 3.9% to 13.6%; hence, the estimate is significantly different from zero. This pathway estimate is also substantively significant; it captures a reasonably large proportion of the overall causal effect shown in Figure 3, suggesting that the risk aversion mechanism may account for a great deal of the overall effect of affective treatment on vote choice in this experiment — or, given uncertainties in estimation, plausibly even the entirety of the effect, since the full effect estimate falls within the confidence interval. Of course, the credibility of this inference relies on the assumptions of the regression model reported in Table 4, which are not fully justified by the experimental design. Nonetheless, while far from definitive, these findings are at least suggestive.

5 Implications for Party-System Change

This experiment has provided evidence in support of the affect-uncertainty theory of support for outsider parties, in which prevalent emotional states alter voters' risk calculus and as a consequence affect their willingness to vote for nontraditional candidates. The strongest evidence discussed above involves the linkage between anger and willingness to vote for political outsiders, for which the simple intent-to-treat analysis found a significant causal effect. Logically weaker evidence of one form or another also supports the proposition that anxiety reduces citizens' willingness to support candidates from unknown parties, as well as the hypothesis that attitudes of aversion/acceptance regarding uncertainty plays a key role as an intervening

variable in the causal mechanism. This section briefly offers some theory and initial evidence regarding how this paper's findings can shed light on the problem of accounting for party-system change.

One particularly promising domain of application is to the problem of explaining party-system change in South America during the 1980s and 1990s. In Peru and Venezuela, in particular, traditional party systems collapsed during the period (Dietz and Myers 2007), an event that coincided with serious economic trouble in both countries. Yet survey evidence suggests that those individuals most troubled by the state of the economy were no more likely to vote against the traditional parties than were people who were much less worried about economic matters (Morgan 2007; Seawright 2006). Why would this important and often strongly-held belief not strongly affect citizens' decision regarding whether to vote for or against the traditional parties?

The theory and evidence in this paper suggest a possible explanation. If the predominant negative reaction typically produced by serious economic trouble is anxiety, rather than anger, then such difficulties may increase citizens' risk aversion and thus causally counterbalance the aversion to those parties due to the belief that they had failed in economic government. In thinking through these issues, it is useful to consider known patterns regarding the kinds of events that generally produce anger. The politically relevant forms of anger that are the present focus will generally have substantially more cognitive content, giving such anger more staying power. As discussed earlier, the cognitions most closely associated with such lasting political anger are a sense of moral injustice at the hands of specific political actors, and a belief that those specific actors have unjustly inflicted personal harm on the voter in question.

Political discourse in both Peru and Venezuela provides a strong suggestion as to which specific attitudes are particularly likely to, in combination, produce the widespread feelings of political anger necessary to generate party-system collapse. The two most salient and widespread accusations against the traditional parties, in the media and in the rhetoric of their non-traditional competitors, are that the traditional parties were riddled with corruption and that they were failing to represent important constituencies in society. Indeed, these claims

merged in Chavez's repeated assertions that the traditional parties had effectively sold out Venezuela's poor in order to keep more wealth for themselves and their personal networks of corrupt friends and allies, and also in Fujimori's campaign slogan promising "Honesty, Technology, and Hard Work," in implied contrast with dishonest and ideologically extreme traditional-party candidates. This combination of perceptions that the traditional political elite is simultaneously hopelessly corrupt and does not represent the voter ideologically is a potent stimulus for thoughts of moral injustice and feelings of political anger. For the voter with this combination of attitudes, not only are her views on the good society not being heard in government, the reason for this under-representation is that politicians are too dishonest to care about the unrepresented individual. Thus, personal and social harm has resulted, not because of chance, incompetence, or impersonal social forces, but instead because of the greed and dishonesty of named traditional-party politicians. The anger resulting from this point of view serves as a primary motive for the voters who take the lead in abandoning the traditional-party system during an episode of party-system collapse.

The post-experimental survey given to subjects includes some questions that, in an preliminary way, support this explanation. Subjects were presented with a series of anecdotes about situations that Alonso, a fictitious local taxi driver, finds himself in. The situations involve personal economic trouble, society-wide economic difficulties, substantial and wide-spread corruption, poor legislative representation, and high crime. For each situation, subjects are asked to identify all of the emotions that Alonso is likely to feel.

Figure 4 shows the percentage of respondents who predicted that Alonso would feel angry in each of the five situations. Predicted levels of anger for the two economic situations and the situation involving crime are comparatively quite low; for these three situations, about 20% of respondents expected Alonso — and, by extension, themselves — to feel anger. By contrast, for the situations involving corruption and poor representation, a substantial majority of subjects predicted anger: over 70% for corruption and over 80% for poor representation.

The pattern across these five situations for anxiety is an approximate mirror image of the anger finding, as can be seen in Figure 5. While the baseline level of predicted anxiety across

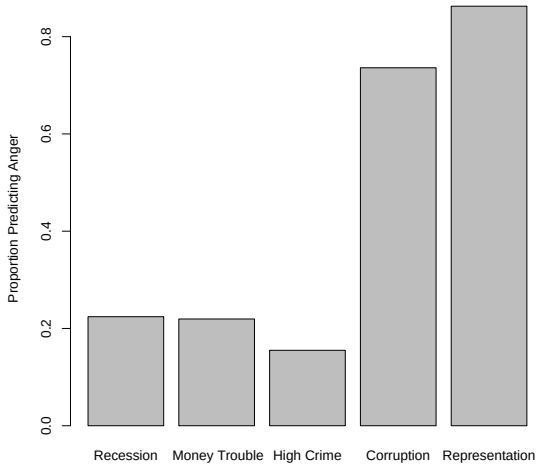

Figure 4: Situations and Predicted Anger Levels.

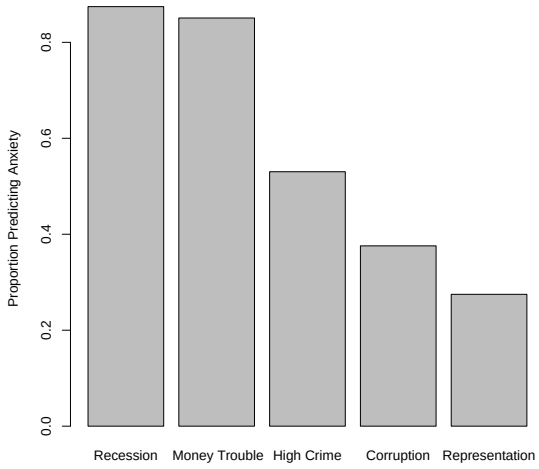

Figure 5: Situations and Predicted Anxiety Levels.

all five situations is moderately higher than the anger baseline, it is nonetheless the case that the corruption and especially the underrepresentation situations elicit substantially lower levels of predicted anxiety than do the economic situations.

To the extent that these patterns of linkage between social, political, and economic situations, on the one hand, and affective responses, on the other, hold broadly, they might account for the apparently weak or secondary direct causal contribution of negative economic perceptions on citizens' decision to vote for non-traditional parties during Peru's and Venezuela's processes of party-system collapse during the 1980s and 1990s. Economic crisis may distinctively generate anxiety, rather than anger, and as a result may be particularly causally linked with risk aversion as opposed to the risk acceptance that appears to promote anti-party-system voting. Hence, party-system collapse may be more distinctively caused by the anger produced by corruption and poor ideological representation than by the anxiety produced by economic turmoil. These findings may have parallel implications for other modes of party-system change.

6 Conclusions

In summary, this paper has presented experimental evidence of a positive causal link between the affective state of anger and citizens' propensity to vote for candidates from previously unknown parties. The data likewise provide some support for the proposition that levels of risk aversion or acceptance are a significant part of the causal mechanism connecting affective state to vote choice, suggesting that the relationship is one in which affect influences citizens' mode of reasoning rather than one in which emotion substitutes for deliberation. These findings offer a new, potentially unifying account of voters' decision-making regarding the emergence of new parties in competition with an established party system, while also extending the affect and cognition research tradition to a new substantive domain.

At the same time, these findings highlight a variety of as-yet unanswered questions and point toward a number of new research trajectories. To begin with, there are the standard considerations of replication in diverse contexts and with different samples of research subjects;

it would be most helpful for comparative purposes to have similar experimental results from countries with party systems that are stronger than Peru's. Such needs are, of course, routine in all experimental research trajectories. In a similar vein, it would be valuable to explore the role of emotions in more electoral choices, involving for example, a candidate from the incumbent traditional party, one from an opposition traditional party, and an outsider candidate. Such a structure adds new complexity to the causal relationships, inevitably bringing factors such as ideological positioning, ruled out in the present research design, into the decision-making process. Hence, it may be the case that in such a decision, only a subset of voters would be affected by the affect-uncertainty mechanism discussed in this study.

The finding that anger can increase voters' willingness to support outsider parties obviously raises a number of possibilities regarding the strategic interactions among parties, candidates, and other elite actors, as well as between these elite actors and the mass of citizens. Do such actors, perhaps intuiting the existence of the causal relationships explored in this study, manipulate citizens' emotions in order to suppress — or, alternatively, enhance — the vote for candidates from outside of the party system? If so, what kinds of issue positions and media frames are the most effective? Do certain elites enjoy advantages, due to position within the state or the media system, in the competition to influence the country's prevalent emotional tone? Similarly, do voters respond to directly political efforts at manipulating their emotions in the same way that they respond to the non-political treatment employed in the experiment described above? Clearly, a great deal of further research is needed to fully work out the role of emotional dynamics in party-system stability and change. While the theory and experiment discussed above cannot answer all of these questions, they do set the stage for these later lines of inquiry by showing that emotions have an important and heretofore not adequately systematized role in party-system change.

References

Aronson, Elliot, Phoebe C. Ellsworth, J. Merrill Carlsmith & Marti Hope Gonzales. 1990. *Methods of Research in Social Psychology*. 2nd ed. New York: McGraw Hill.

Baron, Reuben M. & David A. Kenny. 1986. "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations." *Journal of Personality and Social Psychology* 51(6):1173–82.

Belanger, Eric. 2004. "Antipartyism and Third-Party Vote Choice: A Comparison of Canada, Britain, and Australia." *Comparative Political Studies* 37:1054–78.

Bodenhausen, Galen V. 1993. Emotion, arousal, and stereotypic judgments: A heuristic model of affect and stereotyping. In *Affect, cognition, and stereotyping: Interactive processes in group perception*, ed. Diane M. Mackie & David L. Hamilton. San Diego: Academic Press pp. 13–37.

Cacioppo, John T., Wendi L. Gardner & Gary G. Berntson. 1999. "The Affect System Has Parallel and Integrative Processing Components: Form Follows Function." *Journal of Personality and Social Psychology* 76:839–55.

Coan, James A. & John J. B. Allen, eds. 2007. *Handbook of Emotion Elicitation and Assessment*. Oxford: Oxford University Press.

Coppedge, Michael. 2005. Explaining Democratic Deterioration in Venezuela through Nested Inference. In *The Third Wave of Democratization in Latin America: Advances and Setbacks*, ed. Frances Hagopian & Scott P. Mainwaring. Cambridge: Cambridge University Press pp. 289–316.

Cox, Gary W. 1997. *Making Votes Count: Strategic Coordination in the World's Electoral Systems*. Cambridge: Cambridge University Press.

Davidson, Richard J. 1995. Cerebral asymmetry, emotion and affective style. In *Brain Asymmetry*, ed. R.J. Davidson & K. Hugdahl. Cambridge: MIT Press pp. 361–87.

Delli Carpini, Michael X. & Scott Keeter. 1997. *What Americans Know about Politics and Why It Matters*. New Haven: Yale University Press.

Dietz, Henry A. & David J. Myers. 2007. "From Thaw to Deluge: Party System Collapse in Venezuela and Peru." *Latin American Politics and Society* 49:59–86.

Downs, Anthony. 1957. *An Economic Model of Democracy*. New York: Harper and Row.

Druckman, James N. & Rose McDermott. 2008. "Emotion and the Framing of Risky Choice." *Political Behavior* 30:297–321.

Duverger, Maurice. 1954. *Political Parties*. New York: Wiley.

Forgas, Joseph P., ed. 2000. *Feeling and Thinking: Affective Influences on Social Cognition.* Cambridge: Cambridge University Press.

Freedman, David A. 2008*a*. "On Regression Adjustments in Experiments with Several Treatments." *Annals of Applied Statistics* 2:176–96.

Freedman, David A. 2008*b*. "On Regression Adjustments to Experimental Data." *Advances in Applied Mathematics* 40:180–93.

Green, Donald P. N.d. "Regression Adjustments to Experimental Data: Do David Freedmans Concerns Apply to Political Science?" Paper presented at the 26th annual meeting of the Society for Political Methodology, Yale University, July 23-25, 2009.

Gross, James J. & Robert W. Levenson. 1995. "Emotion Elicitation Using Films." *Cognition and Emotion* 9:87–108.

Hirschman, Albert O. 1970. *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge: Harvard University Press.

Huddy, Leonie, Stanley Feldman & Erin Cassese. 2007. On the Distinct Political Effects of Anxiety and Anger. In *The Affect Effect: Dynamics of Emotion in Political Thinking and Behavior*, ed. W. Russell Neuman, George E. Marcus, Michael MacKuen & Ann N. Crigl. Chicago: University of Chicago Press pp. 202–30.

Hug, Simon. 2001. *Altering Party Systems: Strategic Behavior and the Emergence of New Political Parties in Western Democracies*. Ann Arbor: University of Michigan Press.

Kahneman, Daniel & Amos Tversky. 1979. "Prospect Theory: An Analysis of Decision Under Risk." *Econometrica* 47:263–91.

Keltner, Dacher, Phoebe C. Ellsworth & Kari Edwards. 1993. "Beyond simple pessimism: Effects of sadness and anger on social perception." *Journal of Personality and Social Psychology* 64:740–52.

Kreutz, Gunter, Ulrich Ott, Daniel Teichmann, Patrick Osawa & Dieter Vaitl. 2008. "Using music to induce emotions: Influences of musical preference and absorption." *Psychology of Music* 36:101–26.

Lago, Ignacio, Jose Ramon Montero & Mariano Torcal. 2007. "The 2006 Regional Election in Catalonia: Exit, Voice, and Electoral Market Failures." *South European Society & Politics* 12:221–35.

Lau, Richard R. & David P. Redlawsk. 2006. *How Voters Decide: Information Processing during Election Campaigns*. Cambridge: Cambridge University Press.

Lerner, Jennifer S. & Dacher Keltner. 2000. "Beyond valence: Toward a model of emotion-specific influences on judgement and choice." *Cognition and Emotion* 14:473–93.

Lerner, Jennifer S. & Dacher Keltner. 2001. "Fear, anger, and risk." *Journal of Personality and Social Psychology* 81:146–59.

Lerner, Jennifer S., Deborah A. Small & George Loewenstein. 2004. "Heart strings and purse strings: Carryover effects of emotions on economic decisions." *Psychological Science* 15:337–41.

Lerner, Jennifer S. & Larissa Z. Tiedens. 2006. "Portrait of the angry decision maker: How appraisal tendencies shape angers influence on cognition." *Journal of Behavioral Decision Making* 19:115–37.

Lodge, Milton & Charles S. Taber. 2000. Three steps toward a theory of motivated political reasoning. In *Elements of Political Reason: Understanding and Expanding the Limits of Rationality*, ed. Arthur Lupia, Mathew McCubbins & Samuel Popkin. Cambridge: Cambridge University Press pp. 183–213.

Lowenstein, George & Jennifer S. Lerner. 2003. The role of affect in decision making. In *Handbook of Affective Sciences*, ed. Richard J. Davidson, Klaus R. Scherer & H. Hill Goldsmith. Oxford: Oxford University Press pp. 619–42.

Magaloni, Beatriz. 2006. *Voting for Autocracy: Hegemonic Party Survival and its Demise in Mexico*. Cambridge University Press.

Marcus, George E. 2003. The Psychology of Emotion and Politics. In *The Oxford Handbook of Political Psychology*, ed. David O. Sears, Leonie Huddy & Robert Jervis. Oxford: Oxford University Press pp. 182–221.

Marcus, George E., W. Russell Neuman & Michael MacKuen. 2000. *Affective Intelligence and Political Judgment*. Chicago: University of Chicago Press.

Meguid, Bonnie M. 2005. "Competition Between Unequals: The Role of Mainstream Party Strategy in Niche Party Success." *American Political Science Review* 99:347–59.

Morgan, Jana. 2007. "Partisanship During the Collapse of Venezuela's Party System." *Latin American Research Review* Feb.:78–98.

Morgenstern, Scott & Elizabeth Zechmeister. 2001. "Better the Devil You Know than the Saint You Don't? Risk Propensity and Vote Choice in Mexico." *Journal of Politics* 63(1):93–119.

Neuman, W. Russell, George E. Marcus, Michael MacKuen & Ann N. Crigler, eds. 2007. *The Affect Effect: Dynamics of Emotion in Political Thinking and Behavior*. Chicago: University of Chicago Press.

Perella, Andrea M. L. 2005. "Long-Term Economic Hardship and Non-Mainstream Voting in Canada." *Canadian Journal of Political Science* 38:335–57.

Popkin, Samuel L. 1991. *The Reasoning Voter: Communication and Persuasion in Presidential Campaigns*. Chicago: University of Chicago Press.

Rapoport, Ronald B. & Walter J. Stone. 2005. *Three's a Crowd: The Dynamics of Third Parties, Ross Perot, and Republican Resurgence*. Ann Arbor: University of Michigan Press.

Rosenstone, Steven J, Roy L. Behr & Edward H. Lazarus. 1996. *Third Parties in America*. 2nd ed. Princeton: Princeton University Press.

Seawright, Jason. 2006. Crisis of Representation: Voters, Party Organizations, and Party SystemCollapse in South America PhD thesis University of California, Berkeley.

Sniderman, Paul M., Richard Brody & Philip E. Tetlock. 1991. *Reasoning and Choice: Explorations in Political Psychology*. Cambridge: Cambridge University Press.

Stokes, Susan Carol. 2001. *Mandates and Democracy: Neoliberalism by Surprise in Latin America*. Cambridge: Cambridge University Press.

Watson, David, David Wiese, Jatin Vaidya & Auke Tellegen. 1999. "The two general activation systems of affect: Structural findings, evolutionary considerations, and psychobiological evidence." *Journal of Personality and Social Psychology* 76:820–38.

Weldon, Jeffrey. 1997. Political Sources of Presidencialismo in Mexico. In *Presidentialism and Democracy in Latin America*, ed. Scott Mainwaring & Matthew Soberg Shugart. Cambridge: Cambridge University Press pp. 225–58.

Weyland, Kurt. 2002. *The Politics of Market Reform in Fragile Democracies: Argentina, Brazil,Peru, and Venezuela*. Princeton: Princeton University Press.