RATIONAL choice theory is both a normative standard and empirical model of behavior. As a theory of behavior, it predicts (or prescribes) how an individual will (or should) choose from alternative courses of action given his objectives and beliefs about the instrumental relationship between those alternatives and his goals. The economic version of the theory is often referred to as omniscient rationality because it assumes perfect, unbounded, or substantive rationality (Becker, 1976; Elster, 1989; Rubinstein, 1998; Simon, 1995). A perfectly rational individual has a complete and coherent set of preferences, gathers an appropriate amount of information depending on the significance of the choice, forms beliefs about the alternatives that reflect the relevant information or evidence needed to make the decision, and chooses the action that is optimally related to his beliefs and goals.

The extent to which ordinary citizens behave rationally in politics is an empirical question considered in this chapter. Do people choose actions that are optimally related to their beliefs and goals? Are their preferences coherent, and do their beliefs correspond to the evidence they have gathered? Do individuals seek the proper amount of evidence, given their goals and beliefs?

As we shall see, in studying the political psychology and behavior of citizens, every facet of the rational choice model appears to be violated to some degree. People prefer policies and engage in behavior such as voting that do not further their self-interest. Their preferences are often unstable, inconsistent, and affected by how alternatives are framed. They do not always respond to new information by updating their beliefs and modifying their preferences in accord with their goals. They do not gather enough information to make the optimal choice.

Such departures from rational choice, however, raise a paradox. The paradox is that it is irrational for the average citizen to invest much time and effort becoming informed and making political decisions (Downs, 1957; Hardin, 2006). The economics of information constrain rational choice, because all political preferences and decisions may be compromised by the initial choice of citizens to economize on their effort. Given that
substantive rationality depends critically on the optimal use of information to achieve one's goals, can citizens who rationally pay slight attention to politics still make rational political decisions? We would expect the quality of decisions to vary depending on the circumstances of the decision and the decision-maker.

In evaluating the rationality of preferences and behavior, much depends on our standards of rationality. In the omniscient or perfectly rational model, if we know people's goals and objective circumstances, we can predict their choices because we assume they have the capacity and knowledge to make the proper inferences. People who do not always uphold the standards of economic rationality are often better described as being boundedly rational (Conlisk, 1996; Rubinstein, 1998; Simon, 1985, 1995). In contrast to perfect economic rationality, bounded rationality assumes that people are instrumental in their actions, but will devote only so much time and resources to achieving their goals. Try as they might to make good decisions, they can make mistakes gathering and assessing evidence and reasoning from means to ends (Hirschman, 1982; Riker, 1995).

The decision-making procedures of boundedly rational individuals will vary according to the demands of the problem and the abilities of the decision-maker. To explain and predict people's behavior, we have to study their subjective motivations and goals, the information they possess, and their inferences about the consequences of alternative courses of action. All such deliberative procedures may be construed as being boundedly rational even if they vary in the degree to which they produce substantively rational outcomes (Simon, 1985, 294). If people are not universally rational, perhaps they are more likely to be rational when making decisions in some contexts (e.g., when decisions involve greater stakes or when they are more determined to make the right choice). And if their choices are not objectively rational, perhaps they are rational within the bounds of their limited knowledge, capacity, and motivation.

In this chapter, I explore both the economic and the psychological rationality of political choice. I begin by outlining the assumptions of rational choice theory and discussing variations on those assumptions to accommodate a more realistic individual psychology. I then evaluate the political attitudes and behavior of citizens in different contexts of decision-making. I focus specifically on the degree to which people make optimal (i.e., self-interested) policy choices; whether low or limited information rationality is substantively rational (and whether individuals who gather more information do better); whether beliefs are updated and information is processed rationally; and whether preferences are consistent across alternative framings of issues.

In discussing the empirical results in these areas of research, we shall see that the major deduction of rational choice theory that citizens do not have an incentive to devote much attention to politics casts a shadow on all of the topics we examine. When individuals are not motivated, they have less knowledge of the implications of policies, rely more heavily on partisan and ideological cues and other shortcuts to make choices, are less affected by substantive arguments, and more likely to engage in motivated reasoning. A more psychologically realistic model of political decision-making, however, can explain when decisions will deviate to a greater or lesser degree from optimal rational choice. Because decision-making exacts costs and can be improved through practice,
incentives, and learning, bounded rationality, with its imperfections, should be regarded as an extension of economic reasoning rather than its contradiction (Conlisk, 1996).

Finally, I will discuss how normative standards of decision-making vary and are applied inconsistently across these topics of research. In particular, responsiveness to information is valued in some contexts, but stability of preferences (or resistance to information) is considered desirable in other instances. I will close with other examples of inconsistency in the normative evaluation of decision-making including the treatment of party cues and motivated reasoning.

1. Assumptions of Rational Choice Theory

Rational choice theory assumes that individuals have preferences that reflect their desires and goals. The goals that people aspire to can be left open-ended in the model, although many rational choice analyses assume further that individuals are self-interested and more likely to give priority to goals (both economic and social) that bring benefits to themselves rather than to others (e.g., Chong, 2000; Harsanyi, 1969).

However people define their goals is secondary to having a consistent set of preferences for these goals. An individual’s preferences among a set of alternatives can be ordered if preferences are complete (a is preferred to b, or b is preferred to a, or one is indifferent between a and b) and internally consistent or “transitive” (if a is preferred to b, and b is preferred to c, then a is preferred to c). An individual is rational if these preferences are coherent and if choices are logically derived from them (i.e., a rational individual chooses the most preferred outcome).

Intransitive preferences can arise if people switch dimensions when evaluating different pairs of outcomes (Shepsle & Bonchek, 1996). This can occur, for example, when different pairs of candidates evoke different dimensions of evaluation (domestic vs. foreign policy or character traits) so that candidate x trumps candidate y on foreign policy, candidate y trumps candidate z on domestic policy, and candidate z trumps candidate x on character issues. As I will discuss later, these are framing issues that presumably can be moderated if all of the evaluative criteria are made explicit in the context of choice.

What is the rule or principle that leads to the preference ordering? Because people have multiple goals (e.g., money, profits, power, social status, etc.) and costs accompany the actions taken to obtain these goals, there are invariably trade-offs among the available alternatives. Intuitively, people are able to choose between such alternatives, so they must possess a method for comparing them. The concept of utility allows us to make comparisons among different kinds of costs and benefits by reducing them to a common underlying scale. A utility function translates the goods that people seek into a value.

People select the best available means to satisfy their preferences given their beliefs about what different actions will produce. Because the relationship between alternative
means and ends is often uncertain, it is instrumentally rational to act in accord with one’s beliefs about the likelihood that different courses of action will achieve one’s goals. Outcomes are therefore assigned a utility value, and beliefs about the likelihood that an action will lead to the preferred outcome are assigned a probability. If choices lead to outcomes with certainty, then the rational choice is a simple matter of selecting the alternative at the top of the preference ordering. When there is uncertainty about the consequence of actions, the expected utility of an action combines the respective utilities of the possible outcomes of an action with their corresponding probabilities.

A rational choice therefore entails choosing the course of action that maximizes one’s expected utility.

1.1. Economic and Psychological Rationality

Economic rationality and bounded rationality make different assumptions about the information level and cognitive ability of individuals (Hogarth & Reder, 1987; Kahneman, 2003; Simon, 1995). Bounded rationality assumes there is individual and contextual variation in decision-making processes and outcomes (Conlisk, 1996; Gigerenzer & Goldstein, 1996; Lupia & McCubbins, 1998; Popkin, 1991; Simon, 1985, 1995). Decision-making procedures will vary by the importance of the issue and the motivations, abilities, and predispositions of the individuals forming judgments.

People, therefore, are not naturally or intuitively capable of making optimal choices in the more realistic psychology of bounded rationality. Rather, they sometimes choose poorly when compromising between effort and optimization. Hirschman (1982) suggests that “mistake making is one of the most characteristic of human actions, so that a good portion of the social world becomes unintelligible once we assume it away” (p. 81). Likewise, Riker (1995) notes: “There are degrees of difficulty in choosing instruments. Hence the model does not require instrumental accuracy, although it does require that…people do try to choose instruments that they believe, sometimes mistakenly, will achieve their goals” (p. 25).

Psychological and experimental research has produced a catalog of studies demonstrating the irrationality of individuals within particular contexts (Rabin, 1998). Clearly people are fallible in how they make decisions, often make mistakes, do not always seek to maximize utility, or fail to do so because of cognitive limitations. People often lack rational consistency in their preferences (Tversky & Thaler, 1990). They use evidence incorrectly or prejudicially and often draw overly confident conclusions from insufficient data (Gilovitch, 1991).

Whether these are conclusive demonstrations of widespread irrationality or only limited exceptions to rationality is debated. Among the major objections to the external validity of survey and experimental demonstrations of irrational behavior are that participants are not provided sufficient incentives to perform well on pencil-and-paper exercises, they are given novel problems without an opportunity to learn from their errors of reasoning, and there is usually no debate and discussion in the
experiments to guide how individuals evaluate their alternatives (Camerer & Hogarth, 1999; Chase, Hertwig, & Gigerenzer, 1998; Gigerenzer, 1991; Riker, 1995, Wittman, 1995). Inconsistencies of choice and miscalculations are presumed more likely when there is little at stake and the alternatives are unfamiliar to the chooser. As Elster (1990) notes: “The central issue is whether people deal irrationally with important problems” (p. 40).

Of course, the necessity of incentives, education, and debate to induce rational choice acknowledges individual and situational influences on the substantive rationality of decisions. Decision-making can be aligned on a continuum that ranges from intuitive to effortful processing or “System 1” (intuition) versus “System 2” (reasoning) decision processes (Kahneman, 2003). Intuition is fast, automatic, affective, and effortless judgment, while reasoning is slow, objective, rule-based, and effortful. Similarly, dual-process cognitive models differentiate between “central” (or systematic) and “peripheral” processing of information depending on the effort expended by the decision-maker (e.g., Fazio & Olson, 2003; Petty & Cacioppo, 1986; Petty & Wegener, 1999). There is a trade-off between effort and accuracy. The idea of “satisficing” is that people establish an outcome that is adequate for their purposes and terminate their search when they find something that achieves that standard (Simon, 1957). People have to decide on both the quality of the outcome they seek and the amount of effort they are willing to invest to achieve that outcome. Simon (1990) therefore calls reason “a gun for hire” because deliberate, rational decision-making will be employed only under certain conditions.

Indeed, experimental research identifies where monetary incentives will sometimes improve performance (but sometimes make no difference). Incentives make the greatest difference when they motivate increased effort and if effort is relevant to improved performance. Effort works in combination with existing cognitive capital. When there is insufficient capital (skills, heuristics, experience, and know-how), increased effort can be futile. Conversely, if there is sufficient capital for the task, then adding incentives may not have a marginal effect on performance (Camerer & Hogarth, 1999). Monetary incentives therefore appear to have a qualified effect on rational choice. Larger incentives may induce more effort, but unless there is accompanying expertise, the additional effort may be fruitless. Witness the consequential errors people make in their financial investments (Benartzi & Thaler, 1995; Kahneman, 2003).

A separate issue is the extent to which incentives, education, and debate are relevant to mass political decision-making. For example, it is not clear how frequently we can depend on errors of perception and framing being corrected. “The fact that behavior may be changed after the subjects have been informed of their ‘mistakes’ is of interest, but so is behavior absent the revelation of mistakes because, in real life, explicit ‘mistake-identifiers’ rarely exist” (Rubinstein, 1998, p. 22). The impact of incentives also needs to be evaluated in light of the small expected value of most decisions (such as voting) that citizens make in politics. Much political analysis therefore concerns the quality of reasoning and choice when people are not well informed and highly motivated.
In the following sections, we will observe that people oft en fall short of the standards of rational choice not only because they are paying limited attention to politics, but also because of natural biases in how people process information. There is also evidence harmonious with a boundedly rational framework that consistency of preferences and the quality of judgment and choice varies systematically with changing motivations and incentives.

2. Do People Maximize Self-Interest?

A direct test of rational choice theory is whether people are maximizing utility when they take positions on public policies. Self-interested optimizers ought to prefer policies that yield the greatest benefits for themselves.

In public opinion surveys, however, the influence of self-interest on policy preferences has often proved to be weaker than general orientations such as political ideology, party identification, and political values. Compared to self-interest, people's values and their sociotropic evaluations are better predictors of their candidate preferences and their views in a variety of domains, including government spending, law and order, race and gender issues, social welfare policy, and foreign affairs (Citrin & Green, 1990; Sears & Funk, 1991). Likewise, in elections, voters are more apt to evaluate how the national economy, rather than their own personal economic status, will be affected by different candidates' policies (Kinder & Kiewiet, 1981).

The minor influence of self-interest on political choice is puzzling in light of the centrality of economic performance and standard-of-living issues in electoral campaigns. Politicians spend much of their efforts trying to convince voters that life will be materially better under their policies. Yet the respondents in mass opinion surveys seem to care less about their own personal stakes in policies than about whether those policies promote the national welfare or serve longstanding values.

I will explore reasons for the weak correlation between self-interest and political preferences, identify conditions that appear to strengthen the influence of self-interest, and discuss the theoretical implications of these results for our understanding of rationality. Part of the explanation for these results lies in the conceptualization and measurement of interests, and part lies in the cognitive and political constraints on the pursuit of self-interest through public policy.

2.1. Defining and Measuring Self-Interest

In testing the influence of self-interest, conceptual problems disentangling the sources of one's interests have been circumvented to some extent by defining self-interest as the tangible, relatively immediate, personal or family benefits of a policy. By definition, this narrow conceptualization of self-interest excludes the possibility that self-interest
may be pursued through expressive or other-regarding actions or through long-term calculations. A narrow conception of self-interest also reduces the correlation between indicators of self-interest and measures of values such as ideology, partisanship, and egalitarianism, so that the relative influences of interests and values on policy preferences can be more clearly assessed. Broader conceptions of interests may yield somewhat different interpretations of the findings, but existing studies tend to concentrate on the conditions under which narrowly defined self-interests will influence policy positions.

Survey analyses of self-interest have generally sidestepped people’s reasons for their policy preferences. Researchers typically make inferences about respondents’ self-interest by making their own analysis of the consequences of the policy for different social groups in society and testing whether groups with a greater interest are more likely to support the policy. They assume, for example, that the unemployed will be more likely than the employed to want the government to guarantee employment, or that those without health insurance will have more to gain from supporting a national healthcare plan than those who are insured.

However, there is usually no independent confirmation that the respondents share similar beliefs about the impact of the policy. When people express preferences that contradict their interests, it is possible they knowingly choose an alternative that is not in their objective self-interest. Alternatively, their preferences may be consistent with their own analysis of their interests given their (possibly mistaken) beliefs about the policy. Again, the economics of information provides little incentive for citizens to acquire much policy knowledge even if some public policies (e.g., Social Security and healthcare reform) can have an immediate impact on citizens, and in these instances we would expect people to be motivated to learn more about the policy (Campbell, 2002). Thus a possible explanation for why self-interest exhibits only modest influence in shaping opinions is that people are frequently unaware of the implications of the policies for themselves and their families. The little information they have will often be partisan and ideological information that provides tidy though not necessarily accurate information about the costs and benefits of policies. When direct benefits are not self-evident, and the consequences of the policy are difficult to analyze, an ideological interpretation may be warranted as the best substitute.

2.2. When Costs and Benefits Are Magnified

We still might expect ideology and partisanship to be overridden when there is a clear understanding (even if sometimes simplistic) of what side of the policy benefits one the most. Indeed, studies that report more substantial self-interest effects have typically focused on policies that offer unambiguous benefits or impose tangible costs (Citrin & Green, 1990; Sears & Funk, 1991). Sears and Citrin (1985) found a strong relationship between owning one’s home and voting for Proposition 13, a measure that slashed property tax rates in California. Green and Gerken (1989) and
Dixon, Lowery, Levy, and Ferraro (1991) found that smokers were significantly more opposed to smoking restrictions and cigarette taxes than were nonsmokers. Crow and Bailey (1995) found that regular drinkers were less likely than nondrinkers to support enhanced efforts to control drunk driving and underage drinking. Wolpert and Gimpel (1998) found that gun owners were consistently less likely than those who do not own guns to support proposals to ban handguns or to impose a waiting period for purchasing a gun.

The common element in all of these studies is that the policy being considered was clearly going to help or hurt some elements of the population more than others. For example, homeowners knew that Proposition 13 provided them with a large, immediate, and enduring financial benefit, whereas the hypothetical loss of government services carried relatively little weight (Sears & Citrin, 1985). Similarly, those who own a gun or intend to buy one can see that a waiting period will restrict their freedom. Therefore, instrumental reasoning and self-interested decision-making (i.e., rational choice) are more likely to be manifest when people can see that a policy will have a significant impact on their lives. On this point, analysts in both the social psychological and rational choice traditions are in agreement (Aldrich, 1993; Chong, 2000; Citrin & Green, 1990; Elster, 1990; Taylor, 1989).

2.3. Priming Self-Interest

In addition to the variation in issue content, individual differences in awareness and attentiveness can affect the connection between self-interest and policy choices. Both one's level of stored information and the content of cueing communications modify the priority given to self-interest in decision-making. People who are generally informed about politics or who constitute the attentive public on a particular issue are more likely to know how alternative policy proposals would affect them (Converse, 1964; Zaller, 1992). For those who are less cognitively skilled or engaged, the cues available to them at the moment of choice should be more influential in determining whether they will be motivated by self-interest (Sears & Lau, 1983; Taylor, Peplau, & Sears, 1994).

Critical to the role of self-interest in political reasoning, then, is whether the material benefits of a policy are visible, or cognitively accessible, to the decision-maker (Young, Thomsen, Borgida, Sullivan, & Aldrich, 1991). Pursuing this line of thinking, Sears and Lau (1983) showed that the relationship between self-interest and vote choice became stronger when respondents were asked about their personal economic situation before they were asked their candidate preference. Moreover, when their self-interest is primed, respondents are more likely to agree with egoistic justifications for a policy and less likely to accept reasons founded on broader, symbolic attitudes (Young et al., 1991; Taber & Young, chapter 17, this volume).

Chong, Citrin, and Conley (2001) further illustrate the conditional effects of self-interest in their survey experimental analysis of three policy issues—Social Security, the home
mortgage interest tax deduction, and health benefits for domestic partners. They show that people in the key beneficiary categories (i.e., the elderly, homeowners, and unmarried individuals) recognize their own self-interest and act upon it without prompting when the policy has obvious implications for them; however the influence of self-interest is magnified significantly when people are primed to think about the personal costs and benefits of the policy. In contrast, people with a smaller stake in an issue are less likely to choose on the basis of self-interest and more likely to be influenced by their values and symbolic predispositions, especially when exposed to information that cues such concerns.

2.4. Uninformed Self-Interest

Even such affirmations of self-interested motivation are arguably crude approximations of carefully calculated rational choices. Bartels (2008) demonstrates that popular support for the tax cuts in 2001 and 2003 under President George W. Bush essentially boiled down to the perception among individuals that they personally were paying too much income tax. Other considerations about the growth of inequality in society, the negative social impact of inequality, and the unequal distribution of benefits of the Bush tax cuts in favor of the rich made little difference. While this suggests that voters cared only about the implications of the cuts for themselves, Bartels says average citizens (in contrast to the wealthy) were myopically self-interested in their support of the tax cuts because they failed to consider the ramifications of reduced taxes for cuts in government programs and increases in state and local taxes that would likely negate any tax savings at the federal level. Along the same line we could say that California voters were equally unenlightened when they supported Proposition 13 in California, the quintessential example in the literature of when self-interest supposedly dominated choices. Here is where the voter as consumer is an apt analogy, as consumers are often similarly myopic; for example, they buy low-price energy inefficient appliances even though in the long run these will cost more to operate than the more expensive but more efficient models (Conlisk, 1996, p. 672).

Such an interpretation, of course, holds the citizen against an objective criterion of self-interest and discounts their beliefs about the impact of tax cuts on the economy. Surveys have found that a majority of Americans believe that tax cuts help the economy, while only a fraction will say that tax cuts hurt the economy (AEI, 2011). Another revealing survey finding that might help to explain why lower- and middle-income individuals are reluctant to support tax increases on the wealthy is that they believe that politicians who target the wealthy for higher taxes will eventually also increase taxes on the middle class (AEI, 2011).

Survey analysis on the effect of different framings of tax cuts shows that support for tax cuts declines when people are given a choice between lowering taxes or maintaining spending on domestic programs such as education (Hacker & Pierson, 2005). These findings might be interpreted as support for the idea that information about trade-offs makes people more rational by causing them to take account of the benefits that are lost with tax cuts. The competitive frame provides respondents with information about
both costs and benefits, and their preferences change as a consequence. But in this competitive context, either preference on the issue could conceivably be consistent with self-interest—supporters might be myopic in wanting something now, and opponents might be enlightened enough to resist the immediate temptation of a tax cut in favor of social programs that benefit them. (However, it also may be more plausible to say that people are giving greater weight to social values that support education and other social programs than to say they are becoming more self-interested. It is not clear they feel they are getting a better material return from these programs than they are from the tax cut; perhaps they simply feel that education is something they should support.)

2.5. When Self-Interest Matters

In keeping with a contextual approach to decision-making, the question to explore is not whether but when self-interest matters. (Redlawsk and Lau make a similar argument at the end of chapter 5 in this volume). Self-interest is more likely to matter when people actually have a stake in a policy and can see that they have a stake. Whether they can recognize those stakes depends on the transparency of the policy, the clarity with which the policy is presented to them, and their capacity to understand the implications of the policy. When their objective interests are debatable, when the implications of a policy are hard to discern or are obscured by political persuasion, or when they are not directly affected by the policy, people will rely more heavily on general political orientations (such as ideology and partisanship) that offer guidance in the absence of other criteria. Future research on rational choice should include a wider range of issues that differ systematically according to the size and clarity of their benefits and costs. A second task is to improve the measurement of both self-interest and values by developing more reliable measures of beneficiary classes and the specific values that are relevant to the policies.

3. Low-Information Rationality?

In politics, citizens will seek economical strategies to reason through their choices and hope to make adequate decisions even if they are generally not well informed. An obvious question is the quality of their political choices, which is analogous to the issue raised by economists of whether boundedly rational economic behavior leads to the same market outcomes as optimal behavior (e.g., Akerlof & Yellen, 1985). To what extent does economizing on deliberation produce outcomes that deviate from substantive or unbounded rationality?

The consequences of being uninformed may not be as severe as once thought. Although citizens devote little time to politics, they may learn just enough to make reasonable choices by capitalizing on politically relevant information available as a by-product of everyday routines (Downs, 1957; Fiorina, 1981; Popkin 1991; Lupia and
McCubbins, 1998). Voters may be unfamiliar with substantive issues, but they nevertheless can evaluate candidates using more easily acquired data, such as recent economic trends, the partisanship and personal characteristics of candidates, the candidates’ ideologies, and the identities of opinion leaders and interest groups that endorse the candidates (Brady & Sniderman, 1985; Fiorina, 1981; Key, 1966; Lau & Redlawsk, 1997; 2001; Popkin, 1994; Sniderman, Brody, & Tetlock, 1991). In so doing, voters can draw conclusions without making a detailed study of the issues.

3.1. Measuring Performance

If we are using a normative standard of rationality, the right preference toward policies and candidates would be the position taken by a person who possessed all relevant information about the alternatives, analyzed and weighed that evidence properly, and chose the alternative that maximized his or her expected utility. Perfectly informed individuals in the electorate are an ideal type, like the omniscient rational actor. Researchers could analyze the issues and candidates and substitute their well-informed definition of the optimal choice for different types of voters, which is essentially the strategy taken in the studies testing for self-interested policy preferences. The analyst infers that a policy benefits some groups more than others and tests whether individuals in those groups actually provide greater support for the policy.

A more neutral method to define optimal choice focuses on the preferences of individuals who are significantly better informed than others because of their social position, educational level, or interest in following public affairs. If better-informed individuals have gathered sufficient information to understand the consequences of the policy, they should be more likely to identify the side of the policy that furthers their interests. Therefore we might take the preferences of the most-informed members of the public and compare them against the preferences of less-informed individuals, controlling for their demographic characteristics. Differences in preference by information level would suggest that information changes beliefs about the implications of the alternatives and improves the fit between preferences and goals.

A related approach to gauging the efficacy of low-information choice is to provide individuals with additional information about the alternatives and to measure the extent to which the new information changes their preferences. This can be done experimentally by randomly assigning individuals to a treatment group in which they receive relevant information about a policy; these individuals are then compared to a control group that was not provided this information. A before-after design can also be used to measure the preferences of a panel of individuals before and after they are informed about the alternatives.

Finally, an approach used specifically to test the value of possessing easily acquired but potentially useful heuristic information is to compare the preferences of individuals who possess the heuristic information against the preferences of those who are more fully informed about the alternatives.
3.2. The Impact of Information on Preferences

Virtually all of the studies reviewed here have found that possessing greater information tends to change preferences, which indicates that less-informed citizens are not making optimal choices. (See the discussion by Huckfeldt, Mondak, Hayes, Pietryka, and Reilly, chapter 21, this volume.) Delli Carpini and Keeter (1996) found that group differences between men and women, blacks and whites, and younger and older individuals sharpened among the best-informed members of the groups compared to the groups taken as wholes.

Bartels (1996) examined the effects of general knowledge on presidential vote choices. The average (absolute) deviation between actual and fully informed voter preferences in the six elections from 1972 to 1992 was approximately 10%, with effects being greater in some demographic categories than others. Bartels calculates that if voters chose randomly, the average deviation from fully informed voters would be on the order of 20%; therefore, the limited information possessed by the electorate as a whole shaves the magnitude of error in judgments by about 50%.

Althaus (1998) estimates that fully informed collective public opinion is more supportive of government services and higher taxes, but also (paradoxically?) more opposed to expanding government power; in the realm of social policy, fully informed opinion was generally more liberal except on the issue of affirmative action.

Gilens (2001) uses a standard for informed opinion that is based on specific policy knowledge rather than general political knowledge. He shows that specific information alters preferences over and above general knowledge: support for new prison construction is lowered when respondents are told that crime rates are declining, and support for foreign aid increases when respondents are informed that foreign aid is a trivial portion of federal spending. As in studies that simulate the preferences of a fully informed public, these findings suggest that lacking specific information leads to choices that are suboptimal in the sense of not aligning with the preferences one would hold if better informed. Furthermore, the addition of policy specific information seems to have its greatest impact on those who already possess high levels of general knowledge, because they are better equipped to process the new information and to update their preferences.

There is no handy criterion to assess whether citizens are doing adequately if suboptimally with the trade-off they are making between gathering more information and the quality of their decisions. Bartels asks (1996, p. 221): “Does the attractiveness of democracy as a political system depend in any fundamental way upon the degree of correspondence between the opinions the public actually expresses about a given candidate or policy and the opinions it would express if it was ‘fully informed’?… If deviations between actual and ‘fully informed’ preferences of the magnitude reported here will not shake anyone’s confidence in democracy, would deviations twice as large do so? Ten times as large?”

In their study of voter choice, Lau and Redlawsk (1997; 2006; Redlawsk & Lau, chapter 5, this volume) take the more sanguine position that most voters choose the candidate who is consistent with their stated beliefs and interests. By their definition,
the correct vote is the vote that one would make with complete information about the candidates. Using two alternative measures of correct voting, they conclude from experimental and survey data that between two-thirds and three-quarters of the electorate is voting correctly. Whether an error rate of one-quarter to one-third of the electorate is excessive in a democratic system is an open question.

Even if additional information does change beliefs and choices, it is a separate question whether the cost of obtaining that information is worth the benefits associated with the new preferences. People may be more likely to “get it right,” but the consequences of making good political choices for one’s life may be minor.

3.3. Knowing Just Enough versus Knowing a Lot

Demonstrating that general and specific knowledge leads to different (more optimal) policy or candidate preferences suggests that heuristics are not fully compensatory for those with low information levels. This may be an overstatement because some people may acquire the relevant cues in policy campaigns when the issue is salient, and the key test is whether there are some heuristics that substitute adequately for more detailed knowledge. In Lupia’s (1994) study of several California initiatives on auto insurance rates, voters’ knowledge of the details of the initiatives made little difference in their voting behavior beyond their knowledge of the auto insurance industry’s position on each initiative. Voters who knew only the insurance industry’s stance voted similarly to those who knew additional factual details of the initiatives.

There is of course an inherent ambiguity in using the well informed as a standard for evaluating whether people are expressing optimal preferences. If information does not change preferences, then it does not produce any new knowledge (as defined by Lupia & McCubbins (1998), knowledge helps to predict the consequences of a policy relative to one’s goals). Therefore, the marginal value of the information is zero, and people should not pay anything to obtain it. By definition, if the information has value, it should affect preferences. We cannot always tell, simply by comparing the preferences of informed and uninformed people, whether the information has marginal value. If there is no difference between these groups, the information may not have been valuable or the well informed may have failed to make rational use of the information. Thus, in Lupia’s study, highly informed voters may have derived no additional value from the details of the initiative measures, or they may have ignored such information and focused primarily on the alignment of the lobbying groups and consumer interest groups on each measure. We cannot escape this ambiguity unless we have a separate standard for the relevance of the information to the decision.

The upshot of these studies is mixed. There is a price paid for cutting corners in gathering information. Nonetheless the drop-off in performance may be tolerable depending on one’s standards for decision-making. The deviations in preferences produced by more information are consistent and statistically significant, but there is also evidence
indicating that voters tend to choose the right candidate given their priorities and criteria.

As will be apparent in the following discussion of motivated reasoning, the best informed may be an imperfect standard of good decision-making because they are also the most partisan and ideological members of the electorate. Ideology and party identification can motivate biased interpretations of evidence, especially when that evidence has partisan implications. Therefore, the beliefs of the best informed may reflect an ideologically distorted perspective rather than the objective state of the world. Those who are less ideological may have more accurate beliefs about aspects of the world that are subject to ideological or partisan conflict. The stronger tendency of more informed individuals to engage in motivated reasoning raises question about using this group as the standard for optimal preferences.

4. Are Beliefs Formed and Updated Rationally?

In the normative model of rational decision-making, individuals gather information and weigh its applicability to the choice they have to make. If the evidence is relevant to the choice at hand, they will modify their beliefs to take account of the new information. If these new beliefs change their evaluation of the relationship between the alternatives and their goals, they will change their preference among the alternatives.

The studies I discuss in this section show that reasoning on the basis of limited information and low motivation to engage in deliberate processing of information can give rise, ironically, to motivated reasoning. Although motivated reasoning is often warranted by the circumstances of the decision-maker and can even be logically coherent, it reduces the value of information in politics relative to simpler and sometimes more superficial cues.

4.1. Biased Information Processing

One of the biases of human decision-making is that people will shape their beliefs of the world to make them consistent with their preferences rather than form their preferences based on an objective assessment of the state of the world (Kunda, 1990). In politics, where disputes over the interpretation and significance of information are common, people often interpret the same facts or events from a biased partisan or ideological perspective.

A fundamental tenet of rationality is that one’s desires should not guide one’s beliefs, as in motivated reasoning or cognitive dissonance reduction (Elster, 1990). The classic demonstration of motivated reasoning is Lord, Ross, and Lepper’s (1979) study of
attitudes toward the death penalty. After reading strong and weak arguments on both sides of the issue, supporters and opponents of the death penalty became more polarized and sure of their positions. Each side accepted the arguments consistent with their original position and argued against inconsistent claims, resulting in stronger attitudes following the debate than before.

Motivated reasoning is appropriate within limits, as “it is also inappropirate and misguided to go through life weighing all facts equally and reconsidering one’s beliefs anew each time an antagonistic fact is encountered. If a belief has received a lifetime of support, it is justified to be skeptical of an observation or report that calls the belief into question, but to readily accept evidence that supports its validity” (Gilovitch, 1991, pp. 50–51; see also Hardin, 2009, p. 8). Ideological and religious belief systems may receive greater reinforcement and social support from those we know and respect than objective beliefs about the world. Therefore, we should anticipate that partisanship and ideology might have a greater influence on how people interpret the political world than objective facts. The crux of the issue is how responsive individuals are to new information. If they are responsive, are they using evidence properly? To what extent do existing (prior) evaluations persist in the face of contrary evidence?

Studies pointing to the rationality of voters have offered evidence of their responsiveness to changing information. Page and Shapiro (1992) argue that public opinion, as a collective entity, is generally stable when conditions are constant and dynamic in response to new events and information “that rational citizens would take into account” (p. 56). Similarly, Stimson’s (2004) theory of the public mood describes a responsive electorate (led by some attentive citizens) that moderates and influences the ideological thrust of public policy. The theory of retrospective voting (Downs, 1957; Fiorina, 1981; Key, 1966; Popkin, 1994) maintains that voters are capable of evaluating and responding to the recent performance of the incumbent administration even if they are not well informed on the policy platforms of the parties. In general this research credits the public with being able to discern the direction of public policy, evaluate the competence of the party in power, and respond to political events in a reasonably accurate manner.

Responsiveness to events alone provides evidence that people have reasons for their actions (a minimum standard of rationality) but does not mean that voters are giving proper weight to information in their opinions and preferences. For example, Achen and Bartels (2009) took a closer examination of what voters appear to be keying on when they make retrospective assessments of the administration’s performance. They found that voters react to many irrelevant events, have a short memory and time frame—focusing on recent performance and ignoring earlier events—and base their decisions on outcomes beyond the control of the administration.

4.2. Partisan Biases in Information Processing

Both memory-based and online models of public opinion assume motivated reasoning, especially among partisans who are most knowledgeable about politics. An axiom of the
RAS (Receive-Accept-Sample) model of public opinion (Zaller, 1992) is that individuals accept or reject information they receive depending on its relationship to their partisan and ideological predispositions. The more highly informed individuals will be the most biased because they will be more likely to recognize the partisan cues in information. Lodge and Taber’s (2000; 2013) online model assumes that all decisions are motivated, but sometimes they are motivated to achieve accuracy and other times they are motivated to achieve a desired conclusion (which they call, appropriately, a “partisan mode”). Their John Q. Public (JQP) model (Kim, Taber, & Lodge, 2010) emphasizes the persistence of attitudes and partisan polarization of preferences in the course of a campaign.

Gerber and Green (1998; see also Green, Palmquist, & Schickler, 2002) are in the minority when they argue that there is no partisan resistance to information. According to them, the evaluations of people with different party identifications move along parallel paths in response to new information, which is consistent with unbiased information processing. Bartels (2002) argues on the contrary that such parallel shifts in opinion confirm partisan biases. In his interpretation of unbiased processing, as evidence is accumulated, partisans should converge in their evaluations and eventually reach a consensus if they agree on the meaning of the evidence. The rate of convergence depends on the weight of the evidence (cf. Bullock, 2009). An analysis of 92 topics of opinion change between 1990 and 1992 using the NES panel survey showed that partisan bias was significant in 83 instances. What is more, partisan biases extend to objective facts. For example, Democrats and Republicans polarize in their beliefs about whether income differences have increased or decreased in the past 20 years. Thus, not only do opinions vary by ideology and party, but so do perceptions of the state of the world (Bartels, 2008).

If individuals are motivated by a combination of accuracy and consistency, then partisan biases expressed in response to factual questions may reflect the dominance of the consistency goal. Survey respondents may simply have greater accessibility to partisan perceptions than to facts even when they know the facts, and surveys may not provide respondents with sufficient incentive to retrieve the correct answer from their memories (Prior, 2007). Alternatively, people may not have the specific knowledge they are being tested on, so they use their political values as a heuristic to fill in details they do not know. This is a shortcut that sometimes works, as in the case of the likeability heuristic (Brady & Sniderman, 1985) that allows people to infer the policy positions of social groups.

The impact of substantive information is weakened when people are inclined to impute facts using their partisan values, or if their interpretation of the information is shaped by their prior attitudes and beliefs. Cohen’s (2003) ingenious experiment on the relative influence of partisan cues and policy features shows how party cues affect the subjective meaning and interpretation of seemingly objective information. The experiment presented participants with two contrasting versions—generous or stringent—of a social welfare policy. Judging each policy on its merits, respondents preferred the version that was consistent with their ideological values. But when the policies were attributed to either the Democratic or Republican Party, liberal respondents favored
the Democratic-labeled policy whether it was generous or stringent, and conservatives favored the Republican-labeled policy irrespective of details. Furthermore, greater cognitive effort did not change partisan biases in evaluating the policies.

Therefore, people’s prior opinions about the group interests championed by the two parties were so strong that they had difficulty believing the Republican Party would ever be more sympathetic toward the poor. Any policy that appeared more generous than a rival Democratic policy was assumed to have some hidden features that undermined its ostensible benefits.

Within the confines of the experiment, this type of motivated reasoning appears irrational, but in the real political world, such assumptions about the relative sympathies of the two parties toward social welfare policy are warranted, and relying on party cues might be a more reliable decision rule than an independent analysis of the features of the policies. There is valid reason, rooted in long-term party reputations, to doubt that a Republican program would be more sympathetic to the poor; it may appear so in the capsule summary, but in the respondent’s mind, there must be strings attached to undermine the attractiveness of the program. What would happen if the experimenter added the proviso: these are identical programs and will be implemented identically, except for variations in spending levels and duration? In this case, we might expect respondents to pay more attention to comparing absolute spending levels and time frames for the programs.

The Iraq war represents the most vivid recent example of motivated reasoning among Democratic and Republican identifiers (Gaines, Kuklinski, Quirk, Peyton, & Verkuilen, 2007; Jacobson, 2006; Prasad et al., 2009). Reactions to new information about the absence of weapons of mass destruction (WMDs) in Iraq varied significantly between Democrats and Republicans. Democrats updated their beliefs and increasingly withdrew support for the war when its justification was undermined; Republicans were much slower to revise their beliefs, and those who did supplied new reasons to justify the war, such as the need to overthrow a brutal dictator or to prevent Iraq from being a haven for Al-Qaeda (Jacobson, 2006).

4.3. The Relevance of Facts

A manipulation that strengthens the impact of a “fact” is to make people commit to its relevance. Kuklinski and colleagues (1997) designed a survey experiment that divided participants into two groups. Individuals in Group 1 gave their estimated and preferred levels of welfare spending and their attitude toward welfare spending; in Group 2, individuals gave the same estimates, but before they were asked their attitude toward welfare sending, they were given the true level of welfare spending (which was typically higher than either their estimated or preferred levels). “Group 2 respondents expressed more support for welfare spending than those in Group 1. In this extreme condition, in other words, factual information made a difference” (Kuklinski & Quirk, 2000, p. 173).
Kuklinski and Quirk describe the condition as “extreme” to mean the extraordinary effort that must be made to get people to update their beliefs and attitudes. The implication is that rational individuals should be more easily persuaded by good evidence. An alternative interpretation is that the participants had an attitude toward welfare programs that was not based on knowledge of the actual level of government spending, but simply on their belief that an excessive amount was being spent.

Specific quantitative facts, within bounds, are probably irrelevant for most policy preferences. People do not form their attitudes toward criminal justice based on the number of prisons in the United States. Nor does their attitude toward immigration rest on the annual number of immigrants who enter the country. Instead, people have a more ordinal (and numerically elastic) belief that, for example, there are “too many” people locked in prison or the pace of immigration is “too fast.” Such qualitative judgments can accommodate virtually any actual statistics. Learning the exact numbers will not change those impressions; instead the meaning of the numbers (too high or too low) will be shaped by one’s attitudes, not vice versa.

Gaines et al. (2007) substantiate this point in a panel study of attitudes toward the Iraq war. They show that new information about growing American casualties and failure to find WMDs in Iraq tends to be discounted as being irrelevant when it runs against strong partisan predispositions. In general, new facts do not change opinions as much as the perceived implications of those facts, which are themselves subject to partisan biases.

People are often uncertain about facts and how facts apply to the policy they are evaluating. Information competes with simpler cues that people receive about a policy. These cues also tell them which policy is best for them and which facts are relevant. Source cues especially can deflect attention from the substantive content of messages as well as shape interpretation of the information, so that the persuasiveness of the message depends on one’s attitude toward the source. People not only have to be given incentives to study the information, but the information has to be presented in a way that increases its salience and credibility. A problem with low information rationality is that relevant substantive information is less likely to be given its due when individuals prefer taking a shortcut to making a careful evaluation of evidence.

People’s certainty about the source’s credibility can cause them to change their beliefs about both facts and applicability, especially if their prior beliefs about these facts and their applicability are weak. If an original position in favor of a policy is supported by a credible source and a set of beliefs about the facts, but these beliefs about the facts change because of new information, the new facts may be judged irrelevant (especially if the source remains steadfast but instead changes its rationale for the policy). The source prevails in this conflict because its policy position presumably incorporates all of the information in the situation that has a bearing on the decision. When source cues are so strong, information takes a back seat. Furthermore, following a source cue is not necessarily based on peripheral processing of information. Individuals may scrutinize the credibility of the source carefully. Therefore, party identification is a simple cue to follow, but it can reflect either central or peripheral processing.
The signal from a cue can also lead to an inference about what the facts must be using the following reasoning: the source has all the facts and supports the policy; any fact or consequence of the policy that is relevant to the source’s position must be true or the source would not have endorsed the policy. If a person believes strongly that a fact is relevant but is uncertain if the fact is true, the signal from the source cue will strengthen belief that the fact is true (Lauderdale, 2010).

These dynamics of opinion indicate that Bayesian, unbiased, and rational have been incorrectly equated. There are cases of information processing that are consistent with Bayesian reasoning but that seem plainly unreasonable and ideologically dogmatic. “Opinion change in accordance with Bayes’ rule may often be biased, and in extreme cases it may approach delusion, as long as it does not manifest internal contradictions” (Bartels, 2002, p. 126). Accordingly, Achen and Bartels (2009) show that it is possible to construct a Bayesian model in which partisan biases reflect cognitive inferences as opposed to wishful thinking; motivated reasoning is consistent with Bayesian updating when party identification is strong and the voter learns little information about the issue except that it has partisan relevance.

### 4.4. Overcoming Bias

Models of information processing hypothesize that people can correct their misperceptions when they have an incentive to make superior decisions. The relative emphasis on directional and accuracy goals will vary with the context of the decision. Individuals need not be consistent decision-makers across contexts because decisions differ in their complexity and individuals have varying motivations and opportunities to process information carefully (Lodge & Taber, 2000).

Studies show that increasing the incentive for accuracy (e.g., by telling people their decisions would have to be justified, would be made public, would have an effect on their own or other people’s lives) without changing the attractiveness of particular outcomes, leads to more careful processing of information and reduces cognitive biases (e.g., stereotyping, group bias, primacy effects, anchoring effects in probability judgments, fundamental attribution errors) (Freund, Kruglanski, & Ajzen, 1985; Kruglanski & Freund, 1983; Petty & Cacioppo, 1986; Tetlock, 1983; 1985). (Note that in these decision and judgment tasks the participants did not have motivation to prefer one outcome to another, but they were motivated to care about arriving at an accurate judgment.) Fishkin and colleagues (Fishkin, Luskin, & Jowell, 2002; Fishkin, 2006) show that in carefully regulated deliberative contexts that emphasize rational evaluation of evidence, citizens develop coherent preferences across issues, become more informed about issues, and change their policy preferences following discussion with policy experts and fellow citizens.

But in order for accuracy incentives to reduce cognitive biases, individuals have to possess and employ reasoning strategies that improve choice (Camerer & Hogarth, 1999). Some kinds of problems may not benefit from greater effort if the effort promotes
resorting to reasoning processes that are faulty, or if the problem is too difficult to solve so that effort is irrelevant or even counterproductive. A common circumstance in politics is that information is disputed among experts, and many people do not have the knowledge or ability to sort through competing claims even if they were motivated to do so.

In nonpolitical experiments there is typically a consensus on the quality of arguments among participants. Participants are not predisposed by their partisanship or ideologies to favor or oppose these arguments, so they are able to interpret the arguments more objectively than, for example, the arguments used in Cohen’s (2003) “party over policy” paper. In Cohen's study, there was considerable cognitive elaboration occurring among participants, but it was aimed toward increasing consistency with prior attitudes toward the parties. In addition, in the political world, objectivity in assessing arguments may be compromised by strong prior attitudes toward the subject.

Although Achen and Bartels (2009) found a preponderance of motivated reasoning in their analysis of National Election Survey data, they did confirm that information effects are larger when individuals have personal concerns for the issue and receive considerable information about it. Their prime example is how women's attitudes toward abortion rights changed as Democratic and Republican Party positions evolved in the 1970s and 1980s. Women cared more than men about this issue, and informed women were more likely than informed men to change parties during the 1980s as the abortion issue and contrasting party positions became salient.

In their studies of vote choice, Lau, Anderson, & Redlawsk (2008; also Redlawsk & Lau, chapter 5, this volume) hypothesize that correct voting is related to increased motivation to make a good decision (operationalized as caring who wins); expertise (political knowledge and education); the availability of an effective heuristic; more informative campaigns (reflected in increased campaign spending); and simplicity and clarity of choice (i.e., ideologically distinct candidates, and fewer candidates should make correct voting easier to accomplish). Likewise, Hillygus and Shields (2009) found that voters respond to campaign information about the issue positions of candidates if the issue is sufficiently important to them. The alternative perspective (e.g., Lenz, 2009) is that voters are modifying their views over the course of the campaign to match those of the candidate they prefer. This alternative explanation seems unlikely among the persuadable partisans identified by Hillygus and Shields because their issue preferences were measured early in the campaign and the issues examined were deemed important by the voters, making it more likely that they had strong opinions on these issues that would not easily be changed.

In general, exposure to strong contrary arguments and their repetition should reduce biased processing because it is more difficult to discount strong arguments (Petty & Cacioppo, 1986, p. 164). There is evidence that motivated reasoning among voters can be gradually overcome with an accumulation of evidence, as voters do not indefinitely reject contrary evidence once they have formed a preference (Redlawsk, Civettini, & Emmerson, 2010).
In sum, we assume that rational citizens will incorporate information that is relevant to the decision. Accuracy is pursued if the decision is salient and the consequences are important; for example, more information is sought and evidence is reviewed more evenhandedly. But in politics this process can be muddled by the quality of information and debate over the facts and the applicability of those facts to the decision. Most of our information is obtained by trusting sources, not by independently verifying the truth of a claim. Virtually all public policy claims are disputed in varying degrees (see Chong & Druckman’s (2010a) analysis of the large number of opposing frames used in political debates), making it difficult for citizens to identify what is true or relevant. In the following section, I will discuss how the prevalence of framing effects means that citizens rarely have a clear understanding of what facts and consequences are relevant to the policy. Ironically, motivated reasoning from partisan preferences to beliefs about policies is one of the ways that individuals resist framing effects.

## 5. Framing of Political Preferences

Rationality presumes that individuals have coherent preferences that are invariant to how the alternatives are described. The research on framing offers pervasive evidence that alternative (and sometimes logically equivalent) descriptions of the same policy can produce significantly different responses. In perhaps the most famous example, devised by Tversky and Kahneman (1981), individuals reversed their preferences in selecting between risky choices by preferring the risk-averse option when it was framed in terms of gains, but the risk-seeking alternative when the same outcomes were framed as losses. (See Jack Levy’s discussion in chapter 10 of this volume of framing and preference reversals in international relations.)

In politics, changes in the labeling of alternatives can have marked effects on public opinion. Familiar examples include substituting “the poor” for “those on welfare,” or referring to groups that oppose the right to an abortion as “anti-abortion” rather than “pro-life” (Bartels, 2003). Similarly, public preferences can be markedly affected by selectively highlighting certain positive or negative characteristics or consequences of the policy. A frequently cited example involves a political extremist group that is planning a public rally (Chong & Druckman, 2007, Nelson, Clawson, & Oxley, 1997; Sniderman & Theriault, 2004). If respondents are reminded by the survey question that free speech rights are at stake, they are inclined to support the group’s right to stage the rally. But if they are reminded instead that the rally might spark violence, they switch their position and prefer to stop the rally from taking place.

Framing effects undermine the assumption of consistent preferences that underlies rational choice theory. In all of these instances, preferences should be invariant to changes in the framing of the alternatives. If framing effects are sufficiently common, they reduce the validity of public preferences expressed in surveys and elections, and challenge the notion of popular sovereignty in democratic theory.
5.1. The Psychology of Framing

To understand how framing occurs, consider the structure of an attitude. A person’s attitude toward an object is the product of his beliefs about it. Framing presumes a mixture of positive and negative beliefs and therefore some degree of ambivalence. For example, a person may believe that an extremist group is entitled to free speech but may also believe that a rally would pose a danger to public safety. Whichever belief has greater weight will determine his or her attitude on the issue. Framing influences people’s attitudes by affecting the relative weights they give to competing considerations. Equivalence frames are logically equivalent but convey different connotations or meaning, and issue frames emphasizing alternative considerations of the policy are not equivalent, but they represent the same basic options with alternative descriptions of their features (Jou, Shanteau, & Harris, 1996). Both equivalence and emphasis frames steer respondents to a particular interpretation or connotation of the problem.

People vary in the strength and reliability of their attitudes. Some people have strong attitudes that are based on a clear subset of beliefs. Others have beliefs that incline them in different directions, but do not have a settled understanding of the relevance of alternative considerations or aspects of the problem. Framing effects are more likely when people do not have a strong attitude or preference based on a well-defined set of considerations. Instead they passively accept the narrow conceptualization of the issue or problem provided to them (Kahneman, 2003, p. 1459) and are unable or unmotivated to generate additional features of the problem.

Stability of preferences depends on individuals being able to retrieve and evaluate the same set of relevant considerations independent of the framing of the question. This is likely to be difficult for all but well-informed and motivated respondents. For example, lawyers and judges display stable preferences on civil liberties issues when they consistently apply general legal principles to a variety of controversies involving the First Amendment rights of unpopular groups (Chong, 1996). More commonly, however, ordinary citizens are highly susceptible to framing because they have neither formal training nor strong beliefs on most issues.

5.2. Qualification of Framing Effects

A number of scholars (e.g., Wittman, 1995; Riker, 1995) have argued that experimental demonstrations of framing lack external validity because they exclude features of the political world (incentives, debate, learning) that would mitigate the effects generated in the laboratory. The magnitude of framing effects also can be moderated by the wording of problems, changing numerical details, strong attitudes, greater cognitive ability, increased contemplation, and the need to provide a rationale for one’s preferences (Druckman, 2001; Kuhberger, 1998; Miller and Fagley, 1991).
Druckman (2004) provides persuasive evidence of contextual and individual variation in the size of framing effects on equivalence-framing problems. Expertise reduces framing effects, and counterframing and heterogeneous discussion also temper framing effects by increasing the accessibility of alternative interpretations of the problem so that one is not swayed disproportionately by a one-sided frame. Sniderman and Theriault (2004) also show that simultaneous competition between frames increases the likelihood that people will choose policy alternatives that are consistent with their values. Chong and Druckman (2007; 2010b) demonstrated experimentally that competing frames offset framing effects when the opposing frames are of comparable strength. However, they also found that the canceling effects of simultaneous competition between frames do not extend to dynamic competition between the same frames received over time. When competing frames are received sequentially over time, as in a political campaign, most individuals become newly susceptible to the last frame they receive because early framing effects tend to decay. An important qualification on this result is that people who engage in effortful processing of initial messages develop surprisingly stable—and rigid—opinions that are resistant to framing compared to those who rely on memory-based processing.

5.3. Information or Framing Effects?

A charitable interpretation of many examples of framing effects is that people are being guided by the connotations of frames rather than being misled or deceived. Alternative frames change the problem for the respondent by providing new information and highlighting what is relevant. For example, respondents are reasonable to believe the hate group rally poses a threat to public safety if the survey item explicitly mentions “the possibility of violence,” but not otherwise. This interpretation of framing fits well with Simon’s (1985) description of the problem solver as one “who is provided in advance with a knowledge of neither alternatives nor consequences—and who may even discover what his or her goals are in the course of the problem-solving process” (p. 295).

Framing and information effects have a different normative status in the study of public opinion even though they describe similar processes. Framing effects are said to undermine the validity of public opinion, while information effects demonstrate the public is responsive to substantive policy details. A possible distinction is that information introduces new considerations that change people’s beliefs and preferences. In contrast, framing might operate by increasing the accessibility and applicability of existing beliefs rather than generating new ideas. Many examples of framing, however, probably result from a combination of learning and framing in which new arguments and beliefs are introduced and made applicable through repetition (Chong & Druckman, 2010b).

A telling example of the parallels between research on information and framing is Gilens’s (2001) study, cited above, of the effect of specific policy information on attitudes toward new prison construction and foreign aid. Gilens found that information about declining crime rates reduced support for new prison construction. But this information
could have been framed differently, and there is likely an alternative representation that would induce a different effect on policy preferences. Imagine how preferences would be affected if we used the following frame to connect the ideas that prison sentences have increased and crime rates have declined: “Given that crime rates have declined as incarceration rates have increased, do you support construction of new prisons?” This alternative “information” or frame would probably lead people to be more supportive of building additional prisons. Similarly, instead of pointing out that foreign aid amounts to less than 1% of federal spending (which increased support for foreign aid in Gilens’s study), what would happen if this percentage instead were framed as an absolute dollar amount? Respondents who were told that about $50 billion of the current budget was devoted to foreign aid may be more likely to feel this was too much spending. These examples are meant to illustrate that information effects can be as problematic as framing effects in raising concerns about the reliability of public preferences.

5.4. Motivated Reasoning as a Source of Consistency

It is also instructive to juxtapose motivated reasoning and framing. The problem of motivated reasoning can be summarized as too little responsiveness to information that is relevant to the decision. Conversely, the problem of framing is too much responsiveness to the description of alternatives. The paradox is that in the framing research, resistance to framing usually is viewed positively (i.e., reflecting well on respondents), while in the motivated reasoning research, individuals who do not respond to information generally are evaluated negatively.

The inconsistent treatment of partisan motivations in these two areas of research highlights the need for a consistent criterion. Linking options to partisan endorsements is an especially effective way to reduce framing effects (Druckman, 2001, p. 248). Party endorsements provide supplemental cues to respondents about how to choose consistently between alternative framings of the same policy. As Druckman (2001, p. 237) writes: “many people have well developed preferences towards parties or other elites. . . . Thus, they are able to make consistent choices and are less susceptible to framing effects—they simply opt for the alternative endorsed by their party.” Partisanship can diminish the effects of framing, of course, but this may be due mainly to motivated reasoning. Consistency potentially comes at a cost (cf. Cohen’s findings on party versus policy) if it reflects only peripheral attention to party cues rather than analysis of information. Therefore the source of stability must be considered when evaluating the quality of decisions made. If people are able to choose consistently with the assistance of a party cue, they may also be misled by party cues to adopt positions they would not support on the strength of arguments. Weak arguments could just as easily be bolstered by strong peripheral cues as are stronger arguments.

Framing is inherently a reflection of ambivalence (Chong & Druckman, 2010; Popkin, 1991; Zaller, 1992). Ambivalence can be resolved (and stability achieved) in different ways, including reliance on ideological values or partisan cues, online processing, motivated
reasoning, or rational deliberation. But we should not assume that anything that reduces framing effects is a positive outcome. It is a separate research question to analyze whether individuals are making good procedural decisions according to rational criteria.

Stability allows for consistency of preferences, which is a minimal qualification for rationality. Whether those preferences reflect reliable information and efficient matching of means to ends should also be considered when evaluating the rationality of preferences. In the preceding section, I discussed how strong arguments can prevail over weak arguments if people engage in deliberate processing of information, but it is not necessarily the case that either strong arguments or frames are more compelling on substantive grounds. Their appeal may simply be their ease of comprehension, emotional resonance, or association with an attractive source. There has been little systematic analysis of the qualities of frames that make them effective (Petty & Cacioppo, 1986).

I would argue, on normative grounds, that ambivalence is best resolved through reconciliation of competing ideas—aggregation and evaluation of relevant information to make choices that are instrumentally related to one's goals. In experiments on framing, however, only a small subset of people aggregate and balance information received over time (Chong & Druckman, 2007; 2010). More often, individuals are vulnerable to the vagaries of the timing and framing of communications because they do not engage in effortful processing of information.

In closing, it is useful to recall that the earliest framing effects in surveys were unintended. Survey researchers discovered that different phrasings of the question produced significant differences in the marginal distribution of opinion and sometimes in the correlations between opinions (Schuman & Presser, 1981). At the time, these framing effects were blamed on researchers more than on respondents. For example, the practice of using two-sided questions and bipolar scales is a response to the biases created by one-sided representations of issues such as acquiescence. When the NES changed the wording of issue questions to include opposing liberal and conservative positions, the ideological consistency of people's attitudes increased significantly (Nie, Verba, & Petrocik, 1976; Sullivan, Piereson, & Marcus, 1978). Attitudes can also be more reliably measured using batteries of items rather than single questions. These lessons are disconnected from recent discussions of framing, where competition substitutes for balanced items or attitude scales that present respondents with multiple considerations. In general, the same factors, including improvements in measurement, that increase the reliability of attitude reports should also reduce the prevalence of framing effects.

6. Conclusion

In everyday life, people assume that others are rational in the sense of having reasons for their actions that often derive from self-interest. This is an unstated assumption that guides human interaction. It is not always true, but it is sufficiently valid that people are able to explain and anticipate the behavior of others. Rationality therefore is the baseline against which behavior is measured.
Research in political psychology and behavior is similarly framed by assumptions of rationality. Rationality is the standard against which we evaluate individual decision-making. We assess the quality of public opinion and public choice by comparing it against a normative standard of how people ought to evaluate information, policies, and candidates. It is desirable that people not only have coherent beliefs and preferences, but that they hold reasonably accurate perceptions of the world, are open to new information, and are able to correctly connect means to their goals in light of these (reasonable) beliefs. Elster (1990) refers to rational choice as a normative theory first and an explanatory theory only when it assumes that people will abide by the normative standard of rationality.

Decision-making is assumed to be constrained by the economics of information: knowledge has value but is costly to obtain. Sometimes the costs are too high and cannot be justified given the expected benefit of obtaining the knowledge, such as the cost of gathering detailed information about candidates for election. Much knowledge is therefore discovered as a byproduct of other activities. People acquire it freely as part of their routine daily activities—for example, listening to the news while driving to work—and by relying on sources that share their interests and subsidize costs by analyzing and distilling information for them. If it is rational to limit one's attention to politics, it is also rational to restrict one's participation to relatively costless activities such as voting.

The rational choice explanation for voting, of course, is seen as the problem that falsified the theory (Green & Shapiro, 1994). The average individual derives negligible instrumental benefits from voting because any material policy differences between the parties are discounted by the almost-zero probability that one's vote will affect the outcome of the election (Downs, 1957). The logical deduction from this assumption is that if voters are concerned only about policy benefits, no one would ever bother to vote because the cost exceeds the benefit.

For some reason, this deduction has been regarded as significantly more problematic than the corollary deduction that voters also will have little or no incentive to gather information. Whereas no analysis of political attitudes and behavior questions the economics of information, the calculus of voting is dismissed as false. It is false in the sense that some people do indeed vote in large-scale elections, but some people also possess political knowledge, and it is not clear whether even the modest amounts of information held by the public is too much for a rational actor concerned only with the instrumental value of knowledge. The kinds of noninstrumental explanations (e.g., politics as recreational or expressive behavior) given for highly knowledgeable citizens have not undercut the economic theory of information in the same way that noninstrumental motives for voting have been seen as fatal to the theory of participation.

The most important lesson from the logic of voting is that citizens will place a low value on voting and even successful efforts to lower the costs of voting will have only marginal effects. As Schattschneider (1960) noted a half century ago: “The fact that something like forty million adult Americans are so unresponsive to the regime that they do not trouble to vote is the single most truly remarkable fact about it” (p. 99). What is more, “With some important exceptions, the most striking fact about the
phenomenon is that it seems to be voluntary” (p. 98). The only countries that experience extremely high levels of turnout are those that impose penalties for not voting, which confirms that the value of voting is perceptibly small among many voters.

While the benefits of voting are small, so are the costs. The low cost of voting explains why small manipulations of subjective perceptions, social pressures, and the salience of civic norms can push people into the voting booth. A simple knock on the door from a campaign worker reminding one of Election Day can make a significant difference in the decisions of many (Gerber & Green, 2000). Politicians have a much greater stake in the outcome of the election, and they will create incentives and reduce costs to encourage higher turnout rates. Field experimental work by Gerber, Green, and colleagues has established the impact of social pressure on voter turnout, and more fundamentally the social esteem that is attributed to a person who votes (Gerber, Green, & Larimer, 2008). These studies indicate that nonpolicy social motivations for voting can be both instrumental and self-interested.

If there is general acceptance that rational choice theory is the best explanation for the limited engagement of citizens, there is much less agreement about the rationality of decisions that citizens make when they pay so little attention to politics. I have interspersed my review with comments about the inconsistent application of normative standards in the study of political attitudes. Let me close by briefly bringing together these observations:

We encountered several instances in which the same findings were interpreted and evaluated differently depending on whether the focus of research was on framing, information processing, updating of beliefs, cues and heuristics, or the stability and consistency of preferences. What is virtuous and desirable in one context is a troubling feature of decision-making in another context. For example, consider the following competing claims:

- People exhibit weak attitudes and inconsistent preferences when they are moved by alternative framings of policy alternatives. Alternatively, people respond to information rationally by updating their beliefs and adjusting their political preferences. Is opinion change in response to information different from a framing effect? Some demonstrations of information effects look suspiciously like a framing effect, although information effects are judged positively, but framing effects are judged negatively because they suggest that people have incoherent preferences. In all likelihood, the psychological processes underlying attitude change in response to frames and information are the same. If we believe it is desirable for people to be affected by information, we should consider whether there are parallel conditions in which people ought to be influenced by framing.

- Party cues are helpful heuristics because they override framing effects and create consistent preferences on issues. Alternatively, partisan values motivate biased information processing that reduces the influence of relevant arguments. Depending on the context, relying on party cues to make decisions can be interpreted as either undermining or facilitating rational choice. For example, people exhibit more rationally consistent preferences across alternative frames.
when they rely on party or other endorsement cues to guide their choices. But in the study of motivated reasoning, partisans maintain stable opinions only because they irrationally ignore or discount contrary evidence and fail to update their beliefs.

- The most highly informed individuals are most likely to know their interests and use information optimally in connecting means to ends. Alternatively, the most highly informed are most likely to engage in motivated reasoning and to have distorted beliefs about the state of the world. Because motivated people also tend to be motivated reasoners, research on the effects of information should not simply assume that those who have more knowledge are more enlightened about political issues. The reasoning of highly informed individuals can fall considerably short of the standards of unbiased information processing. Knowledge can facilitate motivated reasoning because knowledgeable individuals have readily available reasons for accepting supportive evidence and rejecting contrary evidence. Therefore the most informed individuals may not hold optimal preferences if those preferences stem from false beliefs.

- Information changes policy preferences. Alternatively, more information does not change preferences because people have access to reliable heuristics. Generally, I think we prefer to see that substantive information makes a difference in how people decide. Yet there are two competing normative interpretations of these alternative conclusions: We are reassured when information matters because it proves that paying attention to politics can make a difference, even if many citizens know relatively little. However, if information makes no difference, this may also be a reassuring result if it indicates that people are able to make the equivalent of informed decisions with low effort and information.

All political decisions have to be explained and evaluated within the context in which they are made, as the procedures used to make decisions should be judged differently when the consequences are either large or small. A recurring theme here is there are no easy solutions to the low incentives to participate in mass electoral politics. Low motivation encourages limited information acquisition, peripheral processing of evidence, uncertain and unstable preferences, and motivated reasoning. Politics encourages the use of heuristics because the nature of interests are disputed and hard to discern, and the credibility of factual claims often cannot be judged independently of the partisan and ideological cues attached to them. Although there is evidence consistent with bounded rationality that increased incentives and motivation can moderate biases and errors in decision-making, an inherent and inescapable feature of mass democratic politics that limits individual participation is the diluted value of a single opinion or vote.

**Notes**

1. See Elster (1986); Kreps (1990); Little (1991); Rubinstein (1998); Shepsle & Bonchek (1996); also Redlawsk & Lau, chapter 5, this volume.
References


