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Session 1: Introduction to the issues

A Behavioral Background for Economic Policy*

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This paper reviews some fundamental insights from behavioral research and considers their implications for the design and implementation of economic policy. Of particular interest, is the tension that emerges between the empirical findings and the standard assumptions about human agents that typically guide the social sciences and policy. A behavioral perspective, it is argued, can help make sense of what might otherwise be seen as economic “puzzles” in the behavior of consumers with, among other things, potentially important consequences for policy design, the take-up of benefits programs, regulation, and consumer protection. Behaviorally informed and insightful policy, it is suggested, can lead to improved consumer welfare.

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Shafir: Behavioral background

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A Behavioral Background for Economic Policy

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I. Introduction

How policy ought to be designed and implemented largely depends on what people are like. What are their strengths and their weaknesses? What do they naturally do well, and where do they typically do things badly? What can they be taught, or be expected to abide by, and what goals must be achieved through other means, such as laws and regulations? Our answers to these questions will fundamentally influence where we choose to focus our consumer protection efforts, and what we try to achieve through them. This paper reviews recent behavioral research focusing on people's proclivities and limitations, with a focus on fundamental aspects of decision behavior where standard theoretical assumptions are likely to yield misleading expectations and, consequently, suggest potentially misguided policies. It argues that a view of decision behavior informed by empirical research rather than theoretical assumptions may help bring about more successful policy analysis and implementation.

Policy has typically been influenced by two perspectives. The first, based on the "rational agent" model, relies on analytic, a priori analyses of the making of rational decisions. It is the perspective typically promoted in business and policy schools, and it has come to dominate much of economics and the social sciences, as well as the formulation and conduct of policy. The second, "folk psychology" perspective, is driven by our intuitive understanding of the decisions that people make and of the factors that motivate and influence them. Part of what has made the normative view so appealing has been its general affinity with intuition: normative theory assumes that preferences are typically stable, and responsive to a variety of cost-benefit considerations, in a fashion that most naïve respondents, upon a moment's reflection, readily endorse. At the same time, people's intuitive views also play a role because we recognize that some normative assumptions – from infallible memory to pure self-interest – are too extreme, and we attempt to mold policy accordingly.

As it turns out, many of the empirical findings regarding human behavior tend to be non-normative and counterintuitive. Not only are people's decisions often inconsistent with normative desiderata; they violate simple intuitive expectations as well. A behaviorally more informed view, it is suggested below, can help enrich our understanding and analysis, and can help create better policy.

II. Two fundamental facts about behavior

Two fundamental facts are at the core of the tension between standard normative assumptions and actual behavior. The first is "construal," the notion that decision makers need to construe a representation of the relevant decision problem in their minds, and the other is the "power of the situation," the fact that such construal is heavily impacted by the context of decision. (For further discussion, see Shafir, 2007, from which parts of the discussion below are reproduced).

A major development in psychological research has been the appreciation of the role of “construal” in mental life. People do not produce direct responses to objective experience; rather, stimuli are mentally construed, interpreted, and understood (or misunderstood). Behavior is directed not towards actual states of the world, but towards mental representations of those states. And mental representations do not bear a one-to-one relationship to states of the world that they represent, nor do they always constitute faithful renditions of those states. As a result, well intentioned policy interventions can fail because of the way in which they are construed by the targeted group, perhaps as an indication of what the desired behavior might be, or “as an insulting and stigmatizing exercise in co-option and paternalism” (Ross and Nisbett, 1991). For example, people who are rewarded for a behavior that they would otherwise have found interesting and enjoyable can come to attribute their interest in the behavior to the reward and, consequently, come to view the behavior as inherently less attractive (Lepper, Greene, and Nisbett, 1973). Similarly, the imposition a fine may be interpreted as a price to be paid, thus increasing the frequency of undesirable behaviors that are thereby made to look like they are being paid for and thus rendered more acceptable (Gneezy & Rustichini, 2000.)

For another example, Cialdini (2001, 2003) discusses nuances in messages intended to produce socially beneficial conduct, which can easily backfire. There is an understandable tendency, Cialdini explains, to try to mobilize action against a problem by depicting it as regrettably frequent. Information campaigns proclaim that alcohol use is intolerably high, that adolescent suicide rates are alarming, or that rampant polluters are spoiling the environment. Although such claims may be true and well intentioned, they may miss something critically important: Within the intended injunctive statement “Many people are doing this undesirable thing” lurks the powerful and undercutting descriptive message “Many people are doing this.” And the latter message stands to imperil the appeal intended by the former.

This brings us to the other fundamental fact about human behavior, namely, that it is a function of both the person and of the situation (Ross & Nisbett, 1991). One of the most striking lessons of behavioral research has been the great power that context exerts relative to the presumed influence of beliefs, preferences, and personality traits, and, at the same time, a persistent tendency among people to underestimate this power of the context. Consider, for example, the now-classic Milgram obedience studies, where people proved willing to administer what they believed to be grave levels of electric shock to innocent subjects (Milgram, 1974), or Darley and Batson’s (1973) Good Samaritan study, which recruited students of a Theological Seminary to deliver a practice sermon on the parable of the Good Samaritan. While half the seminarians were ahead of schedule, others were led to believe they were running late. On their way to give the talk, all participants passed an ostensibly injured man slumped groaning in a doorway. The majority of those with time to spare stopped to help, whereas among those who were running late a mere 10% stopped, the remaining 90% simply stepping over the

victim and rushing along. Despite years of ethical training and continued contemplation of life's lofty goals, the contextual nuance of a minor time constraint proved decisive to these seminarians' decision to stop help a suffering man.

As it turns out, the pressures exerted by seemingly trivial situational factors can pose restraining forces hard to overcome, or can create inducing forces that can be harnessed to great effect. In contrast with massive interventions that often prove ineffectual, seemingly minor situational changes can have a large impact. Kurt Lewin, who coined the term "channel factors," (Lewin, 1951) suggested that certain behaviors can be facilitated by the opening up of a channel, whereas other behaviors can be blocked by the closing of a channel. An illustrative example of a channel factor was documented by Leventhal, Singer, and Jones (1965), whose subjects received persuasive communications about the risks of tetanus and the value of inoculation, and were then invited to go to the campus infirmary for a tetanus shot. Follow-up surveys showed that the communication was effective in changing beliefs and attitudes. Nonetheless, only 3% actually took the step of getting themselves inoculated, compared with 28% of those who received the same communication but, in addition, were given a map of the campus with the infirmary circled, and urged to decide on a particular time and route to get them there. Related findings have been reported in the utilization of public health services, where a variety of attitudinal and individual differences rarely predict who will show up at the clinic, whereas the mere distance of individuals from the clinic proves a strong predictor (Van Dort & Moos, 1976). Along these lines, Koehler and Poon (2005) argue that people's predictions of their future behavior overweight the strength of their current intentions, and underweight situational or contextual factors that influence the likelihood that those intentions will translate into action. This can generate systematically misguided plans among consumers, who, reassured by their good intentions, put themselves in situations which are powerful enough to make them act and choose contrary to what they had intended.

Of course, what policy makers ought to do in the face of such failures is by no means obvious. If there are easy ways to shelter people from systematically misguided or ill informed decisions, that seems worthy of consideration. On the other hand, most of us are rightly worried about interventions with our freedoms. Some also think that excessive regulation may lead to a lack of learning, or sophistication, or responsibility in a population that will grow increasingly complacent. Without needing to take a strong stance on this debate, we shall simply assume in what follows that a better understanding of behavior will allow for more nuanced solutions, whichever seem most appropriate.

III. Decisional conflict and its discontents

People's preferences are typically constructed, not merely revealed, during the decision making process, and the construction of preferences is influenced by

the nature and the context of decision. Consider, for example, the role of decisional conflict and its implications for the proliferation of alternatives. The classical view of decision making does not anticipate nor does it consider the implications of decisional conflict. Each option according to the standard view is assigned a subjective value, or “utility,” and the person then proceeds to choose the option assigned the highest utility. As a consequence of this compelling account, it is universally assumed that offering more alternatives is a good thing, since the more options there are, the more likely is the consumer to find one that satisfies her utility function.

In contrast, because they are typically constructed in the context of decision, preferences can be hard to determine. People tend to look for a good reason, a compelling rationale, for choosing one option over another. At times, compelling rationales are easy to articulate, whereas other times no easy rationale presents itself, rendering the conflict between options hard to resolve. Such conflict can be aversive and can lead people to postpone the decision or to select a “default” option. The proclivity to subdue decisional conflict, rather than to maximize utility, can generate preference patterns that are fundamentally different from those predicted by normative accounts based on value maximization.

For example, decisional conflict has been shown to yield a greater tendency to search for alternatives when better options are available but the decision is hard, than when relatively inferior options are available and the decision is easy (Tversky & Shafir 1992). Rather than a plus, a proliferation of alternatives can dissuade consumers from making what may otherwise amount to a favorable choice. In particular, as choices become difficult, consumers naturally tend to defer decisions, often indefinitely (Iyengar & Lepper, 2000; Shafir, Simonson, and Tversky, 1993; Tversky & Shafir, 1992). In one study, expert physicians had to decide about medication for a patient with osteoarthritis. These physicians were more likely to decline prescribing a new medication when they had to choose between two new medications than when only one new medication was available (Redelmeier and Shafir, 1995). Apparently, the difficulty in deciding between the two medications led some physicians to recommend not starting either. A similar pattern was documented with shoppers in an upscale grocery store, where tasting booths offered the opportunity to taste 6 different jams in one condition, or any of 24 jams in the second. Of those who stopped to taste, 30% proceeded to purchase a jam in the 6-jams condition, whereas only 3% purchased a jam in the 24-jam condition (Iyengar and Lepper, 2000).

In a related manipulation that was part of a larger study discussed further below, Bertrand, Karlan, Mullainathan, Shafir, & Zinman (2005) conducted a field experiment with a local lender in South Africa to assess the relative importance of various subtle psychological manipulations in the decision to take-up a loan offer. Clients were sent letters offering short-term loans at randomly assigned interest rates. Various psychological features on the offer letter were also independently randomized, one of which was the number of sample loans displayed: the offer letters displayed a table with either one or four examples of

loan sizes and terms, along with respective monthly repayments. In contrast with standard economic prediction and in line with conflict-based predictions, higher take-up was observed under the simpler one-example description than under the multiple-example version. The magnitude of this effect was large: the simple (one example) description of the offer had the same positive effect on take-up as dropping the monthly interest on these loans by more than 2 percentage points. In a related finding, Iyengar, Jiang, and Huberman (2004) show that employees' participation in 401(k) (retirement savings) plans drop as the number of fund options proposed by their employer increases.

Adherence to defaults or the status quo has also been observed in "naturally occurring experiments." One was in the context of insurance decisions, when New Jersey and Pennsylvania both introduced the option of a limited right to sue, entitling automobile drivers to lower insurance rates. The two states differed in what was offered as the default option: New Jersey motorists needed to acquire the full right to sue (transaction costs were minimal: a signature), whereas in Pennsylvania, the full right to sue was the default, which could then be forfeited in favor of the limited alternative. Whereas only about 20% of New Jersey drivers chose to acquire the full right to sue, approximately 75% of Pennsylvania drivers chose to retain it. The difference in adoption rates had financial repercussions estimated at nearly \$200 million (Johnson, Hershey, Meszaros, & Kunreuther, 1993). A second naturally occurring "experiment" was recently observed in Europeans' decisions regarding being potential organ donors (Johnson & Goldstein, 2003). In some European nations drivers are by default organ donors unless they elect not to be, whereas in other, comparable European nations they are, by default, not donors unless they choose to be. Observed rates of organ donors are almost 98% in the former nations and about 15% in the latter, a remarkable difference given the low transaction costs and the significance of the decision.

Whereas the addition of options can generate conflict thereby increasing the tendency to refrain from making any decision, options can sometimes be manipulated to lower conflict and increase the likelihood of making a particular choice. *Asymmetric dominance* refers to the fact that in a choice between options A and B, a third option, A', can be added that is clearly inferior to A (but not to B), thereby increasing the choice likelihood of A (Huber, Payne, & Puto, 1982). For example, a choice between \$6 and an elegant pen presents some conflict for participants. But when a less attractive pen is added to the choice set, the superior pen clearly dominates the inferior pen, thus providing a rationale for choosing the elegant alternative, and increasing the percentage of those choosing the elegant pen over the cash. Along related lines, a *compromise effect* has been observed wherein the addition of a third, extreme option makes a previously available option appear as a reasonable compromise, thus increasing its popularity (Simonson, 1989; Simonson & Tversky, 1992).

The point behind these choice inconsistencies is that minor contextual changes can alter preferences in ways that are unlikely to correspond to outcome utilities.

Of course, the fact that consumers are influenced by conflict and context need not immediately imply that choices ought to be taken away, or even that the number of available alternatives ought to be restricted. It does suggest, however, that a proliferation of alternatives, which is where many consumer markets are steadfastly heading, needs to be addressed and handled with care, rather than be considered an obvious advantage. It also suggests that the determination of a default outcome, for example, rather than a mere formality that can be effortlessly changed, needs to be chosen thoughtfully, since it acquires a privileged status. In effect, when proliferating options or the status quo are inappropriately handled (intentionally or not) this can decrease consumers' welfare in ways that normatively would be, at best, unanticipated.

Several other behavioral factors can influence the outcome of consumer decisions in ways that standard analysis is likely to miss. People often are weak at predicting their future tastes or at learning from past experience (Kahneman, 1994), and their choices can be influenced by anticipated regret (Bell 1982), by costs already incurred (Arkes & Blumer 1985, Gourville & Soman 1998), and by effects of sequencing and of temporal separation, where high discount rates for future as compared to present outcomes can yield dynamically inconsistent preferences (Loewenstein & Elster 1992; Loewenstein & Thaler, 1992). Contrary to standard assumptions, the psychological carriers of value are gains and losses, rather than anticipated final states of wealth, and attitudes towards risk tend to shift from risk aversion in the face of gains to risk seeking for what appear as losses (Kahneman & Tversky, 1979). Also, people are loss averse (the loss associated with giving up a good is substantially greater than the utility associated with obtaining it; Tversky & Kahneman, 1991). This, in turn, leads to a general reluctance to depart from the status quo, because things that need to be renounced are valued more highly than comparable benefits (Knetsch, 1989, Samuelson & Zeckhauser, 1988).

In their intuitive mental accounting schemes, people find it difficult to evaluate items in a consistent manner through time (Shafir & Thaler, 2006), and they compartmentalize wealth and spending into distinct budget categories, such as savings, rent, and entertainment, and into separate mental accounts, such as current income, assets, and future income (Thaler, 1985; 1992). Contrary to standard fungibility assumptions, people then exhibit differential propensities to spend from their various accounts, which yields consumption patterns that are overly dependent on current income and sensitive to labels with, for example, people saving and borrowing (often at a higher interest rate) at the same time (Ausubel, 1991).

What is common to many of these patterns is the overly local and context dependent nature of consumer choices. Standard thinking typically assumes robust preferences, largely impervious to minor contextual nuances. In contrast, people's choices often result from a heavily context-dependent deliberation, with the option chosen not infrequently being the one that would have been foregone

had context differed by just a little, and often in rather trivial ways. What this means is that people's choices are often at the mercy of chance forces as well as of conscious manipulation, both of which may be worth protecting against. In what follows, we briefly consider some other facts of human perception and behavior worth thinking about as one envisions policies with an eye towards consumer protection.

IV. Some other relevant behavioral facts

Identity

Recent research has highlighted the relevance of identity salience for people's decisions (see, e.g., Benjamin, Choi, & Strickland, 2006; LeBoeuf & Shafir, 2006, and references therein). People derive their identity in large part from social groups to which they belong (Turner, 1987). A person may alternate among different identities - she might think of herself primarily as a mother when in the company of her children, but see herself as a professional while at work. The list of possible identities is extensive, with some identities, like "mother," conjuring up strikingly different values and priorities than others, like "CEO".

In one remarkable study, Asian-American women (whose two salient identities, Asian and woman, entail conflicting expectations regarding mathematical ability) scored higher on a math test after completing a brief survey that evoked their ethnicity than did those – randomly assigned -- who first completed a survey that evoked gender (Shih, Pittinsky, and Ambady, 1999). In fact, identity-salience has been shown to affect various behaviors, including resistance to persuasion (Kelley 1955), reactions to advertisements (Forehand, Deshpandé, and Reed, 2002), voting (Berger et al., 2006), the rating of consumer products (Reed 2004), as well as consumer decisions. In one study, college students whose "academic" identity had been made salient were likely to opt for more academic periodicals (e.g., *The Economist*) than were those whose "socialite" identities had been triggered. Similarly, Chinese-American citizens whose American identity was evoked adopted more stereotypically American preferences (e.g., for individuality and uniqueness over collectivism and conformity) compared to when their Chinese identities had been triggered (LeBoeuf, 2002; LeBoeuf & Shafir, 2006).

Evoked identities tend to activate concepts and priorities that are associated with particular tastes and values (cf. Bargh et al. 1996; Higgins, Rholes, and Jones, 1977). Consequently, preference tends to align with currently-salient identities, yielding predictable tension anytime there is a mismatch between the identity that does the choosing and the one likely to do the consuming, as when a parent/CEO might happily accept a professional weekend invitation while at work only to regret having to absent herself from the children once back at home.

Similar phenomena may be observed when stereotypes that involve perceived competence and intellectual or professional ability interfere with consumers'

confidence and willingness to engage in various transactions. People targeted by negative stereotypes are more likely to mistrust other people's motives (Crocker, Voelkl, Testa, & Major, 1991; see also Cohen, Steele, & Ross, 1999), may expect to be socially rejected on the basis of the group to which they belong (Mendoza-Denton, Downey, Purdie, Davis, & Pietr-zak, 2002; Shelton & Richeson, 2005), and may experience stereotype threat -- the fear of confirming a negative stereotype about their own group (Aronson, 2002; Steele, 1997; Walton & Cohen, 2007). Adkins & Ozanne (2005) discuss the impact of a low literacy identity on consumers' behavior, and argue that when low literacy consumers accept the low literacy stigma, they perceive market interactions as more risky, engage in less extended problem solving, limit their social exposure, and experience greater stress. In one study, low SES students performed worse than high SES students when the test was presented as a measure of intellectual ability, but performance was comparable when the test was not seen as pertaining to intellectual measures (Croizet & Claire, 1998).

The foregoing discussion suggests possibilities that would not typically form part of the policy analyst's repertoire. For example, the potential to affect consumer empowerment: when offering programs intended for lower SES participants (who are known stereotypically to be seen as less capable), the very fact that these are presented as explicitly intended for welfare recipients or the working poor may trigger particular identities in the intended recipients that are less responsive to the offered program than if more conducive, or capable, identities, such as "head of family," or "working taxpayer," had been used instead.

What is suggested by the behavioral literature is that options available to consumers should be carefully crafted and communicated. Overly complex arrangements, extensive verification procedures, information that's hard to find, language at an inappropriate level, are all not just hassles to be grappled with and overcome, but can become significant factors in the eventual renunciation or misuse of otherwise beneficial alternatives. A recent study of American food-stamp applications (by the organization America's Second Harvest) found dramatic hassle costs. State applications reach up to 36 pages and often include incomprehensible questions. The application process often cues negative identities and can induce guilt and alienation. People are finger printed (to verify that they are not double-dipping in other locations), they encounter perjury threats, they undergo home visits to verify that they are "really poor," and they are often condescended to. Such treatment is likely to reinforce the alienation and hopelessness that often discourage this population. Hassle factors such as these may appear negligible in a standard cost-benefit analyses, but they are the kind of relatively minor barriers whose removal may open significant channels for improved welfare.

Time

People's discount rates tend to be unstable and influenced by factors, such as

the size of the good and its temporal distance, that are not subsumed under standard normative analyses (for reviews, see Frederick, Loewenstein, & Donoghue, 2002; Loewenstein & Thaler, 1989). When asked what amount of money in the future would be comparable to receiving a specified amount today, people typically require about \$60 in one year to match \$15 now, but they are satisfied with \$4000 in a year instead of \$3000 today. This implies discount rates of 300% in the first case and of 33% in the second. Furthermore, because discount functions are non-exponential, a one-day delay has greater impact when that day is near than when it is far. Thus, many who would prefer an apple today over two apples tomorrow, would nonetheless prefer two apples in 31 days over one apple in 30 days, which can lead to dynamically inconsistent preferences (Thaler, 1981).

Excessive present discounting, also known as myopia, is often observed in people's attitudes towards distant future outcomes (see e.g., Elster, 2000; Elster & Loewenstein, 1992). Loewenstein and Thaler (1989), for example discuss an intervention in West Virginia in which the high-school dropout rate was reduced by one-third when potential dropouts were threatened with the loss of their driving privileges. This immediate threat had a significantly greater impact than the far more serious but more distant socio-economic implications of failing to graduate from high school. In a similar vein, physicians reportedly lament the fact that warning about the risk of skin cancer from excessive sun exposure is less effective than warning about sun exposure's tendency to cause acne. In fact, "quit smoking" campaigns have begun to stress the immediate benefits of quitting (quick reduction in chances of heart attack, improved ability to taste foods within two days, and so on) more prominently than the substantial long-term benefits (American Lung Association, 2003). Similar reasoning applies in the context of medical self-examinations and the promotion of safe-sex practices, where immediate discomfort or gratification can overwhelm much greater, but temporally distant, considerations (see also Schelling 1980, 1984).

The tendency to delay decision in situations of conflict, as described earlier, can contribute to apparent procrastination, since, in those situations, things tend not to get done not because the person has chosen not to do them, but because the person has chosen not to do them *now*. To illustrate this point, Tversky & Shafir (1992) offered students \$5 for answering and returning a long questionnaire by a given date. One group was given 5 days to complete the questionnaire, a second group was given 3 weeks, and a third group was given no definite deadline. The corresponding rates of return were 60%, 42%, and 25%. Thus, the more time people had to complete the task, the less likely they were to do it. Just as the addition of options enhances the tendency to defer decision, so can the addition of time enhance the tendency to delay action.

This form of procrastination has non-trivial implications for what would otherwise be considered generous time periods during which to send no-penalty payments, return unwanted purchases, apply for rebates, or sign up for a variety of

entitlements. If when provided longer periods people are actually less likely to follow up, then the impact of these various offers, whether intentional or not, may benefit from a reassessment. In fact, temporal effects can have far reaching implications for thinking about policy. Be it access to retirement funds, encouragement to save, or exhortations to diet, or to practice safe sex, inconsistent and high discount rates have important implications, which are universally observed and have been extensively discussed. They can lead to puzzling self-control arrangements, ranging from negative interest savings devices and self-restraining services, to clever alarm clocks, and cooling periods.

Knowledge & attention

A standard assumption is that consumers are attentive and knowledgeable, and typically able to avail themselves of important information. Instead, there appears to be often a rampant ignorance of options, program rules, benefits, and opportunities, and not only among the poor or the uneducated. Surveys show that fewer than one-fifth of investors (in stocks, bonds, funds, or other securities) can be considered “financially literate” (Alexander, Jones, & Nigro, 1998), and similar findings describe the understanding shown by pension plan (mostly 401(k)) participants (Schultz, 1995). Indeed, even older beneficiaries often do not know what kind of pension they are set to receive, or what mix of stocks and bonds they are invested in.

Cognitive load, the amount of information currently attended to, has been shown to affect performance in a great variety of tasks. To the extent that consumers find themselves in situations that are unfamiliar, distracting, tense, or even stigmatizing (say, applying for a loan), all of which tend to consume cognitive resources, less resources will remain available to process the information that is relevant to the decision at hand. As a result, decisions may become even more dependent on situational cues and irrelevant considerations, as is observed, for example, in research on “low literate” consumers, who purportedly experience difficulties with effort versus accuracy trade-offs, show overdependence on peripheral cues in product advertising and packaging, and show systematic withdrawal from market interactions (Adkins & Ozanne, 2005, and references therein.)

Emotions

Much of literature and the arts are devoted to the eternal tension between passion and reason, and to the influence that heightened states of arousal can have on actions that conflict with long-term interests. Also at a more mundane level, emotional reactions, often undetected, can influence decision making. Indeed, transient moods influence choice and judgment in ways that neither rationality assumptions nor intuition predict (Zajonc, 1980; Zajonc & Markus, 1982). Negative moods, for example, can increase the perceived likelihood of

bad outcomes and the frequency of undesirable events (such as homicides) and correlate with decrease judged life satisfaction, while positive moods act in the opposite direction (Johnson & Tversky 1983, Schwarz & Clore 1983). Those in positive moods, furthermore, often engage in attempts at “mood maintenance,” for example, through greater risk-aversion (Isen & Geva, 1987; Isen, Nygren, & Ashby, 1988). Raghunathan and Pham (1999) have suggested that sad individuals tend to be more risk prone, whereas anxious individuals are more risk averse. They attribute these tendencies to the notion that anxiety and sadness convey different information to the decision-maker and prime different goals, with anxiety promoting an implicit goal of uncertainty reduction, and sadness an implicit goal of reward achievement.

An “affect heuristic” has been proposed, according to which spontaneous and effortless judgments are often made through quick consultation of positive and negative affective feelings (Finucane et al. 2000, Slovic et al. 2002). The role of emotional reactions can be witnessed, for example, in the inverse relationship commonly observed between perceived risks and benefits, such that activities that are thought by people to have great benefits are seen by those same people as presenting few risks, and vice versa. Typical of a heuristic outcome, this unlikely inverse relationship, purportedly mediated by affect, is strengthened under time pressure (Finucane et al. 2000, Fischhoff et al. 1978). In a similar vein, both the perceived frequency of common events and the perceived likelihood of risks such as nuclear power are related to the amount of dread that they arouse (Fischhoff et al. 1978; Lichtenstein et al. 1978).

Emotionally evaluative responses can have a non-negligible effect on decision. For example, people are apparently willing to pay more to insure, and are more likely to seek compensation for, an item that is emotionally meaningful than for an emotionally neutral but equally valuable item (Hsee & Kunreuther 2000). More generally, Loewenstein, Weber, Hsee, & Welch (2001) suggest that “anticipatory emotions” (e.g., emotional reactions to potential outcomes in a risky situation) can influence the cognitive appraisal of decision situations and can impact choice. Shiv & Fedorikhin (1999) consider situations in which consumers are influenced by automatically evoked affect as well as by more controlled cognitions, and present findings suggesting that when processing resources are limited, spontaneous affective reactions have a greater impact relative to cognition, compared to when the availability of processing resources is high.

Transient emotions, often triggered by local contextual factors, can thus influence the construction of preference. Grocery shopping while very hungry, for example, is likely to lead to purchases that would not have been made under normal circumstances (cf. Loewenstein, 1996). And even when people are aware of being in the grip of a transient emotion, they typically fail to “correct” adequately. In one study, respondents were asked to predict whether they would be more bothered by thirst or by hunger if trapped without food and water. Some were asked before exercising (when they were not especially thirsty) whereas

others were approached immediately after exercising (and, thus, were thirsty). Post-exercise, 92% indicated that they would be more troubled by thirst than by hunger, whereas pre-exercise only 61% did (Van Boven & Loewenstein, 2003). In general, people tend to underestimate the degree to which various contextual changes will impact their sentiments and preferences (e.g., Van Boven, Dunning, & Loewenstein, 2000; Gilbert, Pinel, Wilson, Blumberg, & Wheatley, 1998). This contributes to what look like myopic decisions, as people honor present inclinations not appreciating the extent to which they may be due to factors that may soon change.

Automaticity and priming

A variety of priming effects and automatic processes further contribute to consumer decisions often being malleable and disconnected from eventual consumption. At one extreme, are phenomena such as mere exposure, where mere repeated exposure to objects, say, through publicity, even subliminally, can increase their liking (Bornstein, 1989; Zajonc, 1968). Then there is priming, wherein certain attributes are made to play a greater role in a person's decisions. In a classic priming study, participants took a test involving "word perception," in which either creativity, reliability, or a neutral topic was primed. Participants then completed an ostensibly unrelated "product impression" survey that gauged their opinions of various cameras. Cameras advertised for their creative potential were rated more attractive by those primed for creativity than by those exposed to words related to reliability or a neutral topic (Bettman & Sujan, 1987). Priming can thus influence preferences by making dimensions salient that would otherwise have been considered less important. Because of the transitory nature of priming effects, consumption is often likely to occur long after such criterion salience has dissipated, leaving consumers in different states of mind during product consumption as compared to acquisition (see Mandel & Johnson, 2002; Verplanken & Holland, 2002).

Automatic and imperceptible reactions can also influence decision so that, for example, diners lightly touched on the shoulder by their waitress tip more than those who were not touched (Crusco & Wetzel, 1984; Schwarz, 1990, Schwarz & Clore, 1983.) In the aforementioned field experiment conducted in South Africa, intended to assess the relative importance of subtle psychological features compared to price in the decision to take-up a loan (Bertrand, Karlan, Mullainathan, Shafir, & Zinman, 2005), some 57,000 incumbent clients of a lender were sent letters offering large, short-term loans at randomly chosen interest rates. Consistent with standard economics, those offered higher rates were less likely to take up a loan than those with access to lower rates. In addition, various "psychological" features on the offer letter, which did not affect offer terms or economic content, were also independently randomized. Among them was the presence or absence of a smiling woman's picture in the bottom corner of the offer letters. For the men in the sample, the presence of that

picture had the same positive effect on take-up as dropping the monthly interest on the loans by 4.5 percentage points!

Even when presented with hypothetical questions, respondents are unable to prevent biasing effects on their behavior, particularly when the questions appear relevant (Fitzsimons & Shiv, 2001). Thus, gauging attitudes toward consumer products can increase attitude accessibility and impact consumer behavior (Chapman, 2001; Fazio, Powell, & Williams, 1989). For example, Morwitz, Johnson, & Schmittlein (1993) found that merely asking consumers whether they intended to purchase an automobile or a personal computer increased their subsequent purchase rate. Follow-up interviews suggest that the effects of hypothetical questions on choice occur beyond awareness and, as a result, are quite difficult to counteract.

A rich and fascinating literature documents the many ways that mere exposure, simple priming, subliminal perception, and unconscious inferences alter judgment and choice. It is not clear, of course, that all this can be “stopped.” But serious awareness of these effects, contrary to the impression that people are fully in control of their exposure and choices, is likely to help create contexts that are more respectful of the true nature of human – as opposed to “rational” – consumers.

V. Concluding remarks

People do not respond directly to objective facts; rather, stimuli are mentally construed, interpreted, and understood (or misunderstood). Critical for the success and effectiveness of policy interventions is the need to devise contexts in ways that do not merely provide all the options and convey the correct information, but that also are able to trigger the construal most likely to generate the appropriate interpretation and response. Human behavior is the outcome of a system – the human information processing system – that is idiosyncratic and complex. While many of us endorse the normative principles of the classical theory upon reflection, these do not adequately describe the ways in which we, in fact, go about making decisions. As the renowned economist John Maurice Clark said almost 100 years ago, “The economist may attempt to ignore psychology, but it is sheer impossibility for him to ignore human nature... If the economist borrows his conception of man from the psychologist, his constructive work may have some chance of remaining purely economic in character. But if he does not, he will not thereby avoid psychology. Rather, he will force himself to make his own, and it will be bad psychology.” Indeed, examples of “bad psychology” abound (for related discussion see, Bertrand, Mullainathan, & Shafir, 2006).

Theory makes highly plausible and intuitively compelling assumptions that simply happen not to be good descriptions of how people behave. Assumptions about novelty and variety seeking stand in contrast with the status quo bias and the reluctance to decide in the face of a proliferation of alternatives; assumptions

about planning and self-control ignore the actual power of contextual factors, ranging from strong temptations to the impact of imperceptible nuances; and minor psychological obstacles and channel factors have consequences that are substantially greater than any plausible cost-benefit analysis would ever imply.

Because preferences can be malleable, confused, and misguided, consumers can benefit from some attention and help. One form in which these may be delivered is through laws and protections appropriately structured to defend against others' unwelcome influences, which may take any of a number of forms, including misleading advertising, hidden clauses, pressure tactics, and so on. Another, perhaps less obvious form of help, could consist of clever arrangements structured to combat consumers' own weaknesses, such as bad planning, myopia, procrastination, overconfidence, forgetfulness, distraction, peer pressure, confusion, susceptibility to framing effects, misguided beliefs, and other such very human traits. Much can be attained through intelligent and informed design of decision contexts that provide the right channel factors, induce desirable behaviors, restrain less constructive tendencies, and thus ameliorate decision-making. Examples of such designs include seatbelt laws, which provide a simple safety measure that is habitual and largely unquestioned; organ donor defaults, wherein drivers default into being an organ donor when they do not elect to opt out (an arguably superior alternative to that generated by an opt-in arrangement); per-unit pricing, which allows comparisons that most people would not conduct intuitively; and direct deposit and retirement savings schemes, which are an effective way to circumvent the mental accounting impulse to spend freely the cash found in one's pocket or checking account. Standard restraints on premature access to retirement savings are another example, whereas the attempt to limit such restraints (currently under way in the US) is an example of the failure to appreciate human fallibility and its potentially dire consequences.

As it turns out, a behaviorally informed perspective may also need to reconsider what ought to count as ethical, and perhaps legal. According to the standard view, people are well informed and in control. Enticements that ought to be avoided, if harmful enough will be avoided. Information that is hard to find or to understand, if deemed important enough will be located and deciphered. Instead, behavioral research provides ample illustration that even minor obstacles on the way to highly valued goals can become misleading and decisive. (For more on this, see Bertrand et al., 2006.)

Consider, in this vein, the credit cards market, which has benefited from deregulation coupled with technology enabling the almost real-time tracking of personal financial information. A recent report by FRONTLINE® and The New York Times documents some of the techniques used by the credit card industry to get consumers to take on more debt. Revenues come from tactics that include hidden default terms, penalty fees and higher rates that can be triggered by just a single lapse -- a payment that arrives even hours late, a charge that exceeds the credit line by a few dollars, or a loan from a separate creditor (such as a car

dealer) which renders the cardholder "overextended." "[Banks are] raising interest rates, adding new fees, making the due date for your payment a holiday or a Sunday on the hopes that maybe you'll trip up and get a payment in late." The average American family now owes roughly \$8,000 on its credit cards and, not surprisingly, the flurry of unexpected fees and rate hikes often comes just when consumers can least afford them.

Naturally, such tactics are not limited to the credit card industry. Many bank fees, according to *Consumer Reports*, are "no-see-ums embedded in fine print or collected so seamlessly that consumers don't realize they've paid them until long after the fact". Application and re-certification forms can be extremely unfriendly and complicated. As reported by ACORN (Association of Community Organizations for Reform Now), "Much of the competition between lenders in the subprime industry is not based on the rates or terms offered by the different lenders, but on which lender can reach and "hook" the borrower first. Predatory lenders employ a sophisticated combination of "high tech" and "high touch" methods."

Regulating such markets, of course, is a non-trivial proposition. On the other hand, some regulation seems attainable once human frailty is recognized. Consider, for example, the Federal Trade Commission's Funeral Rule, which lists a number of procedures every funeral home must follow, and services it must explicitly describe and provide. "When a loved one dies," explains the "Consumer Rights under the Funeral Rule" brochure, "grieving family members and friends often are confronted with dozens of decisions about the funeral – all of which must be made quickly and often under great emotional duress."

Systematic human frailty, as it turns out, occurs not only when loved ones die. Recognition of everyday quirks, limitations, and just plain (and in many ways remarkably impressive) human nature suggests we ought seriously to consider ways to attain a healthy balance between libertarianism and paternalism (Susnstein & Thaler, 2003), or between free market competition and consumer protection (see, e.g., Gans, 2005; Sylvan, 2004). A more nuanced understanding of people's strengths and limitations in the contexts where they need to succeed has the potential to yield more effective policies and increase human welfare.

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