

Cognitive Critique



THE RATIONALITY OF PREFERENCE CONSTRUCTION (AND THE IRRATIONALITY OF RATIONAL CHOICE)

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“The meaning of preference . . . may be illustrated by this well-known exchange among three baseball umpires. *I call them as I see them*, said the first. *I call them as they are*, claimed the second. The third disagreed, *[T]hey ain't nothing till I call them*, (Slovic 1995, p. 34).”

ABSTRACT

Economics, and law and economics, assume that preferences are fixed and not constructed. The assumption is unrealistic, they acknowledge, but is nevertheless useful for generating accurate predictions. They assume as well that having fixed preferences with the other attributes accorded to them under rational choice theory is normatively desirable. Both these assumptions are false. It is critical in many cases to acknowledge constructed preferences; moreover, such preferences are often not normatively undesirable. More can and should be done to develop a more nuanced conception of preferences; such an account should take into account the extent to which the *discovery*' metaphor underlying the idea of fixed preferences distracts from the needed inquiries into how preferences are

created — the importance of the process, and the role of narratives and classification, While the task is difficult, payoffs potentially include better approaches to difficult public policy problems.

INTRODUCTION

Economists traditionally assume that preferences are fixed (Von Weizsäcker 2005). But, as a recent paper noted, “[t]his assumption has always been disputed and, indeed, in the social sciences outside of neoclassical economics the assumption has never been accepted by anyone. Modern economics.... has raised additional doubts about the realism of this behavioural assumption.”(Von Weizsäcker 2005, p. 2). Indeed, preference construction is a hot topic in many fields, the behavioral sciences generally and psychology most significantly (Lichtenstein and Slovic 2006). And it has also long been an important topic in philosophy...The manner by which preferences are constructed is necessarily of significant interest for law (Sunstein 2000). Consider the extensive resources devoted to state-sponsored or state-certified education as well as public-awareness and public-interest campaigns. Consider, too, the many instances in which the public (or some subset’s) preference supports action. That preferences are constructed suggests that the process by which they are elicited matters — people do not simply have preferences that are invariant to the mode of elicitation, a point made forcefully by Paul Slovic (1995) and others, and borne out by extensive research. One finding of obvious importance: Group deliberation, as occurs when juries make decisions, can yield different results than individual deliberation (Schkade et al. 2007).

It is therefore not surprising that law and economics scholars, especially those within behavioral law and economics (Korobkin 1998), increasingly acknowledge that preferences are often constructed, consider what legal contexts preference construction might matter in, and how it might matter (Sunstein 2000; Thaler and Sunstein 2008). In particular, law and economics scholars are increasingly noting that law itself is a mechanism by which preferences are constructed (Sunstein 1993; Thaler and Sunstein 2008).

For the most part, the critique focuses on the economists’ *positive* claim that preferences are fixed. But the economists’ claim is not just positive — it is also normative. Preferences that are not as economists posit are not infrequently, and perhaps even typically, characterized as *irrational*. Behavioral law and economics schol-

ars sympathetic to constructed preferences often implicitly accept this normative position¹, especially insofar as they characterize some preference construction as anomalous or a mistake. Consider some of the paradigmatic examples, such as one in which a treatment is alternately presented as curing 80% of people or as failing to cure 20% of people; Smith favors the first treatment over the (identical) second treatment (Korobkin and Ulen 2000). Here, *irrationality* seems like a fair assessment. Indeed, Smith may very well have more difficulties in life than will his doppelganger, who understands the equivalence of these two options. (That being said, an argument can be made for the value of having a more optimistic perspective. I discuss this possibility in the next Section.) But preference construction is *not* simply a caricatured and more general version of this type of framing, where two identical options are assessed differently (Hill 2004). This type of mistake, however common, is fairly characterized as irrational; preference construction more broadly is not.

My article argues that preference construction, properly understood, is *not* normatively undesirable. Having fixed preferences means having a complete and stable rank ordering of what we want that dictates our choices. But we often do not have such an ordering² — and, I will argue, rationally so. I am not the first to make the argument that the rational choice model's normative claims are not well grounded (Rabin 1998; Rieskamp et al. 2006; Chapman 2003; Mellers et al. 1998).³ But much of the work thus far simply notes that there is nothing to support the model's normative claims, especially given its descriptive failings: the model is not true and there is no reason to suppose it would be. I argue instead for an alternative model, a process-based model of preference construction. Such a model can potentially explain some important anomalies that violate the traditional model.

My account of preference construction is very much in the spirit of *reason-based choice*, as articulated by Eldar Shafir, Itamar Simonson and Amos Tversky (Shafir et al. 2000), and “categorical reason,” as articulated by Bruce Chapman (Chapman 2003), as well as Itzhak Gilboa and David Schmeidler's *case-based decision theory* (Gilboa and Schmeidler 2004)⁴ and Daniel Keys and Barry Schwartz's theory of *leaky rationality*. Keys's and Schwartz's theory rejects rationality defined *formally* in favor of a broader account that “takes subjective experience seriously, considers both direct and indirect consequences of decisions, and considers the effects

of decisions on others” (Keys and Schwartz 2007, p. 162). More broadly, my account is in the spirit of Herbert Simon’s attempts to shift economics from “substantive rationality” to “procedural rationality” (Simon 1979).⁵ Thus far, there has not been much elaboration of the elements of a process-based account of preferences. I hope in this article to make the case for such an account’s potential explanatory power, as well as its tractability; I hope as well to suggest some unifying themes for further exploration of the processes at issue. One such theme is that of conservation of cognitive resources or, more colloquially, bang for the buck. The complete and stable rank orderings hypothesized by the traditional model, even if they were possible, would entail a significant and unnecessary expenditure of cognitive resources.

I argue that rather than having a complete rank ordering, we have ways of making choices. We construct *narratives*, using evaluative criteria against a backdrop of wants, desires and inclinations, some of which we rank order and some of which we do not. The evaluative criteria embed a consideration of transaction costs: critically, where a decision is not very consequential, a formulaic decision rule that permits a ready choice among roughly comparable alternatives may serve our purposes better than a more considered alternative-by-alternative assessment. Our wants, desires and inclinations are for both traditional objects of choice and higher order values and desires; they are both previously constructed and constructed and elicited in the choice-making process. Our preferences are arrayed on a continuum. At one end, preferences are quite narratively independent, often involving unmediated drives and desires with very singular realizations, such as drinking liquid when one is thirsty;⁶ at the other end, preferences are quite narratively dependent, often involving instantiations of higher-order preferences, such as choosing a particular career for its prestige, income, and other features.

This account of preference construction matters for legal scholarship in three ways. First, it helps make the intuitive case that preference construction is not a simple mistake, heuristic, or bias that can be viewed as exceptional, a deviation from the more general default of the neoclassical model. To the contrary, preference construction is a rational way to conserve cognitive resources; preferences are made determinate (only?) as needed. None of this is to say, of course, that we can never treat preferences as fixed; as I argued above, many preferences are fixed enough. It is a safe bet, for

instance, that most people will do a great deal to avoid going to jail. Indeed, an important part of the preference construction research agenda is to systematically determine when preference construction *does not* matter, or does not matter much.

Second, it suggests some unifying principles to be considered in developing a process-based alternative to the present model of preferences, and consistent with those principles, some possible determinants of preferences. Critically, my account looks to cost-minimization: of a piece with our narratives are decision rules that aim importantly to minimize costs not only of decision-making but also of informing ourselves about, and categorizing, ourselves and the world. While my work in this regard is necessarily very preliminary, I hope that it can suggest useful ways to explore the determinants of preferences, complementing and making use of the extensive work now being done by behavioral scientists in the area. Consider in this regard my observations in the preceding paragraphs about narratively independent preferences' resistance to change relative to narratively dependent preferences.

Third, my account of preference construction furthers what I have elsewhere characterized as the next wave of behavioral law and economics — the search for more realism as to *how* people understand and make decisions, and *how* they perceive their own interests (Hill 2004).

The first wave of behavioral law and economics implicitly hypothesized a false dichotomy: people either come to correct conclusions or make mistakes. Indeed, the first wave typically spoke of preference construction as a mistake; a paradigmatic example was of differing reactions to an 80% cure rate and a 20% failure rate. But the process of preference construction is something other than a potential source of mistakes. Preferences help us define who we are; as our preferences are constructed, we come to understand the world and ourselves.

The first wave also implicitly hypothesized another false dichotomy: people are either self-interested or altruistic. That dichotomy implicitly characterizes self-interest as antithetical to others' interests. But preferences are not just for scarce objects of choice, where A's acquisition of such an object (for instance, a raise from a limited bonus pool) might be at B's expense. Indeed, they are often for higher-order values and ideals, including those that might not be antithetical to, or might even further, others' interests. Consider

in this regard a preference for thinking one lives in a just world (Lerner 1980; Andre and Velasquez 1990; Hill 2009a).⁷

More realism, by itself, might not be sufficient to justify my endeavor; economists typically argue, especially when defending unrealistic assumptions, that what matters is predictive power. In my view, a richer account of preferences should lead to more explanatory power, and better predictions. Ultimately, my hope is that a better understanding of the determinants of preferences can have a significant normative payoff, helping inform policy and policymakers as to how best to influence behavior. My critiques and affirmative account here are a very preliminary step in that direction.

This article proceeds as follows. Section 2 discusses the neo-classical assumption that preferences are fixed, considering the positive and normative justifications for the assumption. With increasing numbers of economists agreeing that, as a descriptive and positive matter, the fixed preferences assumption is certainly not true and may even not be true enough for many of the purposes they seek to use it for, my characterization of the fixed preferences assumption as the neo-classical economists' position is in some, and perhaps in significant, measure foil and expository device. Section 3 discusses the shortcomings of the traditional economists' account in explaining advertising. Section 4 sets forth my alternative process-based account, articulating the unifying principles and some possible determinants of preferences. Section 5 considers a few examples illuminated by my account: justifications for paternalism, contingent valuation, and negotiations in complex business contracting. Section 6 concludes.

CRITIQUING THE NEO-CLASSICAL ECONOMISTS' VIEW

Neoclassical economics holds that preferences are fixed.⁸ The more formal articulations tend to emphasize stability and coherence: as Matt Rabin notes, “[e]conomics has conventionally assumed that each individual has stable and coherent preferences.” (Rabin 1998, p 11). Coherence usually means transitivity: if Ann prefers apples to oranges and oranges to bananas, she prefers apples to bananas. There are also the time-inconsistent preferences: consumption now, having resources later, or eat cake now, be thin later, the explanations for which turn on different rates of discounting. (Loewenstein and Prelec 1992; Rabin 1998; Hill 2009a). Invariance, independent

of stability, is also part of the account: a preference will not *change* if it is elicited in different ways. A typical example: If I favor a treatment with an 80% success rate, I will not reject the same treatment when it is presented as having a 20% failure rate. Nor will I rank order differently my preference for saving forests vs. oceans if I am asked in different ways (Slovic 1995).

But the assumptions go further. As Ariely, Loewenstein and Prelec note, “[m]odern economics assumes that exogenous consumer preferences interact with ‘technologies’ and initial endowments to produce equilibrium prices and production levels.” (Ariely et al. 2006, p 9).” The key word here is *exogenous*. The preferences exist, amenable to being discovered or revealed. Preferences have, in the neo-classical economists’ world, another important attribute as well — they are *complete* or *well-defined* and *determinate*. Determinacy, stability, and invariance are related, part of the strong-form characterization of preferences as existing to be discovered.

What evidence do economists have for their assumptions about preferences — that is, for their positive claim? Empirical evidence provides, at best, mixed support (Slovic 1995; Rabin 1998). Certainly, many experimental results contradict neo-classical economists’ assumptions (Chapman 2003; Shafir and LeBoeuf 2002; Sunstein 2000). Some of the empirics may be questioned, on one or a combination of the following rationales: experiments may be badly done, effects can perhaps be reversed by learning, institutional mechanisms will often compensate such that the effect will not be observed in real life, or the experiments have some other defect that calls their validity into question (Posner 1998). Indeed, these are the familiar critiques in traditional law and economics’ early responses to behavioral law and economics (Rubinstein 2006). But the results are robust (Chapman 2003; Sunstein 2000; Slovic 1995).

Matt Rabin (Rabin 1998, pp 680-3) very humorously shows how economists attempt to salvage pet views in the face of convincing evidence to the contrary. Rabin hypothesizes the existence of a planet, *Nonhollywood*, on which economists do not believe anybody can get utility from what we on Earth would call entertainment items — things that would be consumed and would not leave anything tangible behind. He imagines a scene in which somebody is arguing with the Nonhollywood economists as to why people would spend \$8 to go to the movies. The Nonhollywood economists argue:

“But the alleged *preference* is ‘unstable.’”

“It was often pointed out, and backed up by research, that this alleged preference for seeing movies is highly sensitive, and therefore not a real preference. While it is true that some people like going to the movie, it varies a great deal. It depends on mood, time of day, etc. Indeed, while behavioral researchers claim to have evidence of people willing to pay for movies, a great deal of experimental evidence by economic experimentalists show that this taste goes away under only slightly different conditions. Moreover, when the experiment was done properly — in the way economic experimentalists understood how to do experiments — the taste for movies nearly completely went away. Evidence from well-run economic experiments shows that this alleged taste for movies is highly ephemeral.”

“But evidence shows people learn they don’t like movies...”

“While a few psychologists have argued that they have evidence that people seem to like movies, these experiments are run under novel conditions, and don’t allow learning. Indeed, the standard in psychology experiments was to only ask people to see a movie *once*. Hence, you were told, we do not learn whether this behavior represents a robust preference. But experiments showed that, while a person might pay \$8 to see the movie once, maybe twice, if you keep asking him for \$8 to see the movie, eventually stops paying. Clearly he learns he doesn’t want to see the movie! Once play “converges” to “equilibrium” behavior by subjects, we see no genuine preference for movies...”

Neo-classical economics has a considerable stake in economists’ assumptions about preferences being true. If preferences do not accord with economists’ assumptions, core axioms of rational choice models, on which economics relies, are violated (Ariely 2003; Slovic 1995). Moreover, an important economists’ credo is that assumptions need not be realistic or true — just useful (Friedman 1953); thus, when economists are presented evidence

that something they use in their models is not true, they have a ready answer. And in some set of cases, the assumption is indeed useful — because it is true *enough* (Becker 1976; McDonnell 2006). But the assumption is maintained even when it is not useful; economics is loath to cede its elegant parsimony. One obvious example is advertising. I argue in the next Section that economists' arguments against the overwhelmingly held view and intuition that advertising is principally intended to affect preferences are unsuccessful.

Economists can sustain their use of, if not belief in, the assumption of fixed preferences because they typically focus on preferences for particular tangible or intangible things (e.g., a Ford Mustang or a trip to Bali) from obvious choice-sets (cars, or vacations, within a price range). A person might very well prefer, in a coherent, transitive and stable way, a Ford Mustang over other cars and over having the cash the Mustang costs. And economists can always raise the specter of a familiar and powerful argument from theory, Dutch-booking — if people's preferences did not have the economist-attributed characteristics, people could be Dutch-booked so as to lose all their money.⁹ The argument is part of the broader class of arbitrage arguments: all riskless arbitrage opportunities are taken advantage of fully; people who give away money will be driven from the market. Many things follow from this argument, including that markets are efficient and that people in the aggregate are not *dumb*. The Dutch-booking argument or its more generic arbitrage analogue is said to sound the death-knell for preferences that do not conform to the economists' assumptions — people who have such preferences can be double-booked, and will therefore become extinct. Hence the normative position that even if people do not have preferences that conform to the economists' model, they *should*.

At first blush, the Dutch-booking/arbitrage argument seems to have considerable intuitive appeal, especially as to stability and coherence of preferences. If Jones likes the Grateful Dead twice as much as he likes Jefferson Airplane on Monday, and the reverse on Tuesday, it is easy to see how somebody trading with Jones could soon make Jones penniless. But this seems like, in Fred Schauer's memorable phrase, an "argument from a weird case" (Schauer 1985).¹⁰ In the non-weird everyday cases, there is a common sense answer to the Dutch-booking/arbitrage type of argument. Even if Jones does have these preferences, he will probably catch on after one or two exchanges (Warner 1995).¹¹ (Or else the "irrational" preference is not quite what it seems to be. I may be willing to buy

ten lottery tickets; it does not follow that I'd buy 10 million lottery tickets. I may simply have a budget for "irrational" expenditures that's well within what I can afford to lose. Or I am paying for the "dream" the lottery promises in its ad campaign, "buy a ticket, buy a dream.") There is no reason why being amenable to being Dutch-booked should be an all-or-nothing proposition. The irrationality, such as it is, is self-limiting. And in any event, standard economic theory suggests that not all Dutch-booking/arbitrage opportunities will be fully exploited: there must be, as Grossman and Stiglitz memorably argued, an efficient amount of inefficiency to make the business of looking for such opportunities worthwhile (Grossman and Stiglitz 1980).

Furthermore, what may seem like an unstable preference may in fact be a stable preference — but not for a traditional object of choice. The rational choice theory does not readily accommodate *higher level* preferences. Three examples: (1) Jones wants to be stylish. She may conclude that she wants bell bottom pants and is willing to pay \$y for them after she sees stylish women wearing the pants. But she may later determine that bell bottoms are out of style, at which point she may become unwilling to wear bell bottoms, much less pay for them (2) Jones prefers and chooses Raisin Bran on Monday and Quaker Oatmeal on Tuesday. Maybe his higher level preference is for variety — *try different cereals every once in a while* — or frugality — *I'll buy whatever is on sale* — or time-efficient decision-making — *I'll buy whatever is at the front of the store so I spend the least time shopping*. (3) Richard prefers Roederer champagne to Bollinger champagne. I gave Richard one bottle of each champagne. He drank the Bollinger first, on Labor Day, saving the Roederer. This best accommodated his higher level preference for the best celebratory occasions possible; he wanted to save the Roederer for some more celebratory day than Labor Day.

Of course, there are *unstable* preferences that theoretically should not be problematic to standard theory because they involve new information. Jones buys the oatmeal on Tuesday after a visit to his doctor reveals he has high cholesterol; Jones buys the oatmeal on Tuesday because he finds out that the Raisin Bran factory emitted pollutants into a stream and he cares a great deal about the environment. However, these preferences certainly violate stability, given that stability requires (presumably counter to everybody's intuition and in accord with nobody's real normative views) that preferences stay stable over time.

Unstable preferences of these sorts are surely common, but they scarcely seem amenable to being Dutch-booked. This is so for many reasons, including that the shifts at issue are hard to predict, and even harder to exploit in any way that somebody would find worthwhile. Considerable evidence exists that preferences work this way; my description at least has realism on its side. Without the Dutch-booking argument, it is hard to make a normative argument that preferences *should not* work this way.

What about invariance? It is important to distinguish between two types of cases. The first is the mistake type of case frequently discussed in the behavioral law and economics literature, which is amenable to the same sort of analysis made above with respect to stability and coherence. The preferences at issue here do vary by mode of elicitation, but only because of a straightforward defect in reasoning. Recall the case of Smith, who has a different preference for a particular treatment based on whether it is described as having an 80% success rate or a 20% failure rate. Professionals, too, such as sophisticated investors, sometimes use defective reasoning (Baquero and Verbeek 2006).

But many cases do not involve mistakes; rather, they involve situations in which people form their preferences based on how they come to understand the choice they are making, when many different constructions are possible and warranted by the underlying facts.¹² The choice made at a particular time is context-specific. In a different context, the choice may be different. Just as I argued with many types of instability, there is considerable evidence that preferences do work this way, and it is not clear why as a normative matter such preferences should be undesirable. Classic examples from the experimental literature include situations in which, as between a fancy pen and money, many people prefer the money, but when a third option, a cheap pen, is presented, many more people prefer the expensive pen (Chapman 2003; Shafir et al. 2000). There are many psychological accounts of why preferences might work this way: a person is looking for a basis to make a decision, and finds such a basis in a comparison of alignable attributes (Markman and Medin 2002), for instance. Indeed, especially for a relatively inconsequential decision, a set of rough-and-ready decision rules may be more useful than a specific rank ordering, preserving cognitive resources. In the pen example, the rules could be, respectively: the default to prefer money over something with roughly equivalent value; next, where there are three choices, if there are two roughly equivalent

choices and there is a third choice that is more clearly inferior to one of the equivalent choices (the cheap pen), pick the clearly superior choice.

Another example involves competing higher-order values. Imagine that Jones is both frugal and an environmentalist. Jones is at a store, choosing between cheap sneakers and more expensive ones certified as being made by a manufacturer who does not pollute. If Jones is wearing his *frugal* hat — say, he just splurged, or he just talked to his spendthrift relative — he may be inclined to pick the cheaper option. If he is wearing his *environmentalist* hat — perhaps he spent the preceding evening with his environmentalist friends, or he just passed a landfill — he may be inclined to pick the more environmentally friendly option, notwithstanding that it is more expensive.

Jones's preference — and choice — therefore might be different depending on when he makes it; the subject in the pen experiment's preference and choice is different depending on what else he's choosing from. That this is so, and that this is rational, is well explained by philosopher David Wiggins:

No theory, if it is to recapitulate or reconstruct practical reasoning even as well as mathematical logic recapitulates or reconstructs the actual experience of conducting or exploring deductive argument, can treat the concerns which an agent brings to any situation as forming a closed, complete, consistent system. For it is of the essence of these concerns to make competing and inconsistent claims. (This is a mark not of irrationality but of *rationality* in the face of the plurality of ends and the plurality of human goods.) The weight of these concerns is not necessarily fixed in advance. Nor need the concerns be hierarchically ordered. Indeed, a man's reflection on a new situation that confronts him may disrupt such order and fixity as had previously existed, and bring a change in his evolving conception of the point . . . or the several or many points, of living or acting (Wiggins 1980, p. 223).

What about preferences that are indeterminate? There are two possibilities. Perhaps the preference was indeterminate before it was elicited, but became determinate and stable thereafter. Alternatively, perhaps the preference was elicited and then became

unstable. Indeterminacy by itself is problematic for the neoclassical position insofar as it violates the completeness axiom, which provides that people can rank-order all their preferences: they “consult a free-standing preference menu” existing “before the time of decision and choice” (Sunstein 1993, pp 2637, 2652). Again, preferences that were indeterminate before they were elicited but, once elicited, were stable seem both to exist as a descriptive matter and to be normatively unobjectionable. Why should we know what we want before we need to make a choice? So long as the preference becomes determinate once elicited, Dutch-book arguments are not available. Smith may decide that she wants a dog and is willing to pay \$x for it after a dog-loving friend takes her on an energetic walk with the friend’s dog in a city where Smith has just moved. It could have been otherwise. If Smith had just joined a gym before taking the walk, she might have decided that she didn’t have time or need for extra exercise; if she hadn’t moved to the new city, she would not have taken the walk and discovered her liking for dogs.

My purchase of a digital camera provides another example. When I started the process, I had very little idea which features mattered to me. At a certain point, after inquiries that were not random but were scarcely systematic (that is, some number of web searches, but no meta-searches to determine which web sources were particularly reliable), I stopped looking and bought the camera that seemed best based on the criteria I had thus far formulated, even though I knew I did not have full information; I satisfied rather than maximized (Schwartz 2004). My trajectory was path dependent: my choice might have been otherwise had my searches yielded different information in a different order.

But what if the preference, once elicited, is not determinate, but rather, is unstable or variant to context? The analysis is the same as set forth above: many (most?) instances of seeming instability or seeming variance are hard to characterize as either unlikely or normatively undesirable.

Where are we left? First, the obvious: the rational choice model, in which preferences are fixed, is on shaky ground, both descriptively and normatively. Dutch booking arguments will not work for the bulk of cases. Indeed, there are perfectly sensible accounts one can give of preferences that deviate from the model. Second, there is no reason to suppose a rational person would generally follow the axioms of the rational choice model. In a subset of cases, notably the mistake cases, it is fair to describe the deviation from the model

as irrational. Even then, however, the irrationality is probably self-limiting. A person may not make ideal choices — she may prefer the treatment with the 80% cure rate to the (identical) treatment with the 20% failure rate. But she might understand that a 65% cure rate is worse than a 25% failure rate.

In other supposed deviations from the rational choice axioms, people may be making choices in some manner other than by consulting an invariant complete rank ordering. What might people have instead of invariant complete rank orderings? In Section 4, I hypothesize that they have ways of making choices: they construct *narratives*, using evaluative criteria against a backdrop of wants, desires and inclinations, some of which they rank and some of which they do not. Their wants, desires and inclinations are for both traditional objects of choice and higher order values and desires, as previously formulated and as constructed and elicited in the choice-making process. And their methodology, as I hypothesize it to be, economizes on cognitive resources, making a strong case that it is rational.

THE CASE OF ADVERTISING

Advertising presents a puzzle for economists: if preferences exist to be discovered and revealed, what are advertisers doing? If there were a context, one might think, in which the fixed preferences assumption should be abandoned as not true enough to be useful, it is as to advertising. But neoclassical economists nevertheless try to explain advertising while holding onto their assumption.

And in some cases, they can. Sometimes the economists answer the question, “what are advertisers doing?”, by saying, “advertisers are providing information.” I once lived in a very noisy apartment at a busy intersection in New York. The windows were old; garbage trucks came by at all hours; and a “singer” across the street sang very badly, at all hours, in hopes that people would pay for his silence. I heard an ad on the radio: “are you bothered by lots of street noise? Buy our white noise machine that blocks out street noise.” The ad was from a reputable store; I immediately called and placed my order.

But, as economists acknowledge, much advertising is not informative (Becker and Murphy 1993), at least about the products or services being advertised. Certainly, the explosive growth of TiVo, which permits people to block advertisements, shows that people

will pay to avoid advertising, something they presumably wouldn't be so ready to do if they were getting information they valued.¹³ What do economists say about such advertisements? The classic signaling story is one possibility. Providers of goods and services are signaling their confidence in their products or services by using high-priced celebrities or making other conspicuous expenditures that will be worthless if their products or services are not of good quality.¹⁴ But why not simply publicize how much an advertising campaign costs? Wouldn't doing so signal confidence more directly and enable comparisons of relative confidence among manufacturers (Becker and Murphy 1993)?

None of this is to say that advertisements do not signal confidence in what is being advertised: Presumably, most manufacturers believe in their products and expend significant resources in making and promoting them. And they may reason that even if people make efforts via TiVo and other means to avoid advertisements, negative inferences might be drawn from their not advertising when their competitors are doing so (Clark and Horstmann 2005). Rather, it is to say that they must also be doing something else, and importantly so. Confidence by itself is not sufficient for business success; it may not even be necessary, as suggested by the word-of-mouth re-popularization of Hush Puppies shoes, described by Malcolm Gladwell in *The Tipping Point* (Gladwell 2000).

Another argument available to economists is that advertisements can allow somebody to coordinate her behavior with others' behavior by conveying information *about what others might do* (Clark and Horstmann 2005; Pastine and Pastine (2005). If Sarah Jessica Parker is a cool celebrity at time T and she appears in an ad for the Gap, I may conclude that many people I know will also wear Gap clothes, and therefore purchase the clothes. The coordination theory is also right in many cases but is incomplete; it cannot explain why some attempts at coordination succeed while others do not. This incompleteness points to a difficulty in accommodating into a neo-classical economics framework the mechanism by which ads might coordinate.

Contrast coordination accounts used as explanations for law. The classic example is traffic signals: it does not matter which side of the street people drive on so long as they all drive on the same side. As Richard McAdams (2000, p. 1666) explains,

“[L]egal expression can . . . provide a focal point for coordinating individual action. Because the “mentioned”

solution tends to be the most salient, when the legal rule is sufficiently publicized, it provides salience to one kind of behavior. Law can thereby work expressively even if people do not believe they have a moral obligation to obey it.”

McAdams’s explanation shows precisely how the economists’ coordination account of advertising is lacking. The key is that law is automatically well-situated to be focal. Advertisements are not. Law has a built-in gravitas, and is often salient in a way other communications cannot readily be. It also has a primacy that is antithetical to advertisement: to overstate the case a bit, there is one law, whereas there are many products in competition with one another. Furthermore, from an individual’s perspective, there may be an economy of scope between the expressive and classic incentive-based function of law. Finally, people may simply believe that law generally gets it right as to what things ought to be prohibited; again, the coordination may piggyback on the other reasons to obey law. Law inherits a position with built-in importance. A particular advertisement does not, and it may or may not succeed in acquiring such a position. Might advertising attempt to be focal more often than law does? Even if it does, the analysis stays the same. One advertiser is competing against others; the law has no comparable competition.

If advertising is not automatically well situated to be focal, how does it help coordinate behavior? The common-sense answer — that in *some* circumstances it comes to be focal — relies on the construction of preferences. When seeing Sarah Jessica Parker looking stylish with Gap clothing, enough people may or may not come to believe that the clothes are cool, in the mystical, as yet badly understood and difficult to predict, process by which that status is conferred on things, people, ideas, lifestyles, and so on. They may come to think others will find the clothes cool as well. The collective belief that something is cool (or that many people find it so) is what makes it so, and thus, often, what makes it become a preference. It is not as though the Gap’s clothes are stylish in some factual sense, or were stylish independent of or prior to being depicted and then thought of as such. The advertising campaigns associating the clothes with coolness are probably a necessary part of this process, but are scarcely sufficient; some advertising campaigns fail miserably. Advertising can indeed coordinate, but has no built-in or assured ability to do so. To be sure, the neoclassical position is not

challenged just because an explanation it proposes relies on coordination and cannot explain why people would coordinate around a particular thing. Certainly, green lights are to be explained as coordination, even though it is not clear why everyone would coordinate around them. The difficulty is in the *basis* for the remainder of the explanation — in this case: a *creation*, or *construction*, of what is cool, developed as a (probably unstable) instantiation of a higher order preference.

Indeed, non-informative advertising often links the products or services advertised to generally-held higher-order preferences, supplying the narrative needed to make the link. One memorable shampoo commercial's pitch was that using the advertised shampoo would be, to express the matter delicately, an ecstatic experience. The advertisers presumably hope that people buying the shampoo will, at least facetiously, characterize the experience of using it, as being within the category *ecstatic experiences* rather than just among *leaning* and *hygiene promoting experiences*. There may be an identity adjunct as well. A person might want to be the sort of person who chose her shampoo because of the pitch at issue — because she wanted to think of herself, or depict herself to others, as somebody who valued ecstatic experiences.

Indeed, in examples involving trends, fashion and the like, the preferences are apt to be higher order: status, glamour, healthy lifestyle and so on. Identity considerations — how a person does, and wants to, view herself — are often part and parcel of higher order preferences. A person may want to think of herself as being stylish, and as informing herself about what it takes to be stylish. (It could be otherwise. Academics are overrepresented among people who not only do not care about style, but also take pride in not caring about it.)

I have thus far argued that advertising may work by appealing to pre-existing higher-order preferences — convincing people that a particular product will promote a healthy lifestyle, or will give them particular sorts of experiences different than what they might have supposed. Whether advertising really seeks to convince people these things are literally true, as opposed to making them associate the product with the desired category, is beyond the scope of this article. In the succeeding section, I consider the mechanism by which people might become convinced — the narrative that people construct.

HOW ARE PREFERENCES CONSTRUCTED? AN ALTERNATIVE ACCOUNT

At this juncture, it is appropriate to turn to a basic question: What is a preference? Merriam Webster, unhelpfully, defines a preference as *one that is preferred*. The definition of *preferred* leads, equally unhelpfully, to another definition: *to like better or best*. The literature often treats as synonymous preference and choice: one chooses what one prefers. For economists, preferences are either choices (as to which the preference is revealed by making the choice) or hypothetical choices one would make.¹⁵

But on further reflection, this view of preferences is difficult to maintain. As the examples in the previous section indicate, people have many preferences — when a choice is called for, they may or may not choose what they *prefer*: I prefer chocolate over vanilla. I prefer being fit to being unfit. If I choose going to the gym over chocolate, what does this say about the fact that I have quite a strong preference for chocolate over many other things? And what if I choose going to the gym on one occasion and on another occasion, I choose the chocolate? And what if I have a rule that I will not have chocolate more than twice a month, and the third time in a month that I'm offered chocolate (or am offered a set of choices that includes chocolate) I decline the chocolate because of my rule? Preferences, then, are rank orderings, but almost certainly not complete or invariant rank orderings; they are relevant to choice but do not determine choice. I prefer oysters to clams and mussels. Where does Mozart fit into this ordering? Do I like Mozart more or less than mussels? What if I have \$20 to spend and I can either buy oysters, clams, mussels, or a CD of Mozart? What is the relationship between preferences and choices? Choices are preferences *all things considered*. Moreover, one can have a preference for something that one could not feasibly make a particular choice for — something that has many disparate realizations — say, health, happiness, or a relaxing vacation. These are higher order preferences. Preferences with less disparate realizations (say, chocolate) can be considered lower order.

And what of unranked tastes or interests? If the movers ask where I would like my couch placed, I may think, *the living room or the second bedroom seem good*, without preferring the one to the other. I do have to make a choice, and so I decide which I prefer.

But the initial tastes or views were not rank-ordered. These are what Donald Davidson usefully calls *pro-attitudes* (Davidson 1963).

The economists' descriptive take allows them to hypothesize a comparatively simple relationship between preferences and choices: preferences are either revealed (by being chosen) or would be revealed (chosen). I did choose chocolate over vanilla. Were I to be given a choice between zinfandel and ice cream, I would take the zinfandel. But a rejection of their descriptive (and normative) position along the lines of the previous section also yields recognition that the relationship between preferences and choices is far more complicated.

How do people make choices? In their accounts, Shafir et al. and Chapman use the term *reasons* (Chapman 2003; Shafir et al. 2000). My account has a related albeit broader concept: narrative. All reasons are narratives, but there is more to many narratives. And some narratives are far from what might be commonly recognized as reasons. Narrative plays a critical role in various social sciences. One important function of narrative is to help people organize their world views and justify their decisions (Kunda 1999). Of course, my account is not intended to be a formal, fully-developed theory of preference; rather, it is the beginning of a process-based model, in which important determinants of preference construction can be understood, and a preliminary taxonomy of such determinants can be articulated.

The way people make choices and form preferences importantly involves narrative (McAdams 1993). In my account, the critical determinant of preference construction is *narrative dependence*. The simpler the narrative, the less the preference is narratively dependent. An example captures the intuition: My narrative about why I like chocolate is comparatively simple. My narrative about why I wanted to be a law professor (or, for that matter, write about preferences) is decidedly more complex. The same can be said about my preferences regarding which worthy cause I want the government to devote scarce resources to — or, more precisely, which ones I am willing to have it devote fewer or no resources to. I can easily imagine having a trajectory in which my career or article choices (or sympathy for a particular worthy cause) were different. It is rather harder to imagine how I would come not to have liked chocolate. Indeed, filling out this intuition, more narratively independent preferences tend to feel unmediated; the choice may involve a narrative, but the preference may not. By contrast, for more narratively

dependent preferences, the preference — and the choice — are apt to succeed the narrative. Again, contrast chocolate with a career decision. My distinction harkens back to Aristotle, whose concept of *appetite* has much in common with my term “narratively independent preferences.

Almost all preferences are constructed: they do not exist to be discovered or revealed, and they could have been otherwise. But some are, or at least seem to be, more constructed than others. Indeed, there is a continuum; at one end are preferences that seem comparatively *narratively independent*, such as biologically hard-wired preferences, or preferences for ice cream, and on the other hand, are preferences that seem far more *narratively dependent*, such as a choice of career. The more narratively independent the preference, the more fixed it is; the more narratively dependent, the more it could have been otherwise. This is not to say that narratively dependent preferences are easy to change. To the contrary, narratively dependent preferences can be quite resistant to change if the relevant narrative is sufficiently entrenched (that is, fixed). Consider in this regard the recent work on *cultural cognition* — “the tendency of individuals to conform their beliefs about disputed matters of fact (e.g., whether global warming is a serious threat; whether the death penalty deters murder; whether gun control makes society more safe or less) to values¹⁶ that define their cultural identities” (Cultural Cognition Project Home Page 2008). I have written on an overlapping subject — identity as perceptual lens. (Hill 2007b) Both the work on cultural cognition and my work discuss one important mechanism by which a preference — for a particular policy, for instance — remains entrenched. An individual’s preference is anchored to her *identity*; her identity affects the way she takes in data. The way she takes in data thus serves to further entrench her preference (as well as her identity). Imagine someone strongly opposed to gun control. She may think of herself as very peace-loving, pay far more attention to situations where guns killed innocent people than when people used guns to defend themselves against crime, and hence have her preference for gun control and her identity as a gun-control-favoring-peace-loving-person affirmed.

What can be said about the narratives? In particular, what determines whether a preference is more or less narratively independent? Preferences themselves and pro-attitudes can be lower-order, about tangible things, or higher-order, about more abstract values and wants. I prefer Hershey’s chocolate to Godiva chocolate. I also

want to lead a virtuous life, a higher order preference. *Narratives tend to importantly include instantiations of higher order preferences.* I want the Hershey's chocolate in order to lead a pleasurable life. I want to exercise because it will make me have a longer life. But of course there is a higher order preference favoring chocolate as well: the preference to do things one finds pleasant. If, as in the Woody Allen movie *Sleeper*, it was discovered that chocolate is far better for health and weight control than previously thought, the chocolate preference would presumably win out far more often.

When I am asked whether I want to have society pay \$X to save some forest, I construct my preference using some sort of narrative, probably relating to my desire to be a good citizen, or my desire to leave this planet in good condition for the next generation. Given that my higher order preference has many disparate realizations, we should not be surprised to observe considerable instability and inconsistency when my (narratively quite dependent) lower-order preference about the forest is elicited. Context and circumstance dictates which choice one makes when asked to do so; the choice is made against a backdrop of (probably conflicting) lower and higher order preferences. Indeed, the manner in which higher order preferences inform lower order preferences is exceedingly complex, and pervades preference construction. It also pervades decision making, in the most profound ways, as I will discuss later in this section.

Going to the other end of the continuum, the least narratively dependent preferences may be those preferences dictated or strongly influenced by biology. *How narratively (in)dependent a preference is affects the extent to which it could have been, or could be, otherwise.* Consider in this regard Owen Jones's argument that law will need to work harder to change behavior that was adaptive in previous environments (Jones 2001). On my account, Jones's view is a special case of a more general phenomenon. In this regard, interesting work by Chen, Lakshminarayanan and Santos, based on experiments they conducted on Capuchin monkeys, argues that loss aversion, a preference for avoiding losses, is *innate and evolutionarily ancient* (Chen et al. 2006, p. 520). The extent to which preferences are hardwired or at least of ancient evolutionary origin may be much greater than many assume. According to the authors:

“While our results are by no means definitive proof that loss-aversion is innate in humans, to the degree that they make us more likely to believe that some amount of this behavior has a biological component, they may have

implications for how we treat loss-averse tendencies in human behavior.”

“For example, if these biases are innate, we may be more inclined to believe that they will persist in both common and novel settings, will be stable across time and cultures, and may endure even in the face of large individual costs, ample feedback, or repeated market disciplining. This would greatly constrain both the potential for successful policy intervention and the types of remedies available. In contrast, while a learned, noninnate heuristic may arise in many (if not all) cultures, we may not expect it to persist in settings in which it was highly suboptimal or in which market forces strongly discipline behavior. This would limit the potential scope and scale for welfare losses and may suggest that policy interventions that increase feedback or learning may eliminate what losses do exist.” (Chen et al. 2006, p. 540)

When we make a choice, what are we choosing among? Here, too, the traditional economists are quite wrong. Recall that the rational choice model posits a complete rank ordering of all things; the choice set therefore is or could be all things, and our preferences would not (should not) deviate. But in fact, what one is choosing among is not at all straightforward (Markman and Medin 2002; Hill 2004) — and the choice set matters a great deal. If one does not regard something as being in the choice set, one might not think to choose it; I discuss in *Beyond Mistakes* examples in which the composition of a choice set could have significant ramifications in areas important to policy, including affirmative action and cost-benefit analysis (Hill 2004). Consider Virginia Postrel’s discussion of a justification for affirmative action: that people choose among the “evoked set,” which is necessarily a subset of the full set and are hence more likely to choose a member of the evoked set. Referring to an article in the *New York Times* giving very short shrift to African-American movie stars Will Smith and Wesley Snipes, she noted that “The evoked set of *action stars*’ didn’t overlap with the evoked set of *‘black movie stars*. There was no racial hostility at work, just the limits of human minds and the categories they create. Overcoming those limits is the argument for a certain type of affirmative action — not quotas or preferences, but an active effort

to select from the full range of possible candidates, not merely the first evoked set.” (Postrel 2003).

Returning to more day-to-day examples: Do I put health-club membership and theater subscription in the same choice set? I may, if my aim is to choose what to do on weekend evenings. But, I may not, depending on how I come to organize and view my choices, which in turn depends on many factors, including, for instance, advertisements and the behavior and views of my friends. Indeed, until I wrote this paper, I never thought to put the two in the same choice set — but I will probably do so in the future. My choice process here is intractably and profoundly path-dependent and dependent on mode of elicitation, because it turns on how I categorize, which itself depends on a path-dependent trajectory that could have been otherwise. Indeed, many factors may influence whether the category *what I do on weekend evenings* is meaningful to me, and what belongs in the category. (Feeding the cat? Bathing? Getting food at the supermarket? Having the radio on? Having it on to a particular station?) Factors such as how regularly I do the activity, how much time it takes, and how much prominence it has in my assessment of what I have done and what I am doing are all relevant.

Indeed, what we put in a choice set — what we see ourselves as choosing among — is part of how we categorize the world. And we all do pervasively categorize; we need to categorize in order to make sense of ourselves and our surroundings. Categorization is implicit in preferences: I have a preference for things falling within the category of *chocolate*. I have a preference for activities falling within the category *activities that will make me healthy*. Critically, as psychologists have noted and as I discussed at length in *Beyond Mistakes*, one’s categories and categorizations are somewhat malleable. No pre-ordained group of categories is correct and relevant for everyone.

Moreover, except in rare cases, there are no necessary and sufficient conditions for any particular category. Rather, new potential category members are judged by their perceived similarity to existing category members and the overarching concept of the category. Can the category of *things that make me healthy* come to include a long fast motivated by political convictions? Can the category of *fun things* come to include vigorous physical exercise? Can the category of *delicious dessert* come to include carob cake? The inquiry seems a bit odd when it comes to preferences that one views as unmediated, such as a taste for a particular food. But it seems

far less odd in the context of lower-order instantiations for higher order preferences. I want to be sophisticated; I will prefer x activity insofar as I think it belongs in the category of things that make me sophisticated. I would argue, though, that the mechanism is not so different even for many more unmediated seeming preferences: after all, one needs to be able to construct the narrative of one's preferences, and the narrative will categorize the object of preference within the appropriate category (I liked this carob cake because it was delicious).

Applying these concepts to preferences, consider the interaction between preferences for particular things or activities (lower-order preferences) and higher order preferences, for such things as status and identity. Am I willing to pay \$125 for a pair of black jeans made by Gap? It may depend on whether Gap's ads manage to persuade me that the jeans are what cool people will be wearing this year. How much will I charge to paint a fence? If I encounter Tom Sawyer, who persuades me that painting a fence is really fun, I might even pay to do so rather than asking for payment (Ariely 2006). The question becomes whether I come to see something lower-order as fulfilling the higher-order preference. The jeans are *cool*, a member of the category of *cool things*. Fence-painting has become a member of the category of activities I do for fun. It may be that I previously thought fence painting might be fun, I may have had no view, or I may even have thought that it was not fun, but was somehow amenable to being persuaded otherwise.

Higher order and lower order preferences are frequently intertwined. How does Smith know how much he values a particular stereo? He may like the way it sounds, and prefer it to the equivalent amount of cash it costs. But part of his assessment may turn on how he wants to think of himself, or how he wants others to think of him. Does he want to think of himself as *the guy who spent \$50,000 on a stereo when people are starving in Africa*? If he spends \$50,000 on the stereo, will he think of himself this way? The answers to these questions will affect Smith's preferences.

The indeterminacy plays out slightly differently in a very socially-oriented higher order preference, such as the one for status. What confers status is established in a complex interaction between people and society. Ex ante, it is impossible to know what will be in the set of status-conferring items and activities. When I was much younger, in my social circles it was generally necessary (although not sufficient) to own some particular set of record albums, a pair of

narrow-vaile corduroy pants, a pair of black jeans and a pair of blue jeans if one wanted to have even the most minimal level of status. And of course, what gives status is in a state of flux. Last year's *it* wardrobe was, well, so last year.

Given indeterminate lower order preferences and more determinate higher preferences, how do people make choices? There are many factors — including many that do not relate in any straightforward manner to fundamentals. Whether Jones will be tempted to buy item A may turn on how item A is depicted and by whom (a close friend? A popular celebrity? A billboard in Podunk?), and how Jones views herself (as an early adopter? As a Luddite? As spartan? As self-indulgent?). Recall, too, the Tom Sawyer example above. Tom has to paint the fence. He offers others the opportunity to paint the fence, telling them it will be fun (Ariely 2006). The others take him up on the opportunity and do have fun. Perhaps, had somebody required them to paint a fence the day before they encountered Tom, or indeed, had somebody paid them to do so, they would not have experienced it as fun. It is hard to know. In one experiment, people valued a bottle of wine differently depending on an anchor they knew to be arbitrary: their own social security numbers (Ariely 2003). The message is not that people can be manipulated into any old preference. It is rather that there is considerable room for various influences. It is hard to imagine that most people would pay to be tortured. But how is painting a fence distinguishable from many forms of exercise that people report experiencing as pleasant? (And how would those people experience exercise if, as mentioned above, the prediction in Woody Allen's *Sleeper* came true, and it turned out that people should have been lethargic couch potatoes eating steak and hot fudge sundaes and smoking cigarettes?). Consider, too, the concept of forbidden pleasures. Is there an extra thrill for an underage drinker to be flouting the law? Is there an extra thrill for an accountant to *come close to the line* in an accounting determination? (And if so, what does this say about where the line should be?)

Contrast the picture I have painted thus far with a more traditional economic picture of decision-making. The more traditional picture involves acquiring and verifying information pre-labeled as such, narrowly responsive to the decision-making task, until the costs of getting more information exceed the benefits. By contrast, the picture I have painted is far less tractable. In many decisions, even some simple ones, what's important and relevant is not clear at the outset; the decision may depend on a trajectory that could have

been otherwise. Consider my digital camera example discussed above; even the process of making apparently simple consumer choices is not so simple. Consider my descriptions in Section 4 of decisions about shampoo and clothing. As Douglas Kysar notes, “[i]ndividuals in contemporary consumer cultures . . . define their values, aspirations, and identities by reference to the goods they consume, the leisure activities they undertake, and the locations to which they travel” (Kysar 2003, p. 1758).

Indeed, preferences and identity are inextricably intertwined. I may, for instance, learn about how I balance frugality and health when I choose a much cheaper product that is a bit less healthy than a much more expensive one I may learn that I am not good at retaining technical details when I compare my choice process in buying a digital camera with that of somebody else. How much I like and want a particular article of clothing may turn on how I resolve the conflict between wanting to be stylish and feeling that I and others will think me frivolous for caring and for wasting time informing myself as to what it takes to be stylish.

Moreover, Barry Schwartz argues that people may be more apt to feel regret when confronted with many choices; whatever they choose, they know of many other things they could have done that might have made them happier (Schwartz 2004). There is some evidence suggesting that regret also implicates identity concerns: that “people care not only about the relative outcomes of a decision but also what the chosen outcome implies for their own self-evaluation as a competent, intelligent person” (Loewenstein and Lerner 2003, p. 624). Somebody choosing not to take money offered in exchange for her blood may feel better about herself than if she had never been offered the money. Somebody may choose not to provide blood if doing so becomes associated with money exchanges rather than altruism, whether or not she would be paid.

George Loewenstein recounts another example. A couple was ready to attend a daytime event to which they had obtained a much-coveted invitation. They had a fourteen-year-old daughter who they had intended to leave at home alone. Somebody else, somebody they had no reason to suppose they would encounter again, who was also about to attend the event asked them *do you think it is safe to leave your daughter alone?* They realized that, whatever the answer to the question, once it had been raised, they had to stay home. The downside of something happening after they had been warned would be too horrible. Presumably, the question made salient not

just what others would think of them if something happened to their daughter, but what they would think about themselves.

These examples suggest that decision making is complex in ways that count — it is a way that people come to learn and convey to others, who they are. It is critical not to make too much of this observation, of course. It is not as though each visit to a supermarket involves complicated soul-searching. But in some cases, thinking about a phenomenon in a way that takes more of a meta-perspective may be helpful.

But is my account at all tractable, or is it a wholesale abandonment of any parsimony whatsoever? While it will necessarily be more complex than the traditional account, it does have some key unifying themes. The principal one is that decision-making as I have described it is less costly than the traditional alternative. Interestingly, in the traditional account with fixed preferences, the transaction costs of determining what exists and doing the rank ordering are given short shrift — and this does not even take into account the costs of retrieving the rank ordering. My account hypothesizes that a methodology that forms preferences (only) as needed minimizes costs. The next inquiry, of course, is how we can determine what the methodology might be: how the narratives form decision *rules*. The task is difficult but by no means insurmountable. We might, for instance, be able to formulate conditions under which money might be presumptively preferred over many, if not most, alternatives. I suggested earlier that we might be able to figure out which preferences might be more or less stable. An inquiry for determinants or presumptive determinants of preferences and choices might be fruitful indeed. A critical question, too, is how consequential a decision is. The less consequential the decision, the more we might expect a decision rule mainly focused on minimizing the actual decision-making costs.

Whatever else a more nuanced and realistic account of preferences and preference construction does, it should leave in place as a special case the many preferences that, through hard-wiring or some other reason, can safely be treated as fixed. Such an account also should be willing to sacrifice nuance for parsimony in appropriate circumstances. We are far from knowing how to construct such an account. But descriptive shortcomings of the existing account, burgeoning research on determinants of preferences, and the existing account's weakening normative claims all argue in favor of proceeding to that end.

WHAT FOLLOWS?

The foregoing argues that preference construction is rational; it argues, as well, that there are many mechanisms by which preferences are constructed. It offers a preliminary sketch of some core features of preference construction: that preferences are often not about traditional objects of choice; that there is a continuum from narrative independence to narrative dependence; and that narrative dependence importantly implicates a link between a particular choice and a higher level preference. It offers a brief consideration of the determinants of the narratives as well as a sense of which ones might tend to be more stable. Clearly, all this is quite preliminary; it will take a great deal to make this diffuse account at a high level of generality and abstraction into a more tractable account. That being said, I discuss here several contexts in which my account may have some application.

THE DEBATE BETWEEN THE LIBERTARIANS AND THE NEW PATERNALISTS

Libertarians (*anti-paternalists*) argue that government ought not to be paternalistic: people know better than government what is good for them, and in any event, are entitled to choose what they do, so long as they are not hurting others. The new paternalists argue that because people make mistakes and because preferences are constructed, paternalistic-seeming interventions (ideally, in the form of *soft* paternalism, de-biasing or providing information rather than sanctioning bad choices) might be consistent with what people really want and hence might be consistent with libertarianism. As I argued in *Anti-Anti-Anti Paternalism* (Hill 2007a), the new paternalists have it wrong in an important respect. There is indeed reason, as they argue, to think that people's choices may not be what they really want — but there is no reason to think we have access to or the ability to give what people really want when we choose a policy intervention designed to affect their choices (or preferences). That preferences are constructed does *not* indicate that the government can figure out some true underlying unmediated preference and honor *what people really want* by promoting that preference. The notion of an unmediated preference is untenable and incoherent. That the new paternalists are wrong on this point does not help the anti-paternalists, though: the anti-paternalists think that what people really want is by definition what they choose, and that peo-

ple's choices should therefore be sacrosanct; that preferences are constructed shows that their position is also untenable.

Still, the new paternalists may offer plausible policy prescriptions even though they cannot justify paternalism on libertarian grounds. They argue correctly that there is no pure way to respect *choices*. Choices are necessarily dictated by context, including the applicable default rules¹⁷ — they are always constructed. It follows, then, that trying to influence what people do, whether by sanction or by something softer, does not constitute some impermissible interference with people doing what they really want. Again, what people choose is a complicated mix, arising from what is often a path dependent trajectory. That preferences are constructed suggests that there is no clear way for law to respect what people really want — and that trying to respect what people really want ought not to trump other legitimate societal aims.

CONTINGENT VALUATION

We need to value harms to quality of life such as environmental harms; we have significant trouble doing so. One typical method, contingent valuation, provides a notable and notorious example. It is characterized by inconsistent, incoherent and impossible valuations — saving forest A is valued at \$X, but saving all forests in a region might also be valued at \$X, the same amount; saving all forests in a particular country might be valued at an amount equal to, for instance, some large fraction of the country's GDP and saving forests and lakes might be valued at an amount that is a large multiple of GDP (Kahneman et al. 1999).

My account of preference construction suggests that these types of valuations should be particularly unstable. The traditional observation — they represent cheap talk, because the people who are being asked their valuation are not typically being asked to write checks to pay their pro rata portion of the amount they mention — is clearly correct. But the traditional observation leaves something important unexplained. Why should people's valuations be as unstable and inconsistent as they are? It is because they appeal to several higher order values — as to each of these values, there are many disparate realizations — and, in most cases, there is no reason to anchor one realization in a lasting way. Civic mindedness, caring for future generations, caring for all creatures, caring for rich and poor, respect for something greater than oneself, etc. — all are possible candidates for higher order values one might have, and, again,

all have disparate realizations. Is there a way to limit or eliminate harmful instability in this context? Absent something to ground one or the other — the need to write a check, some story that somehow sticks about one's life, etc. — specifics of the presentation may make all the difference. What if people are asked to write checks? They might provide a coherent rank-ordering, but one that might nevertheless be unstable.

Indeed, making money valuations can itself shape preferences. People might value something differently when money is taken out of the picture. The intuition is straightforward: people may donate blood if asked when they would never *sell* it (Titmuss 1970). Putting a price tag on something may lead to viewing it as something that is paid for — and something weighted against other things that are paid for. In one experiment, parents picked up their children later from a day care center after monetary penalties were instituted for late pick-ups. Paying money transformed the late pick-up from something they should not do to something they could pay to do (Gneezy and Rustichini 2000). Another experiment demonstrated that “support for a noxious facility [a repository to store nuclear waste] decreased when monetary compensation to host it was offered.” (Frey and Oberholzer-Gee 1997, p. 753). Intrinsic motivations to do the civic-minded thing were crowded out. Again, in all these cases, higher order values are coming into play, and are implicated differently with respect to the same action in different contexts.

NEGOTIATIONS OF COMPLEX BUSINESS CONTRACTS

Consider complex business contracting for major transactions such as mergers and acquisitions. In the traditional picture, the endeavor is construed narrowly: parties are straightforwardly and purposively engaged in acquisition of particular information as to the subject matter at issue. The focus is largely on ferreting out the truth from people who know it but have an interest in not revealing it (Hill 2004). Necessarily, such inquiries are quite tractable: what is needed is a truth-revelation mechanism. Party X, deciding whether to buy a share of a business from party Y, and if so, on what terms, needs credible information that the business is not a lemon. Perhaps Y can provide information that X can verify to her satisfaction, or a credible signal. Or perhaps a third party will rent her reputation to assure party X that the business is not a lemon. Whether the business is a lemon is a matter of fact; the only problem the parties face

is that Y has an incentive to depict her business as not being a lemon whether or not it is. Even where the key issue is not Y's superior information and adverse incentives in relation to X, but information that neither X nor Y may have, economic analyses typically treat the information as mechanically elicitable via directed inquiry. Perhaps specialists can obtain the information (for instance, that a transaction is, or is not, valid under applicable law).

In this picture, the lawyer is helping in information acquisition and verification. He knows, through long experience, what information to seek, how to seek it, and what verification techniques are available and appropriate (Gilson 1984). The parties listen to the problems and solutions and negotiate until they reach the one that best meets their needs. But this picture is hard to reconcile with the real world. Long, ponderous negotiations with attention paid to every semi-colon are a stark contrast to what happens when the deal is done: the transaction documents go into a drawer, to be taken out only if the parties stop getting along. And what of all that time spent during the negotiations arguing over each word? All lawyers would agree that the transaction documents, written under enormous time pressure by sleep deprived junior lawyers, surely are not models of clarity to help judges figure out what the parties' deal is — yet nobody goes back and fixes the document (or the system, which inevitably produces documents of this sort) (Hill 2009b). Indeed, if the parties should cease getting along, the chance that there will be something in the transaction documents that allows them to impose costs on the other in some legal process is exceedingly high. Why is this?

One area of particularly contentious negotiation is planning for contingencies, especially those that would be undesirable for one or both parties. How will the parties proceed if the business does poorly? What if one party wants to terminate the arrangement or buy the other out, or be bought out? Notwithstanding that the parties may be experienced business people, discussions on these issues often do not seem like dispassionate consideration and discussion of the various options the lawyer(s) present. Why not?

An analogy to a marriage may be instructive. Imagine two people who are engaged to be married consulting a lawyer about a prenuptial agreement. Each party has chosen a partner. Each has decided he or she can get along well enough with the other — but the *closing* has not yet occurred. In the discussions with the lawyer, each is conveying the sort of person he or she is. If one or both of

them have a well-thought-out plan for making sure they get their *due* should the relationship dissolve, this in itself will provide considerable information to the other party. It may also provide information to themselves about their own priorities and outlook.

In both cases — the transaction and the marriage — the parties do have preferences as to the terms they want. But the negotiations as to charged matters (the principal matters negotiated for pre-nuptial agreements; such matters are typically less prominent in transaction negotiations) are occurring simultaneously with many other things. Each party is deciding on the terms — but each is also deciding whether to deal with the other party at all — what kind of person the other person is based on how the other is acting, what kinds of points the other is stressing, what kinds of contingencies the other thinks warrants addressing and how the other party is proposing addressing them, and so on. (Admittedly, the parties discussing the pre-nuptial agreement are, we hope, more committed to one another than the parties negotiating their contract are at the early stages of the negotiation.) Each party is also learning about itself. How conciliatory is it? How much does it have at stake in getting its way?

On this view, the lawyers need to be a bit careful in bringing up less likely and unpleasant contingencies. There may be a real cost as they are negotiated, without a commensurate benefit. Should the parties get along the contentious clause may not be needed — the parties will probably come up with an accommodation that works for both of them. And should the parties not get along, they will probably each have an argument that whatever the contract may say, they are entitled to something better. Why might lawyers push for negotiations on these types of contingencies beyond what might be in their clients' interests? There is something to be explained, especially since in comparable complex business transacting in Germany, contentious negotiations over contingencies has not been the norm. The likely explanation is lawyer agency costs (Hill and King 2004). The U.S. lawyers use forms that include every contingency they have encountered — firms compete in part based on how inclusive their forms are. There is no payoff to a lean and mean form; there is, however, a considerable cost to not including a contingency, even a remote one (but how would one know it was remote?), that arises. By contrast, in Germany, lawyers use short contracts; the contracts are largely standardized, and different firms use the same forms. The U.S. norm involves aggressive lawyers, zealous advocates for their clients. In Germany, a lawyer who ne-

gotiated in the American style would be reviled. There are salient differences in the court system as well. But the bottom line is that in both countries, parties have preferences for particular terms of their contracts, but their negotiations can scarcely be properly or even importantly depicted as neutral exchanges of direct and indirect information about those terms. The terms are the wrong unit of account — the preferences concern the terms but also higher order matters as to the parties' relationship.

CONCLUSION

The debate as to whether preferences are fixed, amenable to discovery and revelation, pits economists against scholars from many other disciplines. There are two polar positions: preferences are fixed, and preferences are infinitely malleable. Clearly, the truth lies somewhere in between. Indeed, it is important not to caricature the neo-classical economists' view. Presumably most sensible economists would admit that hyper-determinate preferences of traditional objects of choice are an extreme simplification needed to make the model parsimonious and the modeling tractable. But once a deviation is sufficiently large and important, as is the case with the construction of preferences, some sacrifice to parsimony and tractability becomes a reasonable price to pay for increased explanatory and predictive power.

This article sets forth the beginnings of a framework for understanding preference construction, a process-based model. Behavioral science is actively studying specific determinants and mechanisms of preference construction; I propose here a complementary, but more general, account. I do so here as part of a broader endeavor, to re-conceive rationality according to Herbert Simon's view, that context-dependence and other complexities will necessarily be part of the story (Simon 1986). Indeed, preference construction, while challenging the traditional law and economics model, fits well into Simon's conception of rationality. It does not fit nearly as well into the thus-far dominant behavioral law and economics model that emphasizes law and economics' failure to acknowledge that people sometimes make mistakes and sometimes are altruistic.

How are preferences constructed? The role of *narrative* is key. Contrast preferences that may feel immediate and unmediated with those that feel more as though they require deliberation. In the former cases, the preference precedes the narrative — if somebody

asks a person why she likes chocolate, her answer may be *well, because I do*. I fit liking chocolate and seeking chocolate into my view of myself, others, and the world but my experience with the chocolate is apparently narrative-independent. Contrast this with a case where I am trying to figure out whether a particular suit makes me look professional. In the latter case, the preference may be simultaneous with, or succeed, the narrative.

What are people doing when they make a choice? Here, again is where the economists' paradigm, of traditional objects of choice, revealed through action, leads them astray. People's preferences may be for traditional objects of choice, or they may be for something higher-order that they have concluded is well instantiated and realized by the traditional object of choice. Again, I may prefer chocolate because — well, because I prefer chocolate. But I may prefer a particular sports car because I think it makes me be, and seem, daring, and I have a preference to be and seem daring. Indeed, economics more recently is exploring higher order preferences — including the preference for status and esteem (Frank 1999; McAdams 1992), and, in the last few years, preferences relating to identity (Akerlof and Kranton 2000; Akerlof and Kranton 2002; Akerlof and Kranton 2005). Higher order preferences appreciably complicate analyses of preferences, and in particular, the ability to rank-order in a stable and coherent manner. What satisfies a preference for status? What satisfies a preference for enhancing one's sense of gender or racial identity? These questions are increasingly being explored.

Law needs to care about the construction of preferences. After all, law seeks to influence preferences, through education, public interest campaigns and public announcements, as well in more traditional ways, using punishments and rewards. Thus, law ought to understand more about how preferences are constructed. Moreover, law seeks to reflect the citizenry's preferences; again, if preferences differ depending on how they are elicited, the consequences for law are considerable.

One of these consequences concerns how the law ought to try to influence behavior. At a very basic level: jail or fines are used to discourage disfavored conduct because people dislike both considerably. Rewards and recognition are used to encourage favored conduct because people like both considerably. Jail, fines, rewards and recognition — especially the first three — may implicate near — universal first order preferences. While there are apparently people

who want to go to jail, it is a fairly safe assumption that most people would do quite a bit to avoid doing so.

But what should be done about behavior that the law wants to encourage or discourage, when classic means are either unavailable or can be usefully complemented? Public interest campaigns and other uses of law that seek to shape norms should be crafted mindful of how people form preferences. More profoundly, insofar as satisfying certain types of preferences may be socially problematic, should the government consider means to discourage such preferences? These sorts of inquiries are increasingly being made; they can be better informed if we have a better sense of how preferences are constructed.

Indeed, the relationship between higher and lower order preferences suggests other applications. Lawmakers want to do what their constituents desire, even if only to get re-elected. That people wildly and inconsistently overvalue (and at other times, undervalue) environmental benefits is a source of frustration in this regard: what do people want, and how much are they willing to pay for it? My account suggests reasons why cheap talk and cheap sentiment in this area are so pervasive and why more realistic valuations are so difficult to achieve: higher order preferences are strongly implicated, but not readily or stably translatable into particular lower order preferences.

My account here suggests some critical determinants of preference construction. The economics literature focuses on traditional objects of choice (such as consumer goods or leisure activities): in other words, lower order preferences. But people have higher order preferences as well: preferences as to what sort of preferences they want to have, what sort of person they wish to be, and preferences for abstract values.¹⁸ Their lower-order preferences are often informed by higher-order considerations. Part of my wanting to go snorkeling involves my having categorized snorkeling as an activity within the category of *things people do for fun*. Preferences are constructed when people come to see particular choices as reflecting their higher order preferences. This is of course not to say either that all preferences are constructed or that preferences are infinitely malleable. Rather, it is to take a middle ground position; some preferences are determined in path-dependent trajectories, and the trajectories themselves are of considerable analytic interest. All this might seem to abandon parsimony altogether. But I am optimistic that traditional economic principles of cost-minimization can help;

it may be that decision rules and presumptive decision rules we can identify serve much of the function fixed preferences have served.

The agenda I propose is exceedingly difficult, and poses serious analytic challenges. Indeed, I readily acknowledge that my descriptive position here complicates the normative task a policymaker faces. What role should preferences play in policy if they are constructed in the way, and to the extent, that I describe? How do we know what to encourage? How do we know when people are better off? The neoclassical paradigm offers ways of addressing these issues; my alternative thus far does not. But if the neoclassical paradigm's answers are wrong, and significantly so, are they actually much better than indeterminate answers that might be justifiable on pragmatic grounds, or using *local* rather than overarching principles? Much research needs to be done, and the task is daunting indeed. However, there does not seem to be a viable alternative. Certainly, the neoclassical framework ought to be preserved to the extent possible; indeed, it seems likely that it is not infrequently right in many matters that lawmakers might care about. But a richer account that accords better with descriptive reality as well as intuition offers the promise of better policymaking, grounded in an understanding of how people really do form their preferences, and a recognition that doing so other than in accordance with the neoclassical model is not necessarily, or even typically, irrational.

To conclude, I echo the words of psychologists Rieskamp, Busemeyer and Mellers:

“Debates about rationality focus attention far too narrowly. A broader conversation — one that considers reasonable behavior, adaptive behavior, and the environment in which choices occur — is long overdue. We look forward to this shift in focus and the related evidence and theories that will unfold in the next several decades” (Rieskamp et al. 2006, p. 653).

ENDNOTES

¹ I do not want to say they always accept the position. My point here is simply that the bulk of the scholarship expressly disputes the positive, descriptive claim. Sometimes, the evidence used against the positive claim is characterized as a normative failing; other times, normative concerns are simply not addressed. As Bruce Chapman notes, “[T]he general tenor

of [studies showing that rational choice theory is descriptively incorrect] is not to question the normative ideal of maximization. Rather, the departures from the standard account of rational choice are typically characterized, and criticized, as failures to be rational.” (Chapman 2003, p. 1170). A standard line of argument is (a) economists assume preferences are fixed; (b) they are wrong; (c) we need to take into account that experimental evidence shows preferences are constructed; and (d) here is a context in which preference construction matters in the following way.

² More precisely, we may have such an ordering at the moment at which we make a choice, but the ordering is with respect to the particular context; the ordering will almost certainly change. This kind of ordering is consistent with rational choice theory but if we only have orderings at the time of choice, the theory is almost a tautology and largely useless.

³ The best argument for the rational choice theory’s normative claims is the Dutch-book/money-pump argument. I discuss at length in Section 2 why the Dutch-book argument does not suffice as a normative grounding for the rational choice theory.

⁴ Gilboa and Schmeidler correctly critique expected utility models on grounds that “in many decision problems, states of the world are neither naturally given, nor can they be simply formulated. Furthermore, often even a comprehensive list of all possible outcomes is not readily available or easily imagined.” (Gilboa and Schmeidler 2004, pp 659–60). But their alternative oversimplifies: they “suggest that people choose acts based on their performance in similar problems in the past.” *Id.* *Similarity* determinations are not any more automatic than the determination of the possible choice set for a decision. The determination that A and B are similar could be otherwise depending on the same sorts of factors I will discuss in the text regarding how narratives are formed. Consider: similarity to what end? My toaster and cranberry juice are both similar in being red. Are they more similar to one another than my toaster is to my food processor?

⁵ Note that Keys & Schwartz (2007) speak approving of *substantive rationality*. However, they are using the terms differently than Simon does. *Formal* rationality, in Keys & Schwartz’s parlance, is the same as *substantive rationality* in Simon’s parlance. What they mean by *substantive rationality* has significant overlap with what Simon means by *procedural rationality*.

⁶ The preferences I characterize as narratively independent are the paradigmatic preferences on which traditional economists base their theories. Consider in this regard the following statement by Gary Becker (1996, p. 3):

“Much of modern economics still proceeds on the implicit assumption that the main determinants of preferences are the basic biological needs for food, drink, shelter and some recreation. That may not be a bad approach for the very poorest countries, where families spend over half their incomes on food

and another quarter on shelter, and where adult males manage only a few hours of true leisure each week It should be obvious that basic needs for food, shelter and rest have little to do with the average person's choice of consumption and other activities in modern economies."

⁷ Elaborating on the example, I may contribute time and effort to secure the release of a prisoner wrongly convicted in remote country X; in large part, I may be motivated by wanting to believe I live in a just world where being innocent pays off. I am therefore not being purely altruistic; indeed, I am acting very much in accordance with my self-interest. Believing that I live in a just world is an important part of my life, helping me conclude that working hard and generally obeying the rules is worthwhile. But for the just world concern, I might not be motivated to act: Any instrumental motive for my behavior is obscure and remote at best. What is the chance that a good outcome for the prisoner will affect laws generally or in my country, will prevent the fomenting of unrest that could hurt me, or that the person, imprisoned unjustly for a number of years, will leave jail angry and do damage that could hurt me? Presumably zero. The just-world effect has been discussed in the literature, although in quite a different context: blaming a crime victim in order to sustain a belief in a just world. (Lerner 1980)

⁸ To say that preferences are fixed and not constructed is also to say that preferences are (known or) discovered rather than created. While economists do not expressly use the discovery/creation distinction, the vocabulary of discovery pervades economics as well as law and economics — consider in this regard the agency cost/lemons models, with their focus on acquiring information from those who, for self-serving reasons, are not revealing it.

⁹ Dutch-book arguments work most directly when intransitive preferences are at issue. For instance, if person X prefers A to B, B to C, but C to A, X will pay more for A than B, and more for B than C, but more for C than A; somebody could engage in a series of transactions with X where X would be selling C for a particular price, but repurchasing it for more; with enough of these transactions, X would eventually go bankrupt. Intransitive preferences are not coherent. Paradigmatic intransitive preferences are, however, stable and determinate.

¹⁰ Schauer is actually rather sympathetic to such arguments, arguing in effect that life is often weird; still, he thinks that even slightly weird cases ought not to unduly inform rule-making or law-making. (Schauer 2006).

¹¹ Rabin (1998, p. 682) makes not only this point, but also a broader point about the use of Dutch-book/arbitrage arguments against *irrational* choices generally. Returning to Nonhollywood, the economists are arguing again about preferences for movie-going. They argue:

“Indeed, if there were people who went around giving \$8 for nothing in return, they would quickly be driven from the market, so that their behavior would not matter: *But those behaving like this will be driven from the market!*”

“An audience member assured you that somebody willing to pay \$8 for a movie could be “Dutch-booked”: If people paid \$8 just to sit in front of a screen, then somebody could make money off of them! When you respond that, yes, somebody could and *is* making money off of those willing to pay the \$8, another audience member assures you that if people were really willing to pay \$8 for nothing in return, they would in short order be bilked of all their money by an arbitrageur. When you shyly suggest that a consumer’s willingness sometimes to give some of his money to see a movie doesn’t mean he’ll pay infinite amounts to anybody who offers movies, or suggest it might be costly to provide these movies, you get scoffed at for being ad hoc, changing your story, and being very loose about what preferences you were proposing.”

¹² The two types of cases are quite different. The mistake cases lead to a different (and ultimately more limited and tractable) research agenda than cases that do not constitute mistakes. The mistakes agenda is presumably to educate people not to make mistakes or not act on them, or limit the damage if they do act on them, or something of the sort. The framing/elicitation agenda is much more open ended.

¹³ People do not avoid *all* advertisements. Indeed, there are awards for the best ads. Especially good advertisements are viewed voluntarily on the Internet. But people would still avoid most advertisements if they could. A recent example of efforts along these lines is the pop-up blocker.

¹⁴ Another, complementary type of indirect information provision may also be occurring in some types of celebrity advertising: people may infer that a celebrity would not have participated in the advertising if she did not believe the product was good, and that her belief counts for something, especially if she is considered to have knowledge relevant to the product or to be circumspect about lending her name to advertising campaigns. This account works nicely within the neoclassical paradigm. However, it only applies to a subset of what is already a subset of advertisements, celebrity advertisements. More significantly, the mechanism it postulates also ultimately relies on the construction of preferences. Consider in this regard how we determine whose knowledge counts, and who is considered authoritative.

One pure signaling example may be the use of William Shatner in advertisements — at this point, the mechanism seems to be the equivalent of a catchy tune rather than any indirect provision of information other than the company believes in the product enough to bother finding and paying Mr. Shatner. A different but perhaps related mechanism hypothesized in the literature is that people may wish to use a product touted by an admired celebrity because they wish to emulate the celebrity. (Becker and Murphy 2000).

¹⁵. The Economist Magazine's on-line dictionary of economics terms defines preference as *[w]hat consumers want*. (See Revealed Preference, *Economics A-Z*, www.economics.com). The definition of Revealed Preference contains the following joke: Two economists see a Ferrari. *I want one of those*, says the first. *Obviously not*, replies the other. This demonstrates the theory that what a person wants is revealed not by what she says but by what she does. . . But clearly a person can have a preference in the absence of having to make a choice, and can have to make a choice not completely in accord with her preferences. As Cass Sunstein puts it,

“If preferences are reducible to choices, we can dispense with the idea of preferences entirely. But if we do this, much of the explanatory value of expected utility and rational choice theory will be lost. . . . [I]t will be necessary to give up on the notion of an underlying causal relationship between choices and internal mental states. An important goal of rational choice theory has been to help show how choices connect with preferences, defined independently of choices” (Sunstein 1993, p. 222),

Some might argue that rational choice theorists have abandoned this goal; in my view, if they have, doing so was a mistake.

¹⁶. The term *preference* is sometimes defined more inclusively, and sometimes less inclusively. Sometimes preferences are defined as choices; some definitions exclude values. I take the approach of Bowles, Sen and others who define preferences more inclusively to include choices and values, but go beyond both. Indeed, the definition of preference, and distinctions between preference and choice, turn out to be critical.

¹⁷. The default rule is not just influential because it is easiest to go along with. Indeed, there is evidence that a default rule or option is seen as being endorsed by the people or entities responsible for offering the option — often, the government. (McKenzie et al. 2006), A notable example discussed in the article is the differing rates of organ donation in countries where one has to opt in to donate versus countries where one has to opt out not to donate. The donation rates in the opt out countries are much higher. (Zink et al. 2005).

¹⁸. Ultimately, there may not be a completely clear distinction between these two types of preferences. Happiness is clearly higher-order; Wheaties are probably lower-order. But what about a preference for better health vs. a preference for curing cancer? But there are enough clear cases that the distinction is tractable for my purposes.

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