

Georgetown University Law Center

Business, Economics and Regulatory Policy
Working Paper No. 452100

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Beyond Mistakes: The Next Wave of Behavioral Law and Economics

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1. Confronted with considerable evidence that law and economics was ‘getting it wrong’ about people, scholars have spent prodigious amounts of energy figuring out how law and economics can get it right. They have spent most of that energy challenging law and economics’ claim that people are ‘rational’ and don’t make mistakes—that people acquire the optimal amount of information and process it correctly, using standard (albeit not necessarily conscious) cost-benefit computations.¹ Scholars have shown, however, that people do make mistakes, and that the mistakes are systematic, not random. The seminal figure in demonstrating the existence of these systematic mistakes is the psychologist Daniel Kahneman; Professor Kahneman won a Nobel Prize in economics in 2002 for his work.

Energy also has been spent showing that the other important component of the law and economics’ view of people, that people act to maximize their own self-interest, is wrong. A growing literature demonstrates that altruism and cooperative

*This paper was presented as the 2003 Galway Lecture at Queen’s University, Kingston, Ontario. Thanks to Lori Andrews, Kathy Baker, Brian Bix, Lloyd Cohen, Jacob Corré, Tyler Cowen, Phil Curry, Nicholas Georgakopoulos, David Gerber, Victor Goldberg, Mitu Gulati, Sharon Hannes, Peter Huang, Douglas Kysar, Mark Lemley, Don Langevoort, David Luban, Arthur Markman, Richard McAdams, Dale Nance, Erin O’Hara, Jeff Rachlinski, Jackie Ross, Larry Solan, Bobbie Spellman, Eugene Volokh, Richard Warner, Robin West, Jonathan Yovel, the participants at the Canadian Law and Economics Association Conference in 2001 and 2002, faculty workshops at UCLA, Georgetown University Law Center, Case-Western University and the University of Indiana-Indianapolis, where I presented related work, the Brooklyn Law School Symposium honoring the publication of Steven Winter’s *A Clearing in the Forest*, and the attendees of the Galway Lecture. I also wish to acknowledge the very capable research assistance of Charity Ryabinkin, GULC ’04, and Micah Thomer.

¹ There are many formulations; one early, prominent formulation is from Gary Becker, *The Economic Approach to Human Behavior* (University of Chicago Press, 1976) : “ [A]ll human behavior can be viewed as involving participants how maximize their utility from a stable set of preferences and accumulate an optimal amount of information and other inputs in a variety of markets.”

behavior is not uncommon, and that people abide by norms of reciprocity and fairness.²

But another, and in some respects more profound, challenge to the law and economics model has not yet been made. Law and economics gives short shrift to how people make sense of the world—how they label, sort and organize their experiences to form their worldviews—because it assumes that there is often a correct ‘sense’ to be made: a ‘fact of the matter’ agreed upon as a matter of consensus by ‘society.’ In other words, law and economics assumes away the process of ‘categorization,’ one of the most basic psychological processes that help us organize our thinking and actions.³ How else to explain law and economics’ treatment of acquisition costs (defined broadly to include processing and verification) as the only obstacle to perfect information? Perfect information—the ‘fact of the matter’ about the world—is assumed to exist, and in theory be available to be discovered. How something comes to be, and comes to be regarded as, information in the first place isn’t part of the inquiry.

² Relatedly, what constitutes somebody’s ‘interest’ has been challenged as well. In the standard paradigm, people knew what was in their interest; indeed, what was in their interest was assumed to be, crudely, ‘money’ or ‘money and power.’ The situation is well summarized by Erin O’Hara and Douglas Yarn, *Apology and Consilience*, 77 *Wash. L. Rev.* 1121, 1163-4 (2002): “Economists remain agnostic when it comes to defining or ascertaining the contents of individual utility functions, which in turn determine people’s ‘self-interest.’ Preferences, which make up utility, are left for exploration by psychologists. In the meantime, economists make assumptions about individual preferences, and models work more effectively where the assumed preferences are clear, or at least not hopelessly vague, and quantifiable. In the spirit of simple modeling, law and economic scholars typically assume that people desire money, or wealth, to the exclusion of their tastes for other things. Most law and economic scholars will readily admit that human preferences extend beyond material wealth, but reductionist models can generate testable predications about behavior that cannot be garnered from more realistic analysis.”

Evidence has been accumulating that law and economics can, and should, do better. Increasingly, the assumption seems inadequate even as a simplifying assumption. And the specter that any alternative would lead to tautology has been lifting. We can do better than just saying that people want what they seek; evolutionary theory can define a person’s interest as that which enables them to pass on the most genes to the next generation, or neuroeconomics can show what people actually value by looking ‘inside’ their brains. How much prediction either approach will enable isn’t clear, but the descriptions at least will be rich and, in the case of neuroeconomics, go well beyond speculation.

³ The seminal figure in categorization is Gordon Allport. Among the leading scholars in the field today are Lawrence Barsalou, Arthur Markman, Douglas Medin and Brian Ross.

The first wave of behavioral law and economics,⁴ with its focus on mistakes, hasn't helped matters. Either people are making mistakes or they aren't, and we know which of the two states we're in. Identifying the various processes that lead to mistakes and the consequences of those mistakes, figuring out how to correct the mistakes, and, more ambitiously, figuring out when mistakes are apt to occur, is the focus of the scholarship. Behavioral law and economics might note that people think they're better drivers than they actually are; say, 80% of drivers think they are better than average. But this assumes a societal consensus on a metric for judging good and bad driving. Behavioral law and economics might note that once something has happened—say, there has been an accident at a particular intersection—it seems likelier in retrospect. But this assumes some societal consensus as to the 'true' probability (or at least that the ex post assessment is false). And, more significantly, it assumes societal consensus as to the classification of this accident as one of a set of 'like' accidents. That the classification isn't just mechanical can be easily seen by comparison with a classification that *is* largely mechanical, such as pregnancy or heart attacks.

Moreover, it's not as though the focus on altruism has thus far done a much better job in helping law and economics take into account how people make sense of the world. It has also largely assumed away the issue. Either somebody is acting in her own interest or she is acting in somebody else's interest and we know which state we're in. (That being said, work being done in a field with some relationship

4 This phrase is also used in Colin Camerer, Samuel Issacharoff, George Loewenstein, Ted O'Donoghue & Matthew Rabin, Regulation for Conservatives: Behavioral Economics and the Case for "Asymmetric Paternalism," 151 *Univ. of Penn. L. Rev.* 101 (2003). It seems fair to say that while their view of what constitutes the first and second waves differs from mine, their view of the limitations of the first wave and the promise of the second has a fair amount in common with mine. They say: "One can distinguish two phases, or 'waves,' in the modern (post-1980) history of behavioral economics. The first wave identified a variety of disparate phenomena that were all anomalous compared to rational choice predictions, but which otherwise had little in common. As a result, early critics of behavioral economics often complained that it was just a laundry list of departures from rational choice. The second wave is now gathering force and it represents a scientific consolidation that addresses this critique. Precise functions that add one or two free parameters to standard rational theories are being applied to explain important anomalies and make fresh predictions." *Id.* at 105-6. But there is one significant difference between the authors' focus and mine. They characterize their work, and implicitly, the work of 'the second wave' as challenging the assumption of 'perfect rationality.' My work challenges an implicit assumption of 'perfect and complete consensus' about the world (or at least, much more perfection and completion than is the case). To the extent the consensus concerns information about the present (is this car a lemon?) what's at issue is also a challenge to the traditional 'perfect information' assumption, but a neglected, and logically prior component of that assumption: the existence of perfect information is the focus rather than the possession of it. The 'perfect and complete consensus' assumption can be challenged independent of whether the 'perfect rationality' assumption can or cannot be maintained in a particular instance.

to categorization, whether and how people know what they want, may change matters. What's in somebody's 'interest' has some relationship to what they want, and scholars are increasingly showing that people don't know very well what they want, how much they value it, or what makes them happy.⁵⁾

Some recent scholarship begins to analyze issues that expressly turn on how people make sense of the world. Discrimination has been a particularly fertile area. How might a majority group member form her impressions of the characteristics of a minority group member? How might the majority group member's perceptions be affected by the limitations on her data—that is, that she simply encounters fewer minority group members? (How does she try to economize on information costs?) In particular, will the majority group member come to see some particular complex of attributes as typical of the minority group members? And what will be the effect of majority group information acquisition and processing strategies on minority group members and on minority group interests? These types of questions increasingly are being posed.

More broadly, the burgeoning literature on norms and the expressive function of law also implicates how people make sense of the world, as does some of the work of authors seeking to bring 'critical' and 'post-modern' perspectives to law and economics.⁶ Some of this work is seen as challenging the standard law and economics paradigm. But the challenge I have articulated has not been recognized. Once it is recognized, it can be met in a manner that best marshals the power of law and economics to explore a broader set of problems.

2. The standard law and economics paradigm can give short shrift to how people make sense of the world because it implicitly assumes that people know and agree on far more than they actually do.⁷ They may not have perfect and complete

⁵ The work of George Loewenstein explores many of these areas. Indeed, demonstrating how established work in this area has now become, the New York Times Magazine had a long feature article on the subject. Jon Gertner, *The Futile Pursuit of Happiness*, N.Y. Times (September 7, 2003).

⁶ Authors doing particularly interesting work in these areas include Richard McAdams (norms and the expressive function of law) and Douglas Kysar (other types of critiques of the law and economics paradigm).

⁷ One notable exception is Ronald Gilson, *Value Creation by Business Lawyers: Legal Skills and Asset Pricing*, 94 *Yale L. J.* 239 (1984). Gilson's thesis is that transactional lawyers add value by structuring a process and documentation that makes the assumptions of the capital asset pricing model more nearly true. There are many things the parties don't agree on. The lack of agreement comes in part from self-serving concealment but also from generic informational incompleteness. Perhaps the matter at issue can't be known until some time in the future. The lawyers help the parties articulate something they can agree on. For instance, the parties can agree that part of the purchase price for a business is to be paid in the

consensus, but they are assumed to have much more consensus than they actually do.

In the paradigm, people know (a great deal about) their own characteristics, aptitudes and preferences and agree on how to regard others' characteristics and aptitudes. People know what they're willing to pay for something; people know what's in their interest. People agree on what constitutes a good (or bad) employee, a good (or bad) car, a good (or bad) agent, a good judge who makes few if any 'errors.' More broadly, people agree on an accepted way to categorize and understand other aspects of the world. Activity X—say, 'drunk driving'—has Y level of risk based on the present state of knowledge. What counts as a cost and what counts as a benefit is straightforward. Exercise is a cost; a fancy dinner is a benefit. Finally, there's consensus as to the future. We can't predict it, but we agree on the alternatives and their respective probabilities, based on the present state of our knowledge. We don't know whether we will catch disease X, but our probability of doing so is Y%, and if we do catch disease X, the probability that we will survive is Z%. Our probability of winning 100 in a lawsuit is N%; our probability of losing 200 in the lawsuit is R%.

None of this is to suggest that law and economics thinks people have perfect information. Law and economics is exceedingly quick to acknowledge imperfect information. But the information imperfections typically focused on relate to who *has* the information and how others will get it, not on the logically prior inquiry of how something comes to *be, and be regarded as*, information in the first place.

Indeed, the imperfection is very often about information asymmetry rather than informational incompleteness. The information 'exists'—there's some truth, some 'fact of the matter.' It's just that not every actor has it. The car is either a lemon or it is not. The car dealer knows the truth; others may not. The same holds for behavior in the future. An employee on salary may be shirking. The employee knows the truth; others may not.

Occasionally, information is incomplete and not asymmetric—still, there's the assumption that it exists to be discovered, and the inquiry simply concerns the (known) costs and benefits of the discovery expedition. And the same is true prospectively. Perhaps renting cars costs more than it 'should' because there's no

future, based on how much cash flow the business actually generates. The parties needn't agree on how much cash the business will generate; they need only agree that for every \$x the business generates, the buyer will pay \$y in purchase price.

cost-effective way to get somebody who's going to drive a car for a day or week care for the car as though he was going to own it forever. We know the possibilities and how to characterize them.

Why and how does this matter? Because holding onto this assumption—that people know and agree on far more than they actually do—limits law and economics' advances on a number of fronts, and leads it astray on a number of other fronts. Law and economics' focus on ways to get people to reveal what they know gives short shrift to inquiries into the many circumstances in which there's no authoritative source for the information at issue. Will the culture of business A and business B mesh? Will person C be a good fit in person D's organization? We can't just solve the problem by getting someone to reveal 'what he knows'—nobody knows, and the parties will have to come up with transaction-cost economizing strategies to do the best they can. We don't know much about these kinds of strategies and what we do know is mostly generic—costs 'won't' exceed benefits, and parties will exploit various economies, including economies of specialization, scale and scope. Or there may be an authoritative source, but the information simply doesn't exist in a form that makes it straightforwardly amenable to revelation. We may need to monitor somebody—say, a released mental patient or a corporate manager—but often don't know well enough what to monitor them *for*. (Consider: what does the phrase 'he's capable of anything' mean?) Similarly, law and economics' focus on ways to get people to act so as to increase the size of the collective pie gives short shrift to inquiries into the many circumstances in which pie-increasing entails more than just aligning incentives and allocating tasks and risks in some manner known to reduce transaction costs. A significant part of the task and risk allocation will be done under conditions of radical uncertainty; we need more ways to analyze how people arrive at their best guesses. Why did insurance against breach of representations and warranties in acquisition transactions only become available comparatively recently? Why do only particular industries, such as the retail industry, have industry-specific 'factors' that supply considerable amounts of the industry's financing? How can an exotic risk, such as the risk of natural disasters or a particular level of energy consumption, be understood sufficiently that it can be sold on the capital markets?

Holding onto the assumption that people know and agree on far more than they actually do has another cost: it leads law and economics to try on and retain explanations in the lemons family even when such explanations don't fit very well. Consider explanations about why somebody seeking to get a good job in the future would invest in a college education even if college taught him nothing whatsoever that would be useful to a future employer. Or why a company would hire a well-known celebrity as the celebrity pitch person. In both cases, an

important part of what's going on is supposedly the eliciting of private information. In the first case, the employee is signaling that he's a capable employee. In the second case the company is signaling that its product is good. But it seems counterintuitive to think that the main information problem faced by employers and consumers in these types of contexts is generally ferreting out 'the truth' from, respectively, the employee and the company. The employee has better information about his capabilities—at least certain aspects of them—than the employer does. And the company knows something about its product at the outset, whereas the consumer does not. So ferreting out this information might be necessary. But it is very far from sufficient. The employee and the company could be mistaken, or could simply not have known what was required, appropriate, or, in the case of the new product, salable.⁸

3. To address these sorts of issues, law and economics needs to consider the process by which people make sense of the world and themselves. My focus is on what may be the main way people make sense of the world and themselves: 'categorization,' putting things into categories. We could not function without categorizing; the alternative would be to assess each thing or experience anew without benefit of past learning. When we categorize, we are saying 'this thing before me is one of a class of Xs; this X has in common with other Xs certain attributes that make them all Xs.' We have categories for matters of 'fact' ('cleaning products' 'brown-haired females' 'cancerous cells'), for norms ('things that are/aren't done'), for matters particularly relevant to us ('foods I'm allergic to; items I need to pack for my vacation; types of people I like; characteristics I think define me ') and for many other things.⁹ Sometimes we categorize for a specific, limited purpose. But even our 'general', all-purpose categorizations are 'motivated'—the contents of a category are always dictated by the purpose the category is supposed to serve. What falls within the category of 'sex'? What falls

⁸ Indeed, celebrity pitch people may be helpful precisely because what's needed is not just 'revelation' of information but 'creation' of it- creation of, say, a norm of something that's 'done' or 'not done' which the celebrity is looked to to define by reason of their expertise or other aspects of their persona. Once Madonna or Britney Spears broadcast their willingness to wear a particular type of clothing, the (many) people who think of them as the arbiters of coolness will know what to wear, in part because they know what their peers will be wearing.

⁹ Arthur Markman and Brian Ross, two of the leading contemporary scholars in the field of categorization, define categories as "groups of distinct abstract or concrete items that the cognitive system treats as equivalent for some purpose." They note that categorization serves several functions, including the classification of objects, prediction, communication, and formation of preferences. Arthur Markman & Brian Ross, Category Use and Category Learning, 129 Psych Bulletin 592, 592-3 (2003).

within the category of ‘art’? It depends why we want to know. If we’re compiling statistics on pregnancy and sexually-transmitted disease, we may want to define the category of ‘sex’ very differently than we’d define it if we were studying patterns of arousal, for instance. If we’re deciding what to put in a museum, we may define ‘art’ quite differently than we’d define it if we were considering the qualifications of an art therapist.

Categorization is not mechanical or formulaic; rather, it is a rich, nuanced process. Categories are typically formed around a prototype; there are typically many penumbral cases, cases that are progressively further away from the prototype. George Clooney is a prototypical bachelor; the Pope is a more penumbral case. The society may have consensus as to a prototype; which cases are penumbral and how penumbral a particular penumbral case is may be less a matter of consensus. For instance, is the Pope a more penumbral ‘bachelor’ than a 13 year old boy?

There are also competing prototypes. Which is more prototypically American, the relative homogeneity of the Midwest or the ethos of Ellis Island? Indeed, some categories aren’t formed around one prototype. Categories can also be formed around a group of characteristics, where no one exemplar or prototype or category member has all the characteristics. The classic example is Wittgenstein’s, of games: some games have boards; some games have game pieces; some games have 2 players; some games have balls; etc. There is some group of traits that the members of the category share, but there is no one set of traits that define the typical member. Here as well, there are (perhaps many) core cases and fuzziness at the periphery.

Categorizations are oftentimes made, not found; they are malleable and path-dependent. Think of what the category of ‘fashionable garb’ included in the late 1970s and early 1980s. That categorization isn’t fixed, but is instead changing and malleable, is obvious when it comes to norms, especially norms that are merely ‘focal’ or serve to coordinate. Consider norms about how one conducts oneself at job interviews, religious services, musical performances, business negotiations, ATM machines, classrooms, etc. (An aside: there was an interesting story recently in the New York Times about a US businessman who learned ‘the hard way’ that cleaning his teeth at an early afternoon meeting with the business cards his Japanese counterparts had given him violated the local norms.) That categorizations as to matters particularly relevant to us aren’t fixed should also be intuitive. Consider a facetious but quite serious example: why people go to therapy. A woman wants to change the set of men she finds attractive. A man

wants to change the category of traits he thinks describes him to exclude some negative traits and include more positive ones.

And it is, of course, not just people themselves who might want to change how they categorize themselves. The government may want to promote the idea that people can make a fresh start—that a person who has assessed himself as a loser at time T should know that the category of ‘losers’ doesn’t include everybody who was ever a loser at any time in his life. Even as to matters of fact, categorizations are malleable. What counts as a healthy lifestyle? (In the movie *Sleeper*, Woody Allen wakes up to find out that a healthy lifestyle includes steak and hot fudge sundaes.) Is a lottery ticket part of the set of things that are dream-inducing? (The New York State lottery authority says yes in its advertisements that tell people ‘buy a lottery ticket, buy a dream.’)

All this is not to imbue categorization with more power than it has. How people see things does not, of course, dictate how they act. But it is one factor. Certainly, if somebody thinks cigarettes aren’t dangerous at all, she won’t try nearly as hard to quit as if she thinks they are risky.

3.1. Sometimes, the result of categorization will be in some straightforward way a mistake—either it is incorrect, or it leads to a result that is perhaps inefficient and certainly societally undesirable. Consider stereotyping, which can be characterized as having a category constructed around the wrong prototype (an example: women are emotional and unstable and hence unsuited for public office).¹⁰ Stereotyping has generated voluminous literature; certainly, law and economics has not been silent on matters within the more general category of discrimination. But law and economics can very profitably use its focus on costs and benefits to help it understand categorizations about gender, race, and other such characteristics, as some fascinating new scholarship is doing. By taking into account how people categorize—what categories they have and how they decide what to include within a particular category, we can perhaps develop a richer model of how discrimination works and, more ambitiously, better policy solutions as to how to counteract it. Recent articles by Devon W. Carbado & Mitu Gulati¹¹

¹⁰ Fryer & Jackson, *infra* note 12, use a different definition. They regard a prototype as one’s own exemplar, and a stereotype as one’s view of what ‘is thought’ perhaps by others, and perhaps by ‘society. (“There is evidence that individuals can quite accurately identify a ‘stereotype’ for a given vector of attributes that will be common to others or possibly even to a cultural history, even without having that as their own belief.” *Id.* at 27)

¹¹ *The Law and Economics of Critical Race Theory*, 112 *Yale L. J.* 101 (2003)

and Roland G. Fryer, Jr. & Matthew O. Jackson¹² illustrate the point. Both articles use categorization to model the actions and reactions of employers and minority group members.

Fryer & Jackson consider an employer who is making a hiring decision. Among the candidates are those from racial minority groups. The employer wants someone with a high investment in human capital; the potential employees have either high or low investments in human capital, and there are equal proportions of the two types in both the majority and minority groups. The employer can detect the level of investment much more readily in majority group members than in minority group members because he has sorted the more numerous majority group members into several categories, including a category of ‘majority group member with high investment in human capital.’ He has sorted the less numerous racial minority group members into one category, ‘member of the racial minority group;’ the prototype for this category is, accurately, someone with an intermediate level of human capital. Minority group members, faced with this incentive structure, won’t invest sufficiently in human capital; the human capital level for the prototype for the minority group will decline; minority group members will have even less of an incentive to invest in human capital, and so on; the dynamic will be self-perpetuating.¹³

The model employed by Fryer & Jackson deliberately assumes away some of the complexities of real-world categorization. Fryer & Jackson mention some complexities that should be worth exploring. For instance, what determines how fine-grained a categorization is apt to be? Some evidence shows that “people tend to more finely categorize individuals who are above them in a hierarchy and more coarsely categorize individuals who are below them in a hierarchy.”¹⁴ Fryer & Jackson note, too, that their model treats categorization as fixed, glossing over the extent to which both the number and content of categories is malleable.

12 Categorical Cognition: A Psychological Model of Categories and Identification in Decision Making, National Bureau of Economic Research Working Paper 9579 (March 2003), available at <http://www.nber.org/papers/w9575>

13 Fryer & Jackson consider, as they must, why there won’t simply be employers who find it worthwhile to search for the high-capital-investment minority group members. Their answer is that unless there are enough such employers (at the outset), the search costs will continually increase, since there will be progressively fewer high-capital-investment minority group members. *Id.* at 8.

14 *Id.* at 27

Carbado & Gulati use categorization differently. Noting that there are prototypes of members of minority racial groups, they ask: “(1) How do prototypes incentivize behavior?” “(2) [W]hat are the costs of responding to the incentives that prototypes create?”¹⁵ They characterize many employers as seeking both diversity and homogeneity (within the majority culture and ethos).¹⁶ The ‘prototypical’ minority group member will detract from the workforce’s homogeneity, an employer will think. Thus, the minority group member will have an incentive to adopt one of a number of costly strategies to persuade the employer to hire her. The strategies may be costly to the individual, to the group, or both. The minority group member might, for instance, seek to convey that she’s like the ‘insiders’ in the firm she wishes to join, and not like the prototype. One cost of such a strategy may be “to compromise one’s self of identity.”¹⁷

Carbado & Gulati also consider the extent to which the prototypes of particular sorts of victims may provide problematic incentives and impose costs on non-prototypical victims. One example is rape. “If the protection of rape laws accrues only when women behave in a particular manner (let us say, “modestly”), that means that women who want the protection of the rape laws have an incentive to present themselves in ways that fit the protected prototype. In this sense, the price of receiving legal protection is the cost of acting in a manner that fits the prototype. These costs may be higher for some than others. For example, if modesty is defined in terms of white upper-class behavior, it may be costly and difficult (even if not wholly impossible) for minority women to perform their identity in a manner that fits that prototype.”¹⁸

Law and economics can profitably take account of categorization in many other contexts. Consider the task of a corporate director. She is supposed to ‘monitor’ the officers. For what? Among other things, self-dealing. But she can’t look for ‘everything’—what would that mean? Checking the officers’ briefcases after they

15 Carbado & Gulati, *supra* note 11, at 171-2.

16 “Central to our story is the idea that, due to evolving antidiscrimination law and changing social norms concerning equality, an employer’s response to the homogeneity incentive will include some diversity hiring....[There is] a diversity-imposed constraint ... a limit on an employer’s ability to realize the efficiency gains from homogeneity by hiring only whites.” Carbado & Gulati, *supra* note 11, at 106.

17 *Id.* at 157

18 *Id.* at 171-2

leave the shareholder meeting to make sure they didn't steal the shareholders' wallets? Presumably not. Stealing shareholder wallets isn't something that anybody would plausibly expect an officer to do. The director is selecting what to monitor for based on a category—actions the officer might be capable of—or 'actions (or outcomes) I'm supposed to monitor *for*.'

But how are such categories constructed? What did people think Bill Clinton was capable of after the Lewinsky escapade? Reasonable people could, and did disagree wildly. What do we think the 'average officer' is 'capable of'? The conclusions are scarcely dictated by the 'data.' Nowadays, when we have to judge what directors did, and have to figure out how they might do better prospectively, it will be critical to understand how categorization works in this context. The classic focuses—how to motivate directors (with equity stakes, say) and how to make them be less beholden to officers—need supplementation. The perfectly motivated and independent director (admittedly a mythical beast) still needs guidance on how to transcend the limitations of her imagination and experience, and how to make do with necessarily limited resources. (Even if one could 'think of everything' one couldn't check for it.) We need to think more systematically about what it makes sense to monitor *for*—what it's cost-effective to look for given how likely it is to be occurring—what the officer is 'capable of', what the damage would be if it were occurring, and how easy it is to find. One theory a co-author and I are considering comes from evolutionary biology. It was evolutionarily very important to accurately construct a category 'what person X is capable of.' We are trying to model how a capacity to construct the category that would have worked quite well to meet the needs of our ancestors might work in a less satisfactory manner in modern times.¹⁹

None of this is to say that categorization always matters. There are many cases where categorization *is* uncontroversial and its complexities can safely be ignored—where perfect information does exist, even though not everybody has it. If that weren't so, law and economics would scarcely have achieved its well-deserved prominence in the legal academy. The recent financial debacles provide an example, as the classic lemons scenario was played out by corporate managers who had both the ability and incentive to conceal that they were, and were acting like, lemons (bad agents). But this class of problems can be seen as the low-lying fruit; other harder- to-reach fruit await.

¹⁹ The work is tentatively called Monitoring through an Evolutionary Lens; my co-author is Erin O'Hara.

3.2. Categorization is relevant when government attempts to influence behavior by shaping norms and/or beliefs (as to ‘matters of fact’). The analytic framework typically used in this context is ‘expressive law.’ For instance, by making something illegal, the law is expressing that it is also ‘bad;’ people who behave in the illegal way may become subject not just to legal sanctions but also to ‘shunning’ as the new norm is enforced.

But norm-shaping also invokes categorization—a new norm joins other norms as being something that is or isn’t done. The new conduct must be shown to have something in common with other conduct already in the category at issue—where something new is being prohibited, it must meet the criteria for membership in the category of things that are ‘wrong’ (the new action also hurts other people, for instance.)

Similarly, if the government wants to convince people that something is ‘risky,’ part of what it is doing invokes categorization—it is depicting the new thing as properly belonging within the pre-existing category of ‘risky things.’²⁰ (Of course, the government’s attempt to shape beliefs faces other, probably more difficult, challenges: people may simply not believe the government, or they may believe the government but not do anything about it (yes, eating supersized fries is bad for me, but I’m going to do it anyway)) The point can be illustrated with an example that is ridiculous but nevertheless true. Many years ago, the comedian Dick Gregory tried, half-kiddingly, to convince people that eating was hazardous. One argument he made was as follows: “pick up a newspaper and look at the obituary page. See? Every one of those people were eaters!” Nobody is going to accept such a connection—‘eating’ just isn’t going to pass muster as something that is properly within the category of ‘things that cause death.’

Obviously, there is considerable malleability when it comes to norms. Norms arise and disappear with some regularity. But there is some malleability as to beliefs about matters of fact as well; indeed, what constitutes a matter of fact may not always be distinguishable from what constitutes a norm. Consider the ‘friends don’t let friends drive drunk’ campaign, attempting to influence what’s in the

²⁰ In this regard, Douglas Kysar convincingly argues, relying in part on Paul Slovic’s work, that there is no such thing as ‘objective’ or ‘real’ risk. Risk is what is categorized as such; the categorization is constrained, but not completely -- and not wholly by the external world. He notes that “[t]he definition and description of risk necessarily entails an exercise in social power, an act of inclusion and exclusion that carries enormous practical and rhetorical significance for ensuing debates about environmental, health and safety threats.” Douglas Kysar, *The Expectations of Consumers*, 103 *Colum. L. Rev.* __, at 103 (2003)

category of ‘friends’ and ‘what friends do and don’t do;’ the category of ‘what friends do’ can be seen as both a matter of definitional fact and a norm.

The malleability described above is qualitative. But, less intuitively, categorization is also malleable on quantitative dimensions. Public service advertising about littering attempts to get people to categorize their littering with that of others. By contrast, the ‘buy a lottery ticket, buy a dream’ campaign attempts to prevent people from categorizing their purchase of one lottery ticket with any other purchase of any other lottery ticket. The pitch ‘buy a ticket, buy a dream’ could scarcely be used to support buying 100,000 tickets, since attention would thereby be drawn to the fact that any particular ticket was exceedingly unlikely to win. An anti-drunk-driving campaign that tells one story of one accident that ended in a tragic death also exploits the malleability of categorization on quantitative dimensions: the message is that one ought to put each instance of drunk driving into its own category, or perhaps into the category of ‘things that lead to serious injury or death.’ One isn’t to have a category of ‘drunk driving’ in which disastrous instances are grouped with other instances where the drunk driver got home just fine.

The government’s success at influencing categorizations turns in part on whether it has effective competition. For instance, when it seeks to be the arbiter of cool, it’s competing against somebody who’s probably better at the task: the advertising industry. It’s not surprising that the ‘smoking isn’t cool’ campaigns haven’t been particularly successful. By contrast, consider the ‘fresh start’ accorded in bankruptcy. People have categories relating to how they see themselves. Somebody might think ‘I am a loser.’ The government presumably wishes to encourage its citizens to be financially responsible; yet, it has decided to let people not suffer the full consequences of their irresponsibility by allowing for a ‘fresh start.’ But one important function of the ‘fresh start’ might be expressive: to convey to a person that it’s simply false that the category ‘loser’ will always include him if it ever has—that his problematic past needn’t dictate a problematic future. And in this expression, government would seem to have a clear field: it is unlikely that anybody would want to offer a competing message, and many groups, such as religious groups, might want to offer a complementary message.

3.3. A related point concerns consumption and preferences. The traditional law and economics paradigm hypothesizes that people have fixed preferences and implicitly, that they know what those preferences are.²¹ In his book *Luxury*

21 Gary Becker noted, in *The Economic Approach to Human Behavior* 5 (Univ. of Chicago Press, 1976) that “[t]he preferences that are assumed to be stable do not refer to market goods and services, like oranges, automobiles or medical

Fever²², Robert Frank argues that people’s preferences may sometimes be for relative status rather than for particular goods. We consume particular goods not because we like them but to keep up with and perhaps even surpass the Joneses. We are engaged in an arms race to have more, and more visible, ‘stuff’ than our peers, just as peacocks are driven to increase the size and ostentatiousness of their tails. The arms race keeps everyone in relative parity; if everybody disarmed, they’d be in the same place relative to one another and there would be considerable savings of time and effort. Frank’s suggestion is a steeply progressive consumption tax; the tax would serve as a disincentive to ‘excessive’ expensive consumption. It would also help fund quality-of-life enhancing public goods.

That preferences for particular items aren’t fixed seems to me completely correct. Indeed, in a fascinating set of experiments, George Loewenstein and his co-authors found that people were enormously influenced by anchors they knew were arbitrary—their own social security numbers—in deciding how much they valued particular bottles of wine and other items.²³

That preferences for particular items are sometimes actually preferences for status also seems to me completely correct.²⁴ And Frank is using a tried and true means

care, but to underlying objects of choice that are produced by each household using market goods and services, their own time, and other inputs. These underlying preferences are defined over fundamental aspects of life, such as health, prestige, sensual pleasure, benevolence, or envy, that do not always bear a stable relation to market goods and services.” How specific the preferences are is a matter of dispute; notwithstanding what Becker had to say in 1976, many, and perhaps most, economists speak as though the preferences that were stable were precisely the types of preferences Becker was excluding—that is, preferences for particular objects. As D. Ariely, G. Loewenstein, & D. Prelec note in, Tom Sawyer and the Myth of Fundamental Value, MIT Working Paper, (2003), “modern economics assumes that exogenous consumer preferences interact with ‘technologies’ and initial endowments to produce equilibrium stats of the economy- the prices and production levels. This analysis falls apart if preferences are themselves influenced by the very equilibrium states they are presumed to create. Indeed, in the domain of economic decision-making, the most salient and potentially powerful anchors may very well be...the relative prices and relative scarcities of different commodities... [A] certain price level may prevail because of collective anchoring, triggered by historical accident or manipulation.” Id. at 14

22 Robert Franks, *Luxury Fever* (Free Press, 1999)

23 D. Ariely, G. Loewenstein, & D. Prelec, *supra* note 19.

24But how do people determine what their status is? Even here, the task is apparently involves creation as much as discovery. See Armin Falk & Markus Knell, *Choosing the Joneses: On the Endogeneity of Reference Groups*, Institute for

for reducing problematic consumption: making it more expensive. Frank's solution may help. That being said, besides the political difficulties in enacting it, it also has some curious effects—the better it works, the worse it works. The better it works at reducing problematic consumption, the worse it works at raising money to do the things Frank thinks would actually increase the quality of life but aren't status-conferring: better schools, cleaner air.

But why is the category of what's status conferring not also up for grabs? It's not, for instance, as though 'bigger is always better'—for some things, the smaller the better. (Most) Televisions should be large, as should pepper shakers and boom boxes. But cell phones should be small, as should certain other types of electronic equipment. "Items that connote status" is a category, malleable and path-dependent like many categories, and perhaps, even more malleable and path-dependent than most categories. There are subcommunities where status is conferred based on engaging in socially conscious activities; it seems in principle possible that 'time spent volunteering for Habitat for Humanity' could become status-conferring in more communities. It would seem, then, that one way to address the problem Frank addresses is precisely to try to change the contents of the category of 'status conferring activities.' Parallel terminology would refer to a change in social meanings. But my terminology, invoking categorization, is meant to emphasize the cognitive component of the endeavor—the component that emphasizes that members of the category 'status seeking activity' have to be able to be depicted as having something in common, the same way members of the category 'red things' do.

Should the government seek to pursue this strategy, it will want to understand as much as possible about the selection principle for the category. Consider in this regard the work of Dorothea Kubler distinguishing between 'snob norms' and 'bandwagon norms.'²⁵ She notes that if the norm at issue is a 'snob norm,' discouraging it via incentives isn't likely to work—the more costly and difficult the thing at issue is to do or acquire, the more attractive doing or acquiring it will be. Her suggestion is that efforts should be directed towards changing the social meanings (I would say, categorization) of these norms. By contrast, 'bandwagon'

Empirical Research in Economics, University of Zurich, Working Paper No. 53 (2000). The paper argues that people can at least partly choose their reference group or standards.

25 Dorothea Kubler, On the Regulation of Social Norms, 17 JLEO 449 (2001). Kubler defines a norm as a "moral expectation shared by a group of people, entailing social stigmatization or at least moral indignation aimed at those who deviate."

norms can indeed be cost-effectively changed via incentives. Arms-race consumption would seem, interestingly, to have elements of both a ‘snob’ and a ‘bandwagon’ norm—an analysis as to which one dominates might help determine whether Frank’s policy prescription is best able to reduce this type of consumption.

Of course, what people want and why they want it is a very complex matter. But what’s critical is that people’s preferences are not just there to be discovered either by markets or even by the people themselves. Doug Kysar characterizes consumption, a close relative of preferences, as “a messy communicative act that combines pleasure-seeking with elements of self-definition and social-expression.”²⁶ How we will experience a particular act of consumption,²⁷ what that act will tell us about ourselves and will tell the society about us is determined in significant part by how it is categorized. Is the act the sort of thing people pay to do, or the sort of thing people are paid to do? Is the act ‘something cool people do’? Is it ‘something disciplined people do’? I discussed earlier how policymakers might try to shape the category of ‘what friends do’ (they don’t let their friends drive drunk.) There are many implications for how we might regulate advertising and other related matters from such an analysis. None of this is to overstate the role of categorization in the formation of norms, beliefs, or preferences; other psychological, social, economic and legal factors are clearly very important. But the cognitive dimension is important as well; understanding how changing norms, beliefs or preferences might require changes in categorization might help assess the viability and desirability of a norm, belief-or preference-changing strategy relative to other possible strategies.

3.4. Another tantalizing set of applications relates to the construction of ‘choice sets.’ In a world where categorizations are found, not made, choice sets are predetermined; one simply gets information (in the ways so well described in

26 Id. at 41.

27We may or may not know what will give us pleasure; indeed, if something is being like other pleasurable things, that may lead us to infer that the thing is pleasurable and perhaps even experience it as such. In G D. Ariely, G. Loewenstein, & D. Prelec, *supra* note 21, at 3, the authors use the following example: “In a famous passage of Mark Twain’s novel, Tom Sawyer, Tom is faced with the unenviable job of whitewashing his aunt’s fence in full view of his friends who will pass by shortly and whose snickering only adds insult to injury. But as we know, when his friends do show up, Tom applies himself to the paintbrush with gusto, presenting the tedious chore as a rare opportunity. Tom’s friends wind up not only paying for the privilege of taking their turn at the fence but deriving real pleasure from the task- a win-win outcome if there ever was one.”

traditional law and economics models) as to which choice ought to be made. But as the psychologists Arthur Markman and Douglas Medin point out, “a substantial part of the choice process may involve developing the consideration set, which is the set of options that is actually being considered.” Consider, in this regard, choosing which computer to buy. Part of the choice involves finding out on what dimensions computers differ.

Markman and Medin note, too, that when a decision maker is choosing among options, it may not be clear which attributes of the options are relevant. The example they give involves choosing among dogs at a pet store. They also note that a decision maker may only consider a single option. The decision maker may be “retrieving potential options sequentially and accepting or rejecting them immediately rather than explicitly comparing a set of options. The process of generation and evaluation may differ substantially from comparative choice processes.”²⁸

The manner in which choice sets are constructed has many important implications and applications. One is for disclosure policy. Markman and Medin point out that when people are making choices, there’s a focus on alignable differences—dimensions on which the options can be compared directly. Only afterwards is there a focus on nonalignable differences. First we compare business A’s earnings with those of business B; next we consider that business A is in the chocolate business and business B provides maid services. There is a reason why ‘gaming’ price-earnings ratios is common; all companies have them, and companies know they are being rank-ordered on this dimension. I explored some of the ramifications of gaming these types of measures in an article on financial appearances.²⁹ As the disclosure debates rage on, spurred in part by Enron, there needs to be ample focus on how choice sets are constructed.

Another example comes from Virginia Postrel, a prominent libertarian thinker. A justification for affirmative action, she says, is that people choose not among all possible alternatives but among the ‘evoked set,’ which is necessarily a subset of the full set. They are hence more likely to choose a member of the evoked set. After discussing this phenomenon in the context of toothpaste, Postrel extends it

²⁸ Arthur Markman & Douglas Medin, (2002). Decision Making, in D.L. Medin & H. Pashler (Eds.) *Stevens Handbook of Experimental Psychology* (3rd Edition), Volume 2. (pp. 413-466, at 427). (New York: John Wiley and Sons)

²⁹ Claire A. Hill, Why Financial Appearances Might Matter: An Explanation for 'Dirty Pooling' and Other Types of Financial Cosmetics, 22. *Del. J. Corp. L.* 141 (1997).

to affirmative action. She noted that an article in *The New York Times* gave very short shrift to Will Smith and Wesley Snipes. “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.”³⁰

Yet another example comes from work done by Matthew Adler on cost-benefit analysis. He notes that “cost benefit analysis, in its standard form, presupposes the options for choice and other features of the choice situation, such as the information available for choice, and provides guidance with respect to a situation thus specified.” Where cost benefit analysis is going to be required under law, what is the status of the choice set? How is that decided upon? Adler considers whether the manner in which the choice set is determined ought also to be dealt with in law—whether it ought to be “legalized.” The distinction he is making is, as he says, largely the same as the political scientists’ distinction between “the process of agenda setting, and the process of deciding between alternatives on the governmental agenda.”³¹ Assuming, as law and economics historically has, that the choice set is pre-determined, would assume away the issue Adler raises.

4. Whatever else the first wave of behavioral law and economics has done, it has shown that there’s a great deal the traditional law and economics model doesn’t correctly predict. Indeed, in some work, one can detect an interesting shift: the justification that the law and economics model does a good job at predicting is abandoned, replaced by a normative justification—‘well, people aren’t really like this, but they ‘should’ be.’³²

30 Virginia Postrel, *A Tool to Explain Affirmative Action*. *New York Times*, C2. January 30, 2003.

31 Matthew D. Adler, *Rational Choice, Rational Agenda-Setting and Constitutional Law: Does the Constitution Require Basic or Strengthened Rationality?* U. Penn. Law School, Public Law Working Paper 21; U of Penn, Inst for Law & Econ Research Paper 03-01, Feb. 2003. See also Chapman, *infra* note 30, and in particular, his discussion as to how choice sets are constructed. Although Chapman uses a philosophical rather than psychological rubric, his basic thrust has much in common with mine. See also Daniel A. Farber, *Toward a New Legal Realism*, reviewing *Behavioral Law and Economics*, Cass R. Sunstein, ed., 68 *U. Chi. L. Rev.* 279, 299 (2001): “[B]ehavioral law and economics in general has been focused on a subset of the human decision-making process: making choices between defined alternatives.”

32 Bruce Chapman notes: “Recently, the positive theory [of rational choice] has come under attack from experimental psychologists and economists. Their experimental results, gathered together under the banner of behavioral analysis, show that the maximizing model of rational choice often does not provide a very accurate account of how agents actually

The process by which people make sense of the world hasn't thus far been part of the inquiry law and economics typically contemplates making. But it should be. Traditional law and economics explains to us why markets draw negative conclusions when a company or its executives sells the company's stock. The executives know more than the market—they might very well be selling when markets view the stock more favorably than is warranted. Behavioral law and economics explains to us that juries might find a manufacturer liable for a misuse of its product that was only foreseeable in hindsight. Behavioral law and economics also explains to us that we may over or underestimate remote risks, or overestimate a probability based on salient cases, and act accordingly. We may shun Volvos if we know of 4 involved in accidents over the preceding months, even though the overall accident rate for Volvos is quite low. But neither is of much help when we're seeking to understand many real-world problems where categorization is less a matter of consensus.

Indeed, law and economics' most successful and best-developed applications thus far have dealt with a special case in which the process of categorization is properly left out of the analysis: a case where there is perfect and complete consensus. Categorization isn't at issue because everyone agrees on what categories there should be, and the attributes category members should have—that is, what the appropriate labels to be applied are once the information is obtained or the incentive is put in place (car is a lemon; person is a good agent). This is a very important special case, but a special case nonetheless.

The rhetorical structure is familiar in a field whose starting point is always a special case: the perfect, no-transaction cost worlds of the Coase Theorem, the Capital Asset Pricing Model and Modigliani and Miller's Capital Structure Irrelevance Theorem. The more general cases are in our world, with its many real-world costs and frictions. I have argued that one such 'cost' or 'friction' arises when there is no 'fact of the matter'—when perfect and complete consensus is lacking. But there are other heretofore un or under-acknowledged costs and frictions. For law and economics to 'get it right' about people, it needs not only to correct what it has expressly gotten wrong before, but more clearly articulate some of what it has implicitly assumed and assumed away, so that these assumptions can be properly examined and if necessary, questioned. Simplifying

choose...However, the general tenor of these studies 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." 150 U. Penn. L. Rev. 1169, 1170 (2003)

assumptions about emotions, motivation, preferences, and many cognitive processes have already been shown to be problematic; the simplifying assumption of perfect and complete consensus needs to be added to the list. Law and economics has acquired considerable experience in relaxing its assumptions without abandoning its deservedly vaunted parsimony and tractability.

Relaxing the assumption of perfect and complete consensus is far less radical than it might seem; it complements the traditional law and economics paradigm that views people as purposive (if not ‘rational’) maximizers. Indeed, once we acknowledge that figuring out what to maximize, and how to maximize it, isn’t straightforward, we can resume viewing people as typically doing the best they can to advance their own interests.

The approach I’ve described differs profoundly from the bulk of the behavioral literature to date. Most of the behavioral literature discusses people who are reaching sub-optimal outcomes. Sometimes, the process the people are using to reach these outcomes—a process that acknowledges some cognitive limitation—is argued to be adaptive generally but maladaptive in the case at issue. But the overall thrust is people ‘getting it wrong’—making mistakes. The approach I’m discussing contemplates that we may or may not know whether the result is a mistake, and often, our best guess is that it is not a mistake. And the focus of the explanation is on the behavior at issue as a neutral fact about the world, not on its status ‘as a mistake.’

I end by noting an irony. Law and economics has largely assumed away the process of categorization, while law itself expressly categorizes all the time. Much of the law—certainly, quite a bit of what we teach our students—is to show how judges decide whether a particular instance falls within a pre-established statute, rule, regulation, or common law. Is ‘this’ a ‘that’? Is this set of actions a “murder” as defined in the statute? Is a lien an ‘ownership interest’ for purposes of some regulation? Is an airplane a ‘vehicle’ for purposes of a ‘no vehicles in the park’ prohibition? Implicit in these determinations is that there is a prototypical case and many penumbral cases. The judges use the rhetoric of discovery, typically, in part to play their roles in the societal play in which they have been cast. Legitimacy is not at issue if you’re simply ‘discovering’ and ‘applying.’ But as decades, if not centuries, of jurisprudential scholarship has argued, and convincingly shown, that move is as much rhetorical as substantive. The same understanding needs to permeate law and economics.