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Nudges, preferences and competences: a critique of both neoclassical and behavioral economics

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Abstract

For all their differences, the two rival theories of human behavior have many unfortunate similarities. Standard rational choice theory posits that individuals use rational techniques to pick ends that meet their set of private preferences. Modern theories of behavioral economics point to systematic deviations from those principles. Both approaches assume that all preferences are individually based. However, the evolutionary principle of inclusive fitness insists that in family situations, it is the welfare of the unit, not of any of single individual, that explains various forms of natural love and affection that arise because of the interdependence of – and the redistribution of – wealth it requires. Likewise, both standard theories ignore variations in tastes and in competence levels that allow for gains from trade across competence levels. This paper then reinterprets the common treatment of nudges and the various legal doctrines dealing with disabilities, product liability, and firm structure where the standard assumptions of uniform behavior miss the salient features of human behavior and social interactions.

Keywords: disabilities; firm structure; inclusive fitness; incompetence; nudges; preferences; variations

Two schools of economic thought

Broadly speaking, there are two major styles of economic thought. The first, dubbed ‘blackboard economics’ by Ronald Coase (Henderson, 2013) stresses the dominance of formal proofs in economics which examine the operation of markets and other social institutions on the sensible if imperfect assumption that most individuals are rational agents seeking to maximize their private returns by making optimal decisions on how to buy and sell various kinds of goods and services. It is well understood that the assumptions that lie behind this model are oversimplified, but, perhaps for just that

reason, they yield powerful results. There is no reason to delve into the frailties of individual human beings to conclude that cartels and price control systems impose serious welfare losses on the economy. The notorious queues for gasoline under price controls in the Nixon administration show the excess demand over supply under the price cap, leaving people to devise various stratagems to move their places up in the queue. And that same theory shows that printing too much money can result in inflation that can disrupt all sorts of financial and mortgage markets. That theory also demonstrates that the untethered ability to walk away from contracts undermines the security of exchange that allows for gains from trade over the dimension of time.

There are two points to note here. The first is that the fact that demand curves slope down and supply curves slope upward means that there are always, on both sides of the market, differences in tastes and ability to pay that differentiate one person from the other. The second point is that no one person ever exerts much power over these issues, and so long as the weaknesses do not have a huge directionality, the safe assumption is that the various individual quirks and tics cancel each other out, so that the centralizing tendencies control the overall movements. Indeed, the new rounds of regulation on global warming, energy, health care, security regulation, antitrust and telecommunications constantly harp on the frequency of market failure. But despite recent interest in behavioral economics, these regulations rely on traditional (rational) public choice modes in the spirit of Buchanan and Tullock or on generalized laments of consumer ineptitude. They do not rely on the supposed behavioral quirks and biases that behavioral economics has identified, like anchoring and risk aversion. So many have been identified that it is virtually impossible to tell which bias or quirk is in play at any given time.

Yet once the focus shifts from these large aggregates to individual choice environments, the mood and analysis change. At this point, individual deviations from that rational norm can no longer cancel out, so that the austere rational choice assumptions of neoclassical theory have to bend to make some needed accommodations. It is thus no longer permissible to concentrate on the median, but it is now critical to look at the determinants of individual choices.

Rizzo and I come from very different backgrounds: he is more the Austrian economist and I am more the traditional lawyer who deals with individual cases that often arise because of deviation from standard practice. Our joint awareness of the imperfections of human nature made us in principle congenial to the study of behavioral economics, which also explores the follies and foibles of human beings. But strangely enough, both of us in different – but parallel – ways found that we were often deeply critical of the methodologies and concerns of this modern economic theory. Rizzo, with Glen Whitman, wrote a book, *Escaping Paternalism*, whose subtitle *Rationality, Behavioral Economics, and Public Policy* (Rizzo and Whitman, 2020) identified a large class of issues on which they disagreed with the modern behavioral agenda, much of which travels under the soothing name of libertarian paternalism (Sunstein and Thaler, 2003). They start off by offering a brief catalog of foibles made in connection with diet, retirement funds, discounting and the like. In its most generic form, they champion the findings of behavioral economics that are said to lead to deviations from the rational choice model. Hence, they question whether the use of various devices, including nudges, could and should be used to get individuals to make choices

that are consistent with their own (noumenal) preferences – a position I have long rejected (Epstein, 2012).

In this article, I shall address three major weaknesses of the modern behavioral theories. In this first part, I point out some of the dubious empirical leaps that have to be made to deal with ‘nudges’ which when sliced and diced, all too often go astray because of their failure to account for basic impulses of human behavior. The next two parts deal with the explanation for that breakdown given that the newer forms of behavioral economics make two erroneous assumptions – also shared in part by Rizzo and Whitman. The first is that they ignore the powerful way in which evolutionary pressures shape human behavior, displacing the model of individual self-interest with one of inclusive fitness that drives very different forms of human behavior in families and smaller kinship units. The second point stresses how deviation in individual competence level leads to additional opportunities for gains from trade between those with higher competence (who can deal with greater risk) and those with lesser competence (who cannot). By ignoring these points, both modern behavioral theories and the neoclassical versions of rationality offer unduly simplistic accounts of institutional arrangements, which in fact are driven in large part by the prospect for gains from trade across competence levels.

Overrating nudges

One of the singular contentions of behavioral economics is the belief that gentle nudges can move human behavior in a desirable direction without engaging in the naked coercion that is antithetical to libertarian norms (Thaler and Sunstein, 2021). In one of their most notable gambits, Thaler and Sunstein surmised that nudges could get students in school cafeteria lines to eat the good foods by putting the bad foods on the back shelves. Much depends on the particulars of how this experiment is structured in practice. If the food is free, no cafeteria could long survive if one tall kid scooped up all the tasty stuff from the back. So, stronger steps are needed. Hand out the desserts separately, or put them in a box to avert the risk by direct command, not by ineffective hints. Indeed, parents face the same issue, for students who receive healthy food for lunch often barter it away to friends and then buy the good-tasting stuff from a nearby market. The patterns change if the foods are sold, but then nudges fail empirically, because once past the cash register, ‘the extra that was taken because of the nudge was thrown in the garbage. In the end, the effect on consumption of healthy foods was nil.’ (Polman and Maglio, 2024). The law of unintended consequences applies to behavioral economics.

To give yet another example, Sunstein and Thaler (2003) write:

In the law of consumer protection, the most obvious examples of libertarian paternalism involve “cooling-off” periods for certain decisions. The essential rationale is that under the heat of the moment, consumers might make ill-considered or improvident decisions. Both bounded rationality and bounded self-control are the underlying concerns. A mandatory cooling-off period for door-to-door sales, of the sort imposed by the Federal Trade Commission in 1972, provides a simple illustration. Under the Commission’s rule, door-to-door

sales must be accompanied by written statements informing buyers of their right to rescind purchases within three days of transactions.

The apparent notion here is that the three-day waiting period is gently coercive but to great positive effect. There is no statement as to the cases in which these rules are maximally appropriate, but the reference to door-to-door sales suggests that these one-time encounters are ripe with the risk of fraud. Yet, there is no effort to demonstrate the benefit of these periods in that context, and none whatsoever to ask how they might apply in a different context, including home mortgages, where these cooling off periods are required. To test this hypothesis, I did a one-minute detailed empirical study some years ago when I closed my real estate mortgage. I asked the escrow agent whether in all the years on the job she had known or heard of anyone who sought to undo their home mortgage within the statutory period, to which her answer was a resounding no. I then asked whether she knew of borrowers, who sought, usually without success, to escape that limitation, to which the answer was a resounding yes. In some real estate closings, borrowers have to round up money at the last minute to avoid losing favorable purchase terms or to avoid forfeiting a down payment. A three-day delay in that universe is an eternity. It takes little time to realize that the consumers in these two different markets face very different constraints, so it becomes dangerous to think *a priori* that some restraints are minimal when they are not. Thus, I have taken the view that these laws should apply to returning prisoners of war (POWs) in Vietnam who were approached by salesmen when they had lots of pocket money (Epstein, 1975, p. 304). Given that the risk of fraud varies by consumer product, it might be wise to impose such a rule for encyclopedias but not beauty products, or the reverse, on which also see Rizzo and Whitman (2020, p. 10). It takes hard work to contextualize these statutes. Unfortunately, Thaler and Sunstein do not study how different markets work on the ground, which makes their prescriptions often read like ‘just so’ stories.

Well aware of these difficulties, Rizzo and Whitman seek to cabin these errors in *Escaping Paternalism* by pointing out the hidden difficulties of using these so-called beneficial controls to correct supposed cognitive or emotional flaws. Rizzo and Whitman do not treat all forms of regulation as bad, for the traditional rules that allow – indeed require – parents (as paternalists) to look after the welfare of their own children are deeply embedded, given that young infants can neither fend nor decide for themselves. The solution, especially in a state of nature, is that parents take on that job given the bonds of natural love and affection that bind them together (because of their shared genetic bond). That personal obligation survives even if mentally disabled or sick children have little or no chance to contribute to the care of their parents in their old age.¹ The state, once formed, then assumes a back-up duty of displacing parents in cases of abuse or neglect (usually defined narrowly); it is surely not unusual for parents to farm out the care of their children to close relatives in situations of extreme distress.

¹ At this point, I report a brief anecdote from 44 years ago at a New Year’s Eve party at the home in Chicago of William and Elisabeth Landes. George Stigler was espousing the ‘Chicago’ view that all human exchanges are done with an eye to future mutual gains, such that children are cared for today so that they will care of their parents in old age. But general practices need not be iron laws. So my wife, Eileen, thinking of my autistic niece, asked George, ‘Why does any parent take care of an autistic child?’ George was, for once, silenced. He shrugged, stood up and quickly walked away.

And at the other end of life, adult children often take over the care of their parents. So, any inquiry into paternalism and rationality in the modern vein only addresses the *extensions* of paternalism into everyday life, where the waters are much muddier than the standard behaviorist literature suggests.

Understanding preferences

Theoretical preliminaries

As a lawyer one is forced to encounter many stubborn practices that do not jibe with any strong set of preconceptions, and so I address the basic problem by asking when some deviation from the norm justifies the use of state power to regulate business and social relations, even for persons who are not remotely in need of institutional or custodial care. It is in this context that behavioral economists use a definition of rationality that is too strict for its own good.

The standard economic theory of market behaviors takes the competence of ordinary individuals and the stability of their preferences as articles of faith, without resting their views on explicitly evolutionary grounds (Becker, 1971). Under this definition, rationality involves a cluster of traits whereby preferences are stable over time, complete and internally consistent, such that if A is preferred to B, and B is preferred to C, then A is preferred to C. In speaking of stable preferences, there is a necessary distinction between immediate and ultimate preferences in order to recognize that any theory of human behavior allows people to update their immediate choices on the strength of new information in order to satisfy their ultimate preferences. Rizzo and Whitman give good reasons to think that the firmness of this distinction may be undermined by constant shifts in context that make it hard to frame the relative orderings (Rizzo and Whitman, 2020, pp. 42–44, 55–56). But I would not put too much weight on these epistemological objections because it is doubtful that people would want to suffer willingly from these reversals if they could accurately identify and eliminate their sources. The desire to be consistent can rid us of these errors. The objection in some sense works off Coase's contrary-to-fact zero-transaction-cost world where all deals are executed effortlessly and instantaneously. This artificial assumption is only useful to let people structure actual transactions for flawed individuals who had no time to think of them. The same is true with perfect rationality, which is only possible in a world where everyone gets perfect scores on their GREs.

That strong version of rationality has to be erroneous on *a priori* grounds because people can only be error-free if they have infinite resources at their disposal, which is just not possible in a world of scarcity where trade-offs necessarily have to be made in choosing among goods and the strategies for their valuation. Thus, it cannot be that anyone, let alone everyone, has perfect *competence* in decision-making. Yet Rizzo and Whitman do not list the topic of variation in competence in their index, so it comes up only obliquely, but never systematically, in their book.

Yet, that outcome cannot be right no matter which brand of economics is favored by this or that investigator. Put otherwise, if any agent is presented with two or more options to test against his or her preference set, it will take some effort to figure out the return from both alternatives – or are there more? – before choosing. This embeds a

costly search cost problem into preference formation, requiring incremental inquiries before knowing whether to decide now or investigate further.

To make matters worse, on both the standard view of rationality (SR) or Rizzo and Whitman's inclusive rationality (IR), the specification of that decision-making mechanism is elusive at best. Thus, in his contribution to this issue, Roberto Fumagalli asks us to consider a triplet of preferences for apples (A), bananas (B) and cakes (C), where he thinks that strict transitivity can be satisfied (Fumagalli, [in press](#)). But, ironically, his plan of action is unattainable because that simple ordering is incomplete when tested against everyday behavior. On some occasions, I prefer a fruit salad with a side piece of cake. In other cases, I may prefer bananas for breakfast, apples for lunch and cake for dinner. And more generally, I may prefer a balanced diet across different food groups for health reasons given that human beings need to satisfy certain nutritional intakes (such as essential amino acids) or die. Thus, the foodie industry thrives on a mix of old favorites and new cuisines for dining pleasure. In dealing with this dizzying array of revealed preferences, a sensible person must, and can, explain many, perhaps even most, of these variations in ways that satisfy both completeness and transitivity by restricting the domain – that is to isolate preferences at breakfast during the week, but not on weekends. Hence, whether preferences are said to be narrow or inclusive does not matter, for the supporters of neither SR nor IR have any operational way to distinguish between these two positions at the theoretical level. Only in context can the rationality of discrete choices be understood in SR. In contrast, IR uses common sense to sort out cases. But in the end, both require the same information, albeit labeled and packaged in different ways. Thus, in any real-world setting, it is best not to try to second-guess or nudge any of the observed behaviors, unless there is some obvious breakdown in cognition (seizures, etc.) that raises medical, not economic, issues.

Food is also another area in which it is dangerous to assume hyperdiscounting, a puzzling practice of accepting a small benefit today and forfeiting a larger benefit down the road whose present value (such as with accurate discounting) is far greater. When the choice is with cash, there is a genuine puzzle, which should disappear if the subject is told that there is an active market for future income streams that, net of transaction costs, could yield a larger lump sum than the proffered alternative. It is hard to see who would decline that choice. But with food, the entire issue collapses because eating a cake now is not the same as that same cake two hours later. Right now I am hungry and the cake is worth far more to me now than later, when my meal is over, and there is a wide array of desserts available. As in so many cases, the nature of the underlying commodity (as with scams and home mortgages) has to be specified with great precision before making any finding of behavioral irrationality.

On this view, the scope of any generalized economic inquiry is limited. It becomes highly likely that any judgment that any given person has (or has not) obtained rational outcomes is difficult to make from the outside. In addition, neither Fumagalli nor Rizzo and Whitman offer any reason whatsoever to posit that all individuals, regardless of their natural endowments, have equal rates of successes or failures in seeking their highest level of satisfaction. The simplest observation shows that all individuals do not have the same height, weight and build. The most superficial analysis of general intelligence reveals that it is not uniform across all individuals, and ditto with athletic skills and resistance to antibiotics. Variation is everywhere. For analytical purposes, it

does not matter how these traits are distributed – be it with normal distributions, each with a distinctive median and variance, or in some skewed fashion.

What does happen is that the performance levels of a given set of people will not be uniform because they do not have the same level of competence. Some people will, as it were, be forever ruing their poor choices in marriage, friends, hobbies and work, and then, they will hire life coaches to help them get their lives back in order. Yet, others sail along with few regrets and much happiness in marriage, friends, hobbies and work. Thus, as an additional dimension, *variation in individual competence* adds yet another layer of complexity to an overall inquiry into the determinants of decision-making. Competence in managing life choices is as much a variable as height or cholesterol levels. It is one fraught with implications on how people behave both individually and in various social organizations.

At this point, therefore, it becomes important to find some way to soften the untenable assertion that rational behavior always involves flawed individuals with limited but uniform skills in making choices. Error is thus as much a part of the human condition as individual and group successes. One notable effort to tone down these strong claims is found in the work of Herbert Simon, who questioned strong assumptions of rationality by introducing the notion of ‘satisficing’, which rejects any claim of ‘the rationality of the utility maximizer, and a pretty smart one at that.’ (Simon, 1978, p. 2). But in so doing, Simon only relaxed the assumption of strict rationality to allow for the possibility of error. What he did not do, however, was address the obvious variations in competency that turns it into some random variable. The most obvious approximation is a normal distribution, whose median and variance have to be determined empirically. But nothing says that other asymmetrical distributions are off limits. At this point, Simon makes the same mistake as the hard-core rational choice types. Ironically, given that Rizzo and Whitman (ditto Fumagalli) target paternalism, they never respond to Simon’s work because the many variations of paternalism were not part of Simon’s project.

So, at last we come to the bulging field of behavioral economics whose mission is to expose certain patterns of behavior that deviate from the severe postulates of rational choice economics. The initial reaction should be to discount the novelty of this approach because in its search for anomalies it does not do the hard descriptive work to understand how simpler theories, correctly applied, offer more sensible solutions than its long list of implicit biases, cognitive or otherwise. For these purposes, one easy place to start is with the vast number of decision-impacting cognitive biases closely associated with the work of Kahneman and Tversky, where a bias *du jour* is the operating assumption (Tversky and Kahneman, 1974). Thus, it is always possible to run some experiments to show the quirks in human behavior where subjects fail to act on some agreed-upon norms in doing probability calculations. But it seems odd that anyone should try to make the case that humans do not behave rationally as a global observation about human nature regardless of context. The basic objection from human variation also applies here: some individuals will be better at ducking these traps than others, so this critique of human rationality, by positing uniformity of behavioral response, makes the same error as the standard model and its Simon variation.

There is yet a further reason why these skeletal accounts of human preferences do not ring true. The most powerful force of human nature, and indeed all living things, is for any organism to survive, and reproduce, through to the next generation in the cycle. Whether one starts at birth or puberty does not matter. If human beings cannot survive over that entire cycle, the species comes to an abrupt end. Hence, any theory of individual preferences has to be shaped with durability in mind, which is why the basic insight of *inclusive fitness*, associated with the work of W. D. Hamilton (1964a, 1964b), is key to understanding the basic structure of preferences: if they involve only individual satisfactions (i.e., parents prefer dancing when their children are ill), the species will die out (Epstein, 2009). But as Cass Sunstein and Richard Thaler reported, Amos Tversky quipped: ‘Listen to evolutionary psychologists long enough, and you’ll stop believing in evolution.’ (Sunstein and Thaler, 2016). To this group, I might add behavioral economists.

For human survival, these preferences have to be stable over time, and it thus becomes indefensible to speculate on matters of human identity in the manner of the noted philosopher, Derek Parfit, for whom the continuity between the present and future lives of a given person gives rise to problematic conundrums (Parfit, 1984). But in human affairs, there are no such sharp temporal divisions, for if there is, abstractly, one distinct future life, then there are literally thousands for every person such that it is now a real question of whether someone who orders take-out for dinner will have the same preference when the food arrives. And in dealing with retirement, behavioral economists overthink the problem. It is not that ordinary people acquire new personalities at only that convenient moment. It is that they face big choices, so they pay greater attention to their finances and life choices in transition. They will no longer have a steady income, and they may well want to relocate or downsize. They may have to face the loss of a spouse or partner. In general, retirees have two ways to reduce transition problems to manageable proportions. First, they can be confident that their underlying preferences are stable, and second, they know how to cope with future uncertainties. So, when people keep or acquire their dream home for retirement, they know what kind of living situation they desire. And to the extent that unhappy uncertainties pop up, these retirees keep enough of their assets in liquid form to meet these unanticipated changes. If people were immobilized by doubts as to their personal identity, they could either learn how to do long-term planning or make short-term gain (Epstein, 1995).

Thus, when Kahneman and Tversky speak about the errors that arise from using various heuristics, such as representativeness or availability (Tversky and Kahneman, 1974), they often ignore variations in competence among the general public or the targeted populations – even though they must acknowledge that some individuals are less prey to errors in judgment than others. And they are notably hostile to the use of evolutionary theory to explain either the reliability or stability of human preferences. Nonetheless, a robust account of human behavior has to measure both medians and variances in discharging various tasks. In addition, these variations in abilities are common knowledge, as everyone from the youngest age knows which kids are the smartest, the best athletes and the future musicians and artists. The rise of various forms of differential aptitudes and abilities has major implications for the organization of all kinds of social activities, both at the individual and the group levels. But to the extent

that all their dominant models ignore or downplay these forces, they are necessarily inadequate.

Legal and social responses to variations in competence and preferences

The common law approach in dealing with disabilities contains two separate parts. The first is that no individual can plead infancy or insanity as a defense against harms to strangers, in part to induce their guardians to take care to keep them out of harm's way (*McGuire v. Almy*, 1937). In contractual situations, however, the less competent are protected by the doctrine of undue influence applied to behavior that falls short of coercion and duress to protect them from disadvantageous arrangements, again with the intention of making sure that they receive independent advice before they enter into any transaction. But these remedies are only partial, and they tend to cover only those cases where persons are not expected to deal on their own with the vicissitudes of life. In addition, there is nothing about these doctrines that addresses systematic challenges that may be faced by individuals of lesser competence. Thus, it would be a mistake to assume that various protective strategies are unnecessary when individuals have weak disabilities. People who are legally competent – such as me – routinely hire financial advisors precisely because their relatively greater expertise yields higher rates of return (net of fees) than are obtainable from their own management of a portfolio. All they need to be is competent enough to know that others are more competent than they are. They do not have to know the craft of the experts, but they have to be able, or have a family member or friend who is able, to make intelligent decisions on whether to accept their recommendations or not. These are not hard conditions to satisfy. Lots of transactions, therefore, are only necessary because talents are not uniformly distributed across individuals, so trades that improve relative competence are commonplace in ways that none of the standard theories that ignore these differentials can predict.

Disabilities

This issue has assumed major proportions with the passage of the Americans with Disabilities Act (ADA, 1990) which created a general environment requiring that major alterations had to be made in all premises and facilities to take into account of the needs of disabled persons. No one doubts that ramps for wheelchairs and much other equipment are required in hospitals and in other establishments, such as retirement communities and hospices, to take care of the traffic. Yet at the time of the passage of the ADA, there was little reason to think that market solutions fell systematically short in this domain. One key point about all these programs is that they used a combination of physical accommodations with the intensive provision of services by trained personnel to do everything from delivering medicine to helping individuals walk, bathe and engage in the other necessary activities of life.

The question is just how far these protections should extend. The current law provides that these accommodations must be made in all kinds of buildings that are open to the public and even to purely private apartments – many of which do not need any wheelchair accommodations. But at this point, the entire rationing mechanism starts to unravel in a number of different ways. First, under any regulatory scheme,

the government has to introduce an inspection regime to make sure that the regulated party is in compliance. At this point, the easy and continuous shift from capital improvements to labor breaks down because governments know how to monitor structural flaws but rarely have effective means to see whether forms of labor assistance are supplied as promised. Accordingly, regulation is geared toward the former and not toward the latter, which creates massive distortions by requiring unnecessary capital investments.

In one dispute on which I worked, to forestall litigation about potential code violations, the property owner wrote to all tenants asking them to indicate, no questions asked, which defects in their accommodations (both in their units and the common areas) needed fixing. Virtually, all the requests were trivial (even though fines for violations, often discovered by testers, could be heavy, including ripping out structures with minor defects – electrical outlets one inch too high or low – and replacing them at great cost). There was one woman who submitted a request for \$30,000 in major repairs, but several days later, before the work could be started, she wrote back to say she needed assistance at home and was moving to an assisted living unit, so the repairs were unnecessary.

The same issues arose in connection with renovations made at the University of Chicago Law School after the ADA. In one notable instance, an attendee at a disability rights conference walked the office floors and found that all the beautiful Saarinen doorknobs were noncompliant, and so they all had to be replaced at great expense under the ADA even though no user had complained. Elsewhere, the Law School had to install an elevator with five stops to make sure that disabled individuals could ride up to public events even though there were always able-bodied individuals around who could, and in fact did, take wheelchairs up manually. The classrooms were also shrunk to enable wheelchairs to move behind the podium from one side of the room to another, even though there was at most one person in the building who used it. And when one courageous student with near total paralysis enrolled, the Law School was not allowed to supply her with a full-time attendant who could help her on campus and off but instead had to install special panels in the elevators (which are still there) to meet the capital requirements. The list can go on, but the point here is that while competence issues are often key, too often the wrong forms of intervention get adopted in response to isolated incidents. It is not that some availability heuristic has gone astray. It is that the major dangers associated with the traditional vices of public choice theory come to the fore, so that powerful groups can turn the regulatory scheme in their favor by skewing regulation. Yet, this simple point is often missed by defenders of regulation in their efforts to deal with admitted shortfalls owing to under-regulation in response to incompetence, and they introduce errors in the opposite direction.

Highway driving licensing schemes

There are also other schemes that have to deal with the dangers caused by incompetent activities. There is little doubt that drivers and passengers on highways are aware of these threats. So, the question is: what system of regulation should deal with these risks? And here, the universal strategy has several parts. First are the categorical exclusions. There are multiple stages in the process. The initial cut is into gross categories, so

that individuals below a certain age, usually around 15 or 16, are kept off the road on the general ground of incompetence to drive. There are always exceptions to these rules – farm children who drive tractors on roads – but the error costs of making individual determinations are too high because the number of youngish children who are able is sufficiently small that it is likely that higher case-by-case analysis will introduce more errors than it eliminates. At the next stage, transition rules take over: youngsters may drive with instructors, then later drive alone, but not at night or not at a distance from their home. Then, there are driving tests that seek to determine relative competence to drive ordinary cars and trucks, but special tests to measure greater competence are required for larger vehicles like buses and semi-trucks, given that the higher risks justify greater caution. But the license process is not at an end. Insurance requirements add a second layer of protection, and periodic tests for renewal do as well. Citations for poor driving are then used to get bad drivers off the roads, as are serious liabilities and criminal sanctions for dangerous driving. The movement between stages can vary from place to place, and there is no one right answer as to where the breakpoints should be placed. But the basic point remains: differential levels of competence are matched with different levels of overall supervision to maximize net gains from the system. A list of generalized cognitive deficits offers no information as to how these activities should be undertaken.

Defective products

Similar rules regarding differential competence also have a major role to play in addressing matters of ‘human factors,’ a branch of psychology which deals with the patterns of behavior at the man/machine interface (Cherry, 2024). This problem becomes a challenge for lawyers who have to design a system of liability for products that cause injury after they leave the hands of their original manufacturer and move down a chain of distribution that typically includes at least four basic actors: the manufacturer who designs, fabricates and puts warnings on particular products; the distributor; the retailer; and the customer or user. It is, therefore, possible to have three kinds of defects: design, construction and warning, which could impair the operation of a product. But that product is then shipped by a distributor to retail operations, and these organizations in turn are broken down into small units for sales to consumers, who either use them personally or pass them on to others for similar use. The correct way to think about these chains was put forward by Justice Roger Traynor in his concurring opinion in *Escola v. Coca-Cola Bottling Company* (1944, p. 444):

The manufacturer’s liability should, of course, be defined in terms of the safety of the product in normal and proper use, and should not extend to injuries that cannot be traced to the product as it reached the market.

Escola is generally lauded for expanding liability by moving to a strict liability regime from an earlier system that presumed negligence – *res ipsa loquitur*, or the thing speaks for itself – if the product was defective, i.e., with thin or brittle glass. Yet, using the correct definition of defect led to no real change in liability. At its core, the system rested on the view that the latent defect in the product – extra carbonation, a crack in a container, contamination by a foreign object, a weak cog in the machine – resulted

in no major shift in the regime, as detected by the lack of any response in the insurance market for these products. The theory was one of the manufacturer's implicit misrepresentations: the product looked safe when it was not. But once the product left the original manufacturer, it had to be shipped in ways that preserved its integrity: a bottle could not become dangerous by intermediate changes in heat and motion before it reached the ultimate user. For these critical tasks, variations in competence do not matter, given that strict industry protocols of handling and inspections could, and did, assure safety. But the last stage, 'normal and proper use,' puts the onus on the consumer and introduces added difficulties.

Just who are these users? The target population often varies. For automobiles, the class of intended users covers everyone from the novice to the professional, so the car must be safe enough for all to drive. But additional protections are needed against collision, and where ordinary expectations break down, it is best to adopt a specific statutory framework to firm up the requirements before these vehicles are sold. Always make sure that the statutes are fully binding on all parties, so that no one can insist on a novel precaution tailored to deal with, and only with, the collision that just occurred, or the drug that has some unanticipated side effect (Epstein, 1980, pp. 110-111). These ad-hoc balancing tests always result in major expansions of liability, as every case becomes a jury question under some risk/utility test that balances too many factors for too little gain (Wade, 1973) – in violation of the general injunction in favor of simple rules (Epstein, 1987).

Wholly apart from these interventions, there are many products like machine tools that require higher levels of skill, and for these, there are manuals and instructors who can guide people away from accidents that all too often occur in an initial encounter with a new tool for which the user has received inadequate instruction. And for such workplace accidents, workers' compensation is far better than tort liability against a remote manufacturer with less control over the situation.

In some cases of deep precision use, the matter of competence becomes even more critical. Thus, for virtually all surgical instruments, the use of safety guards will often hamper the skilled worker, so the key downstream adjustments restrict use only to highly trained practitioners. To relax the 'normal and proper' use requirement in these cases is an invitation to disaster. Thus, in cases like *Riegel v. Medtronic, Inc.* (2008, p. 320), the doctor performed a coronary angioplasty on a patient who had just suffered a myocardial infarction. Here is the tale of woe:

Riegel's doctor inserted the Evergreen Balloon Catheter into his patient's coronary artery in an attempt to dilate the artery, although the device's labeling stated that use was contraindicated for patients with diffuse or calcified stenoses. The label also warned that the catheter should not be inflated beyond its rated burst pressure of eight atmospheres. Riegel's doctor inflated the catheter five times, to a pressure of 10 atmospheres; on its fifth inflation, the catheter ruptured.

It is a tough call whether the doctor's decision to exceed known limits was a wise act of desperation, wanting for other treatments. But those difficulties do not justify any action against a company that has identified the key conditions for safe product use.

The tool has to work for competent practitioners, and using an ex-post rule to impose additional performance standards could easily result in removing sensitive instruments from the market. So, all the adjustments must be made downstream, such that products are normally and properly designed solely for the expert user. Competence differentials that are ignored in standard rational choice debates are the keys to the successful deployment of wide ranges of devices.

Relative competences within firms

Ronald Coase's famous article, 'The Nature of the Firm' (Coase, 1937), offers a well-rehearsed transaction-cost explanation as to when parties forego spot transactions in order to organize in firms. If the tasks are discrete, a two-party exchange is often sufficient to secure gains from trade. But in many situations, finding discrete transactions is not possible so that people consciously combine together in firms, to organize for ongoing relations. A firm can have partners and employees whose duties and compensation arrangements are not set for each discrete transaction, reducing the occasions on which payments are required (Williamson, 1981).

One major limitation of the Coasean argument, however, is that it does not specify two key elements for determining the organization of any individual firm. First, the basic firm structure: Is it a corporation, partnership or some other form of organization? What positions are then created, and what kinds of people can fill these roles?

It should quickly be apparent that none of the theories of human behavior are up to this task because they do not attend to variations in competence and tastes among individuals, but posit that they have some bundle of basic characteristics. If that were indeed the case, there is no reason why one person should be head of computers and a second in charge of advertisement. Yet, once heterogeneity among persons is introduced into the equation, the relevant job assignments become far clearer. It is necessary to match people to positions based on their interests and their talents, which will have to vary substantially among the firm members. Therefore, it is not likely that two randomly chosen individuals will be in competition for the same slot. These tastes matter because of the major investments in human capital that make such levels of specialization possible.

The same is true in matters of competence. Two computer programmers will not have identical or similar talents, and those differentials influence the roles they take and the form and level of the compensation that they receive. The higher the level of competence, the more difficult the tasks that can be undertaken. So given this difference, superior talent will tend to move toward an ownership position in the firm, which makes that person a 'residual claimant' who surrenders priority to less competent workers who in turn receive lower levels of compensation given their lower level of risk. And then, at the top level, key partners share the residual risks because even with different skill sets, the ablest have to take on the residual risks. It is, therefore, a huge mistake to adopt any theory of firm behavior that places all individuals in lockstep harmony. Rizzo and Whitman are right to take sharp issue with Thaler and Sunstein when the two of them object to the general presumption of freedom of contract in

labor markets (Rizzo and Whitman, 2020).² But all three versions of rationality – the standard model, the Simon model and the behavioral model – make the same mistake in their insufficient abilities to find a principled grounding for individual preferences and individual differences in competence. And once the right model is adopted, there are additional dimensions on which to trade that are only observable within the firm, and their existence makes the case for freedom of contract even stronger.

Conclusion

The great achievement of Rizzo and Whitman is to lay bare the difficulties in embracing the behavioralist models that treat deviations from the standard rational choice models as fatal flaws in economic theory. But to complete the story, it is not sufficient to undercut the case for paternalism. The fuller story is that some people do indeed need to be wards of parents or guardians, but there is a huge variation in preferences and competences that do not justify any such dramatic interventions. People who well know their own tastes and limitations are best able to enter into sensible arrangements that match their talents, preferences and competence. These choices should not be dismissed as naked preferences but should be understood as driven and shaped by the need for individual and group rationality in discrete individual settings. The real task is not to throw cold water on key social relationships. It is to broaden the tool set that helps bring greater clarity to the understanding of the mainstreams of human behavior. It includes taking efforts to adopt rules and practices that mesh with the complexities of human behavior and do more than assert or deny the importance of individual self-interest. At this point, the differences in abilities and competences really matter.

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References

- Riegel v. Medtronic, Inc.*, 552 U.S. 312 (2008).
 Americans with Disabilities Act, Pub. L. No. 101-336, 104 Stat. 327 (1990) (codified as amended at 42 U.S.C. §§ 12101–12213 and 47 U.S.C. § 225).
 Becker, G. S. (1971), *The Economics of Discrimination*, 2nd edn, Chicago: University of Chicago Press.
 Cherry, K. (2024), ‘The basics of human factors psychology: maximizing human capabilities’, Available at: <https://www.verywellmind.com/what-is-human-factors-psychology-2794905> (Accessed 18 September 2024).
 Coase, R. H. (1937), ‘The nature of the firm’, *Economica*, 4(16): 386–405. <https://doi.org/10.1111/j.1468-0335.1937.tb00002.x>
 Epstein, R. A. (1975), ‘Unconscionability: a critical reappraisal’, *The Journal of Law and Economics*, 18(1): 293–316.
 Epstein, R. A. (1980), ‘The Static Conception of the Common law’, *Journal of Legal Studies*, 9(2): 253–75.
 Epstein, R. A. (1984), ‘In defense of the contract at will’, *The University of Chicago Law Review*, 51(4): 947–982.
 Epstein, R. A. (1987), ‘The risks of risk/utility’, *Ohio State Law Journal*, 48(2): 469–477.

²For a more systematic defense of freedom of contract, see *In Defense of the Contract at Will* (Epstein, 1984).

- Epstein, R. A. (1995), 'Are values incommensurable, or is utility the ruler of the world?', *Utah Law Review*, **1995**(3): 683–715.
- Epstein, R. A. (2009), 'Happiness and revealed preferences in evolutionary perspective', *Vermont Law Review*, **33**(3): 559–583.
- Epstein, R. A. (2012), 'Inside the Coasean firm: why variations in competence and taste matter', *The Journal of Law and Economics*, **54**(S4), Supplement: S41–S62. <https://doi.org/10.1086/662187>
- Escola v. Coca-Cola*, 150 P.2d 436 (Cal. 1944).
- Fumagalli, R. in press, 'Standard rationality versus inclusive rationality: a critical assessment', *Behavioural Public Policy*
- Hamilton, W. D. (1964a), 'The genetical evolution of social behaviour I', *Journal of Theoretical Biology*, **7**(1): 1–16. [https://doi.org/10.1016/0022-5193\(64\)90038-4](https://doi.org/10.1016/0022-5193(64)90038-4)
- Hamilton, W. D. (1964b), 'The genetical evolution of social behaviour II', *Journal of Theoretical Biology*, **7**(1): 17–52. [https://doi.org/10.1016/0022-5193\(64\)90039-6](https://doi.org/10.1016/0022-5193(64)90039-6)
- Henderson, D. R. (2013), 'The man who resisted blackboard economics', Available at: <https://www.hoover.org/research/man-who-resisted-blackboard-economics> (Accessed 18 September 2024).
- McGuire v. Almy*, 8 N.E. 760 (Mass. 1937).
- Parfit, D. (1984), *Reasons and Persons*. Clarendon Press. Oxford.
- Polman, E. and S. Maglio (2024), 'The problem with behavioral nudges', *Wall Street Journal*, 26 May 2024. Available at: https://www.wsj.com/economy/consumers/decision-making-research-behavior-2e5060c1?mod=hp_featst_pos4.
- Rizzo, M. J. and G. Whitman (2020), *Escaping Paternalism: Rationality, Behavioral Economics, and Public Policy*. Cambridge: Cambridge University Press.
- Simon, H. A. (1978), 'Rationality as Process and as Product of Thought', *American Economic Review*, **68**(2): 1–16.
- Sunstein, C. R. and R. Thaler (2016), 'The two friends who changed how we think about how we think', *The New Yorker*, 7 Dec. 2016. Available at: <https://www.newyorker.com/books/page-turner/the-two-friends-who-changed-how-we-think-about-how-we-think>.
- Sunstein, C. R. and R. H. Thaler (2003), 'Libertarian paternalism is not an oxymoron', *The University of Chicago Law Review*, **70**(4): 1159–1199. <https://doi.org/10.2307/1600573>
- Sunstein, C. R., and R. H. Thaler (2003), 'Libertarian paternalism is not an oxymoron', *The University of Chicago Law Review*, **70**(4): 1159–1202.
- Thaler, R. H. and C. R. Sunstein (2021), *Nudge: The Final Edition*, New York, NY: Penguin Books.
- Tversky, A. and D. Kahneman (1974), 'Judgment under uncertainty: heuristics and biases', *Science*, **185**(4157): 1124–1131. <https://doi.org/10.1126/science.185.4157.1124>
- Wade, J. (1973), 'On the nature of strict liability in tort', *Mississippi Law Journal*, **44**(5): 825–851.
- Williamson, O. E. (1981), 'The economics of organization: the transaction cost approach', *American Journal of Sociology*, **87**(3): 548–577.