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Norms as Limited Resources

by Steven Hetcher

Editors' Summary: Despite its need for a constant supply of altruistic behavior, recycling has grown steadily in the United States over the past few decades, making it the most successful—and most puzzling—of the environmental norms. In this Article, Prof. Steven Hetcher uses the recycling norm as a means for teaching us about motivational assumptions regarding human behavior. In the past, scholars have taken an all-or-nothing approach toward the methodological assumption regarding human motivation; either people are basically narrowly self-interested or people are basically moral. This Article argues that the study of the recycling norm supports a third position, one that falls between these two extremes.

I. Introduction

As our forms of social organization become increasingly complex, so do our social problems. Our best hope for solutions is through the combined efforts of practitioners, policymakers, and theorists. In no domain of social activity are our problems more pressing or is the hope for real-world solutions more elusive than in the area of protection of the physical environment. On the theoretical front, one of the most promising developments has come through the recent introduction of social norms theory into the analysis of environmental problems.¹ Given that a norms approach continues to grow and evolve within legal theory generally, there is every reason to believe that this approach will continue to bear fruit in its applied modes, such as its use to better understand the physical environment.²

This Article focuses on the recycling norm, which is the environmental norm that has been most successful. The re-

cycling norm has been the subject of intense scrutiny, both in the world of practical politics and in a number of academic disciplines.³ Legal scholars may be particular benefactors of a better understanding of the recycling norm, as the very existence of the recycling norm presents a puzzle for those with a pragmatic interest in actual policy implementation. The recycling norm seems as if it should be incapable of persisting over time as it appears to require a constant supply of altruistic behavior of a sort thought impossible by the dominant law-and-economic approach to legal analysis. Not only does the recycling norm persist despite the prediction of economics, but it flourishes. Recycling has grown steadily in the United States over the past few decades.⁴ Thus, the recycling norm is like the flight of the hummingbird; impossible according to conventional scientific understanding but present in nature just the same. This fact makes widespread recycling behavior of great interest due to the questions it raises. What are the implications of recycling behavior for the prospect of instantiating other desirable environmental norms, and other desirable norms more generally? Turning from policy to theory, questions are raised regarding the adequacy of the economic approach

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1. See, e.g., Ann Carlson, *Recycling Norms* 89 CAL. L. REV. 1231 (2001); Michael P. Vandenberg, *Order Without Social Norms: How Personal Norm Activation Can Protect the Environment*, 99 NW. U. L. REV. 1101 (2005). Leading norms theorists have in passing noted recycling as an example of a social norm at work. See Cass B. Sunstein, *Social Norms and Social Roles*, 96 COLUM. L. REV. 903, 906-07 (1996); Richard H. McAdams, *The Origin, Development, and Regulation of Norms*, 96 MICH. L. REV. 338, 350 (1997).
2. For perspicacious perspectives on the law-and-norms movement, see esp., Richard Posner, *Social Norms, Social Meaning, and Economic Analysis of Law: A Comment*, 27 J. LEGAL STUD. 553 (1998); Robert Ellickson, *Law and Economics Discovers Social Norms*, 27 J. LEGAL STUD. 537 (1998); ERIC POSNER, *LAW AND SOCIAL NORMS* (2000).

3. See, e.g., Shawn M. Burn & Stuart Oskamp, *Increasing Community Recycling With Persuasive Communication and Public Commitment*, 16 J. APPLIED SOC. PSYCHOL. 29 (1986); Daniel Scott, *Equal Opportunity, Unequal Results: Determinants of Household Recycling Intensity*, 31 ENV'T & BEHAV. 269 (1999); John A. McCarty & L.J. Shrum, *The Recycling of Solid Wastes: Personal Values, Value Orientations, and Attitudes About Recycling as Antecedents of Recycling Behavior*, 30 J. BUS. RES. 53 (1994).
4. FRANK ACKERMAN, *WHY DO WE RECYCLE?: MARKETS, VALUES, AND PUBLIC POLICY* 8 (1997); Jim Glenn, *The State of Garbage in America*, *BIOCYCLE*, Apr. 1998, at 63 (noting that curbside municipal programs have grown dramatically in the 1990s); Carlson, *supra* note 1, at 1261 (reporting that recycling of solid waste increased almost fourfold in the 1990s); Gregory A. Guagnano et al., *Influences on Attitude-Behavior Relationships: A Natural Experiment With Curbside Recycling*, 27 ENV'T & BEHAV. 699 (1995).

to norms, as a theory that predicts the impossibility of an extant norm is a theory in need of evaluation.

The study of the recycling norm teaches us a very important lesson about an issue at the core of legal theory and social theory more generally, namely, the choice of the proper motivational assumption regarding human behavior that should serve as a starting point for legal policy analysis. The core assumption around which law and economics is built is the assumption of economic man, so-called *homo economicus*.⁵ On the economic account, rational man is an egoist.⁶ The recycling norm arguably provides grounds to reject this assumption, as narrowly rational actors should not be wasting their time on recycling but should instead seek to free ride on the recycling efforts of others. Those who reject the assumption of *homo economicus* typically reject it out of hand, and often in quite strident terms.⁷ On the main competing conception—the one held for instance by most sociologists, social psychologists, and philosophers—people are held to be sources of genuinely moral behavior as opposed to narrowly rational behavior masquerading as moral behavior.⁸ On this sociologically oriented conception, people are thought to be heavily influenced by social norms, and these norms are thought to constitute the morality of the community or society.⁹ This Article argues that the study of the recycling norm supports a third position, intermediate

between the previous two, called *predominant egoism*, which is neither fish nor fowl.¹⁰ On this view, people are predominant but not complete egoists. People indeed act in genuinely moral ways, but not to a significant degree in comparison to their self-regarding behavior (which is not to say that the results are therefore insignificant).

Part II will begin with a brief look at the development of law and norms by focusing on the manner in which it builds on law and economics. Law and economics has been the most significant single development in legal analysis over the past one-quarter century. Its impact has been felt as well in environmental law. Richard Posner has accurately noted that law and norms is second-generation law and economics.¹¹ It is not surprising then that the rational actor approach to norms has recently been applied to better understand core concerns of environmental law. Once these general connections between first-generation, law and economics and a norms-based approach have been set out, the way will be clear in Part III for a more specific look at the recycling norm. The Article first sets out some general features of recycling behavior. Next, it considers the potential importance of this norm from the perspective of rational choice theory. The Article compares the recycling norm with some of the dominant examples from the rational choice literature of practices that have presented persistent difficulties in terms of their ability to be explained by the traditional rational actor or economic account. The Article argues that recycling behavior is at least as difficult to account for under the standard assumption of *homo economicus* as are well-known examples such as voting and donating to public radio. It argues that the best explanation for recycling behavior draws an assumption of altruistic motivation that is at odds with the traditional rational actor account. In the following section, this claim will be evaluated in light of Prof. Ann Carlson's argument that the role of norms is minimal in the recycling context in comparison to the crucial role played by the consideration of convenience. Despite the role of convenience, the explanation of recycling that begins with the assumption of predominant egoism remains most viable. This discussion will raise an important question: how generalizable is the finding regarding the need to move away from the assumption of *homo economicus* toward a model that gives systematic explanatory space to the role of altruism?

To help answer this question, Part IV will consider recycling in light of an important conception of norm emergence that has been developed in the field of social psychology and recently imported into the legal domain.¹² This is the value-beliefs-norm (VBN) model of norm activation. The VBN model gives a potentially expansive role to altruism. If this model accurately characterizes the potential for altruistic motivation to play a vastly expanded role in the creation and

5. See STEVE A. HETCHER, *NORMS IN A WIRED WORLD* 66 (2004).

6. See generally GREGORY KAVKA, *HOBBSIAN MORAL AND POLITICAL THEORY* (1986).

7. See HETCHER, *supra* note 5, at 308. Non-rational choice theorists in political science, for example, sometimes refer to the theory as "rat choice," as in rats in a maze, to capture both the unflattering conception of human nature perceived to be held by the theory as well as its perceived behaviorist leanings.

8. ROBERT ELLICKSON, *ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES* (1991). See generally BRIAN BARRY, *SOCIOLOGISTS, ECONOMISTS, AND DEMOCRACY* (1978) (classic work setting out main differences between economic and sociological approaches to human behavior).

9. BARRY, *supra* note 8, at 3-8; HETCHER, *supra* note 5, at 98. The economic approach holds that this seeming morality of the sociologists can actually be explained in terms of narrow self-interest. Economists have long seen themselves as cynical debunkers of the easy moral terms thrown around by what economics sees as the other more lax social sciences. The appeal of the economic claim is due to the core value of parsimony in scientific explanation. Most relevant in the present context, it seems parsimonious to avoid assuming non-egoistic motivation if it is unnecessary in the most predictive explanation of some pattern of putatively normative social behavior, such as recycling. Traditional economics holds that sociology offers a vacuous account of why people conform to norms. According to the economists, on the sociological account, people conform because they have been conditioned through education to follow certain norms as compared to others. According to the economists, such accounts explain nothing because they do not explain why conformity is in the individual self-interest of each conforming individual. Russell Hardin writes:

Part of the appeal of the assumption of narrow rationality is almost methodological: it is easy to accommodate in analysis, and it is relatively easy to access in generalizable behaviors. An additional appeal might be, as is sometimes claimed, that it explains a very large fraction of behavior in certain realms. One can too easily overrate the size of that fraction even in the most explicitly economic contexts. But often the assumption of narrowly rational motivation yields predictions that are the most useful benchmark by which to assess the extent and the impact of other motivations. Occasionally it yields predictions which so nearly fit behavior that investigation need go no further in order to satisfy us that we have understood why certain outcomes, and not others, occur.

RUSSELL HARDIN, *COLLECTIVE ACTION* 11 (1982).

10. See HETCHER, *supra* note 5, at 98-103; KAVKA, *supra* note 6, at 64.

11. Posner, *supra* note 2, at 553; See also Richard Posner, *Social Norms and the Law: An Economic Approach*, *AM. ECON. REV.*, May 1997, at 365. The initial reaction of first-generation stalwarts to law and norms is aptly summarized in a comment I received in my first year in the legal academy from one such scholar after I had given a presentation utilizing norms theory to model negligence in tort at a law and economics workshop. His remark, delivered in a wry manner: "I can't decide whether you said nothing at all, or whether everything you said, I've said before."

12. Vandenbergh, *supra* note 1 (value-beliefs-norm (VBN) model applied to toxic release data).

maintenance of public norms of behavior, the implications are staggering for public policy. Most importantly, on this model, the emergence of important social practices is simply a matter of cost. The implication is that as cost becomes less of a factor, these practices should tend to emerge simply by operation of causal factors already in place.

II. Taking Norms Seriously

Beginning with a bird's eye view, norms are coming to be recognized as playing an essential role in comprehensive policy analysis. Norms are increasingly recognized as providing one important answer to the overarching framework concern that is sometimes referred to as the issue of institutional competence. When seeking to determine the best institution or combination of institutions to regulate a particular policy problem, we can no longer simply consider federal versus state regulation, or legislative branch versus executive branch versus judicial branch actions, or even a legal response versus a market response; it has become clear that we must also consider whether an informal means of regulation might be preferable to either a formal, legal response—be it federal, state, or local—or a market response.

The debate over the relative importance of top-down legal as opposed to bottom-up social forces in determining the emergence and maintenance of social order has been a venerable topic in legal scholarship. The classic work is that of Stuart Macauley, who long ago studied in a detailed sociological fashion the behavior of Wisconsin businessmen with regard to their contracting practices.¹³ Macauley's findings were startling, as he discovered that the practices of this important social group were significantly driven by informal social norms of fair contracting rather than by any predominant appeal to their formal legal rights. This finding was a frontal challenge to what is perhaps the single most widely held assumption in legal scholarship. Legal scholars disagree about many things, but one thing that has always garnered widespread, if usually tacit, agreement is the belief that the law serves as the dominant force in creating and maintaining social order via the creation of formal legal rights.¹⁴ A lawyer's reflexive response to a policy problem is to seek a legal solution. The implicit idea being that once the right set of rules are promulgated from on high, along with the proper set of sanctions for deviant behavior, then the state of affairs below will fall into place accordingly. Prof. Robert Ellickson has labeled this erroneous but widespread assumption of the legal academy "legal centralism," by which he means to capture the central role given to formal legal rules in the top-down causal account built into the traditional lawyers' model of social order.¹⁵

Professor Ellickson did a study of a community in Shasta County, California, of a sort a sociologist might do. He interviewed the relevant actors in order to determine the norms they held with respect to a variety of injury-producing behaviors related to cattle ranching and small-scale farming.¹⁶ But unlike the traditional sociological approach, Professor Ellickson then analyzed the behavioral norms he uncovered

in rational choice terms. Professor Ellickson developed the important hypothesis that communities under certain conditions—most importantly, when they are "close knit"—will develop welfare-maximizing norms.¹⁷ An implication of Professor Ellickson's analysis was to provide support for Macauley's thesis that lawyers overemphasize the importance of the law in regulating peoples' lives, as Professor Ellickson found that the ranchers and farmers in Shasta County do not follow the law in arriving at their welfare-maximizing outcomes. Most strikingly, perhaps, was that even insurance adjusters and lawyers who work in the area of trespass and automobile accidents were found by Professor Ellickson to follow the relevant norms rather than formal legal standards.¹⁸

Professor Ellickson's bottom-up causal account of norm emergence and maintenance struck a chord with a number of commentators who paid special attention to this feature in their norm studies. For example, Lisa Bernstein's well-known study of the diamond industry emphasizes the bottom-up informal causal structure of the pertinent norms of behavior.¹⁹ The focus in the law and norms literature on top-down versus bottom-up causation can be overdone, however, as scholars and policymakers are coming to realize that the most effective solution to complex social problems may typically involve a combination of legal, market, and informal responses. For example, Cass Sunstein has argued that cigarette smoking norms have changed dramatically over time due to a combination of informal and formal regulatory pressures.²⁰ Elsewhere, I have argued in the context of website privacy that the Federal Trade Commission has played a major role as a norm entrepreneur.²¹ Indeed, turning Professor Ellickson on his head, Sunstein, Larry Lessig, and others have seen the quest for better "norm management" as providing a new role for activist government.²² As will be discussed in the following section, Professor Carlson's work fits into this latter camp, as she promotes a regulatory approach that combines both informal and formal modes of regulation. She argues, however, that in the end, it is the legal response that offers most promise, at least with respect to recycling. Professor Carlson in effect sees the recycling norm as a cautionary tale of the limited potential of the environmental protection norm and sets herself apart from the likes of Lessig, Sunstein, and Dan Kahan, whom she labels "norm enthusiasts."²³

Professor Ellickson has argued that a norms-based approach will best develop along a parallel path to that followed by its intellectual forbearer, law and economics,

17. *Id.* at 137.

18. *Id.* at 50-51.

19. Lisa Bernstein, *Opting Out of the Legal System: Extralegal Contractual Relations in the Diamond Industry*, 21 J. LEGAL STUD. 115 (1992).

20. See Sunstein, *supra* note 1, at 906-07.

21. Steven Hetcher, *The FTC as Internet Privacy Norm Entrepreneur*, 53 VAND. L. REV. 1283 (2000).

22. Lawrence Lessig, *The New Chicago School*, 27 J. LEGAL STUD. 661 (1998); Sunstein, *supra* note 1, at 918.

23. Carlson, *supra* note 1, at 1236 ("Yet I conclude in this Article that social norms play a much less significant role in encouraging behavior necessary to resolve a large-number, small-payoff collective action problem than social norms enthusiasts might believe." In the environmental context, Prof. Michael Vandenberg is more sanguine than Professor Carlson about the relative value of informal over formal legal efforts. Vandenberg, *supra* 1, at 1102. He should be ranked then with Lessig, Sunstein, and Kahan as a norm enthusiast.

13. Stewart Macauley, *Non-Contractual Relations in Business: A Preliminary Study*, 25 AM. SOC. REV. 55 (1963).

14. ELICKSON, *supra* note 8, at 4.

15. *Id.*

16. *Id.* at 15-122.

one-quarter century ago, namely, by developing along a twin track of case studies and practical applications on the one hand and theoretical explorations on the other hand.²⁴ Professor Ellickson's hope has been borne out thus far in the early application of norms theory to law generally, and now to environmental law. One of the mantras of law-and-norms scholarship has been that it is important to develop in-depth studies of particular substantive norms rather than being satisfied with accounts that solely work at an arid conceptual level.²⁵ The following discussion will seek to combine an in-depth look at the recycling norm with conceptual analysis. Fortunately, the empirical element of this discussion is made easier by the fact that social scientists have produced a good deal of data on recycling.

III. Recycling and Rational Choice

The situation we find ourselves in is one in which the dominant social-scientific framework that is operative in the law would predict that recycling would not emerge as a norm.²⁶ Yet, recycling has grown dramatically over the past few decades in the United States. The question is why. Section A below first sets out some general features of recycling behavior that have particular salience in the context of a rational actor analysis. Next, the potential importance of this norm from the perspective of rational choice theory are considered. This discussion will first raise the issue of whether recycling is an important counterexample to the core assumption of *homo economicus*. Section B compares the recycling norm with some of the dominant examples from the rational choice literature of practices that have presented persistent difficulties in terms of their ability to be explained by the traditional rational actor or economic account. Recycling behavior is at least as difficult to account for under the standard assumption of *homo economicus* as are well-known examples such as voting and donating to public radio. Next, Section C examines the important argument made by Professor Carlson that convenience is the key factor in the maintenance of the recycling norm. Contrary to Professor Carlson, this Article argues that the best explanation for recycling behavior appears to rely on an assumption of altruistic motivation that is at odds with the traditional rational actor account. This Article further argues in favor of the adoption of the motivational assumption of predominant egoism over either the dominant assumption of pure egoism or the competing assumptions of predominant or pure altruism.

A. Recycling Behavior

Unlike many of the other examples of norms in the literature, recycling norms did not emerge from mainly bottom-up informal causal processes. Instead, the practices are typically established by a governmental initiative. In this important sense then, recycling norms differ from the norms

analyzed in some of the leading case studies. The recycling norm has an important element of top-down norm management as part of the core explanation of its extant structure which, for example, norms regarding music file sharing do not.²⁷ Permissive file sharing persists despite a concerted effort by a well-organized, well-funded, and well-connected entertainment lobby as well as a bevy of new laws generally perceived as pro-copyright owner. It is fair to say that the permissive file-sharing norm exists despite these laws rather than directly in response to them. By contrast, with recycling, it is the legal provisions that appear to play the dominant causal role. One would perhaps expect to see this in the situation in which the law actually requires recycling, as it does in a few states such as Wisconsin.²⁸ But even when regulations have stopped short of making recycling mandatory, their actions have nevertheless made recycling more likely. For example, numerous jurisdictions have begun charging fees to citizens that vary depending on the amount of garbage disposed, which should incentivize additional recycling at the margin.

Recycling programs are state and local affairs.²⁹ The federal government plays little role. The important consequence is that recycling programs vary across this large number of jurisdictions. The architecture of recycling also pushes toward uniformity within communities, as an individual in a community that practices individual separation of recyclables cannot decide unilaterally to be a curbside commingler. Thus, we can expect recycling norms to be highly uniform within particular recycling jurisdictions and to vary between them.

When Sunstein, Richard McAdams, and Professor Carlson refer to the "recycling norm," they implicitly take there to be a unitary thing to which they refer. This unitary object must be a linguistic element, as due to the above-mentioned local variation, there is not one single pattern of behavior that serves as the referent of the term "recycling norm." Rather, there are a variety of recycling programs that fall under the umbrella of the term. The most popular form of recycling has been curbside pickup of recycled materials, in which participants separate their recyclable garbage into different containers and place these containers near the ordinary trash containers where they are picked up.³⁰ Some jurisdictions offer commingled curbside recycling in which participants separate their recyclables from other trash but do not separate the different types of recyclable material.³¹

24. Ellickson, *supra* note 2.

25. See, e.g., Eric A. Posner, *Law and Social Norms: The Case of Tax Compliance*, 86 VA. L. REV. 1781 (2000) (noting excess of scholarship that is abstract and methodological rather than devoted to concrete problems).

26. *Id.* at 1232 ("In rational economic terms, most individuals probably should not recycle: the costs (time, labor, storage space) surely exceed the monetary benefits.").

27. Steven Hetcher, *File-Sharing Norms and the Music Industry*, 7 VAND. J. ENT. L. & PRAC. 10 (2004) (no close-knit community allows permissive norm of file sharing).

28. See Carlson, *supra* note 1, at 1263. Professor Carlson notes that the norm of law abidingness may support the recycling norm. *Id.* at 1233. June L. Tapp & Felice J. Levine, *Persuasion to Virtue: A Preliminary Statement*, 4 L. & SOC'Y REV. 565 (1970) (examining emergence of norm of law abidingness). There is evidence that it does, as the states that make recycling mandatory have very high participation rates. Note, however, that the emergence of the permissive file-sharing norm cautions against excessive reliance on the norm of law abidingness in norms explanations as file-sharing is a global norm with perhaps 100 million participants despite its illegality.

29. Carlson, *supra* note 1, at 1261 ("garbage disposal remains a municipal activity").

30. Jim Glenn, *The State of Garbage in America*, BIOCYCLE, Apr. 1999, at 113 [hereinafter Glenn, *The State of Garbage in America*—1999]. See also *id.* at 63 (noting that curbside municipal programs have grown in a decade from approximately 1,042 in 1989 to 9,349 in 1999).

31. Carlson, *supra* note 1, at 1265.

A third common form of community recycling program is the type that involves drop-off centers.³²

Having one term for a set of related social practices is convenient as long as we do not lose sight of the fact that ultimately it is the behavior that matters most; while it is the linguistic item that gets bantered about and that may be put down in print, it is the strategic structure of the practices that ultimately determines whether people are likely to conform to or flout the norm as it is this structure that determines the relevant costs and benefits.³³ Thus, endorsing the norm qua normative, linguistic proposition is a necessary but not a sufficient condition for the actual acts of conformity required for the persistence of the norm qua pattern of behavior.

Another important feature of recycling is that it is an inherently public activity in a way that many norms, such as blood donation and contributing to public radio, are not. Not all environmental norms are public in this way. Dumping motor oil or throwing discarded batteries in the trash are easily hidden behaviors but failing to recycle is not. This publicness may make these norms more susceptible to certain rational choice dynamics such as the power of esteem discussed by McAdams.³⁴

Finally, Professor Carlson notes that recycling norms involve benefits that are non-monetary.³⁵ She speculates that this factor may make conformity to these norms less likely for many people. Along similar lines, I would add the observation that conformity to recycling norms involves *costs* that are largely non-monetary. This fact may have an impact on who we might expect to act cooperatively. It might plausibly make recycling more likely for many people who may not have marginal cash to spare but who may have marginal time on their hands. Contrary to the truism, time is not money, as most people do not have jobs and cannot efficiently obtain ones, which allows people to turn marginal free time into marginal hours labored.

B. Recycling and the Rational Actor Assumption

An important theoretical insight gleaned from looking more closely at the recycling norm is that one is left with a better appreciation of just what an important example recycling may represent for the rational choice literature. While the rational choice model has been the ascendant paradigm in the academy over the past one-quarter century, it is often thought to suffer from counterexamples. The most famous counterexample is of course the fact that people vote. They vote by the millions and they vote election after election. Rational choice theory to date has provided no plausible explanation for this significant behavior.³⁶ Either the millions of people who vote are irrational or rational choice theory's account of rationality is problematic in some material respect. After voting, probably the two most commonly cited counterexamples to the rational choice model is that it can-

not explain actions such as why people donate money to public radio or why they tip in restaurants that they are unlikely to patronize again in the foreseeable future. What voting, tipping, and giving to public radio have in common is that they are activities that prop up *public goods* and, thus, are potentially subject to *free riding*, as the narrowly self-interested rational actor will realize that her participation will not determine whether the good is produced or not and so will opt to free ride on the participation of others, reasoning that the marginal benefit to her from her participation does not outweigh the marginal cost to her. But since all rational actors will make the same calculation, all will attempt to free ride and the good will not be produced.

The recycling norm is arguably a better counterexample to the classic rational actor model than any of the three counterexamples just noted. There are good self-interested reasons to tip in local restaurants, which is where most people eat most of the time when they eat out. It is plausible that this habitual behavior would easily carry over to non-local situations, especially given the fact that non-tippers must still make their way out of non-local restaurants, which will often then occur under the loathing eye of one or more of the restaurant staff. Perhaps for the real Gary Beckers of the world, the loathing eye would not be felt as a cost, but plausibly for most people it will. Regarding the example of giving money to public radio, this is a weak example with which to attack the rational choice account given that something like 9 out of 10 members of the listening audience do not in fact give money.³⁷ In other words, the vast majority of people free ride with regard to giving to public radio just as rational choice theory predicts. Voting is a better counterexample to the rational choice account because people vote by the millions and in significant percentages despite the fact that any particular voter may rationally expect no personal return from doing so. Worse yet for the traditional account, the more educated, affluent, and mature people are, the more likely they are to do this allegedly irrational act.

Recycling is like voting in this respect; millions of people do it, and the more educated and affluent one is, the more likely one is to recycle,³⁸ despite the fact that there is no apparent personal benefit for doing so. Thus, recycling is an important embarrassment to the dominant paradigm of rationality, one on a par with voting. In fact, in two important respects recycling is an even greater source of embarrassment to the dominant rational choice paradigm than is the example of voting. First, recycling has gone up dramatically over the past one-quarter century. In certain communities that have been subject to empirical study, recycling rates astonishingly approach 100%.³⁹ The same cannot be said for voting. In addition to high rates of participation in certain communities, recycling has a second striking feature; it takes repeated effort on a daily basis to be a recycler. On average, to be a voter may take one hour or two of one's time on an annual basis. With the increasing number of locations offering extended time periods in which to vote, and with voting by mail and online, the amount of time required is reduced further still. Recycling by contrast may involve efforts by the whole family and involve literally thousands of small actions over time, which must surely add up to a sub-

32. See Glenn, *The State of Garbage in America—1999*, *supra* note 30, at 69-70.

33. In general, the term norm is ambiguous between norms as statements and norms as patterns of behavior. See generally HETCHER, *supra* note 5, ch. 1 (distinguishing rule conception from pattern conception of a norm).

34. McAdams, *supra* note 1.

35. Carlson, *supra* note 1, at 1241.

36. HARDIN, *supra* note 9, at 11.

37. That is at any rate what my local public radio station tells me during its fundraising drives.

38. Carlson, *supra* note 1, at 1291.

39. *Id.* at 1278.

stantial commitment of time and effort when considered as a whole. The more effort that it takes to be a recycler, the more perplexing the behavior is from the perspective of the rational choice theorist.

The classic rational choice theorists certainly did not predict the dramatic growth of the recycling norm. Quite the opposite. For example, in his leading work, *Collective Action*, Russell Hardin provides an extended discussion of efforts by the environmental movement to solve its wide ranging set of overlapping collective action problems.⁴⁰ On the whole, Hardin is pessimistic about the chances for environmental collective action to persist over time. Following Mancur Olson, Hardin argues that we should only expect to see cooperation under conditions in which some group offers so-called selective incentives to would-be cooperators.⁴¹ Selective incentives are benefits for membership in groups such as the Sierra Club. Unlike the benefits provided by public goods, the benefits of selective incentives flow directly to the cooperators, giving them additional reasons—self-interested reasons—to cooperate. Selective incentives do not appear to operate in the recycling arena in any obvious way, however. Thus, if there is to be an explanation of recycling that is consistent with the narrow rational actor account, it must bring forth some other mechanism in addition to the classic notion of the selective incentive in order to explain why what looks like non-self-interested behavior is really self-interested after all.

The most likely candidate appears to be the esteem account developed by McAdams. The question of the role played by esteem is important for the issue of pure egoism versus predominant egoism versus pure altruism. If the real driver of recycling is esteem, then recycling may not present a bold challenge to the pure egoist account after all, as the esteem account, at least as defended by McAdams, is consistent with the traditional rational actor account. On this conception, people desire esteem in the same way they desire ice cream or any other good.

The esteem solution postulates that as a matter of sociological fact, people characteristically value the esteem of others. Thus, people will, other things being equal, be inclined to conform to those norms for which disesteem is attached to defection. McAdams argues that under proper conditions the force of esteem may be the glue that holds a norm together.⁴² In this account, McAdams presents esteem

within a sanction model. A problem endemic to sanctions models is that they may be subject to the same collective action problem as narrowly rational actors will wish to free ride on the sanctioning efforts of others. As McAdams argues, esteem may be specially suited to combat this so-called second-order collective action problem because esteem has the special feature that it is practically costless to bestow.⁴³ While sanctioning usually involves costs on the sanctioner's part—and thus is subject to free riding—esteem sanctions are free to administer and consequently not subject to the second-order collective action problem.⁴⁴

Professor Carlson plausibly argues that esteem may play a significant role in the context of recycling.⁴⁵ On her view, it is plausible that people may in part be motivated to recycle in order to garner the esteem of their friends and neighbors.⁴⁶ Given the public nature of recycling, this is indeed a particularly apt factual situation for the application of esteem theory. This is a significant factual difference between recycling and voting as voting is basically a private act. With curbside recycling especially, whether or not one is a conformer to the recycling norm will be apparent to anyone who passes by one's house as the recycling bin will be outside. Despite her acknowledgment that the pursuit of esteem may play a role in recycling behavior, Professor Carlson nevertheless argues that the consideration of convenience is paramount.

C. Recycling as a Norm of Convenience

Professor Carlson sees her case study as a more rigorous test of a casual claim made by Sunstein and McAdams to the effect that recycling is an important instance of a social

conformity with the norm. To illustrate, if a norm governs recycling behavior, then individuals deciding whether to recycle will factor in the esteem or pride they will gain from recycling or the guilt of loss of esteem they will suffer if they do not. If the norm to recycle is strong enough, the esteem of self-satisfaction it provides may outweigh the costs of recycling and induce the desired behavior.

Carlson, *supra* note 1, at 1239. See also *id.* at 1270 (hypothesizing that people who have internalized the recycling norms will feel guilt if they fail to recycle.).

43. McAdams, *supra* note 1, at 352. Professor Ellickson's more recent work also acknowledges a possible role for esteem in the emergence of a norm. Robert C. Ellickson, *The Market for Social Norms*, 3 AM. L. & ECON. REV. 1, 1 (2001).

44. McAdams, *supra* note 1, at 342.

45. Carlson, *supra* note 1, at 1279.

46. *Id.* Professor Carlson thinks that convenience is best explained in rational choice terms:

The correlation between ease of recycling and increased recycling behavior can be understood in rational choice terms: by making it easier for individuals to recycle, governments can reduce the cost of the behavior. However, an alternative, or at least additional, explanation may also be at work. Curbside programs, whether separated or commingled, allow households to display their compliance with a recycling norm very visibly to their neighbors. To the extent that garnering neighbors' esteem or signaling one's reputation motivates a potential recycler, visible curbside recycling is a wonderful tool. Curbside recycling may therefore not only lower the cost of recycling by reducing effort, but may increase the benefits to recyclers by allowing them a more effective means for signaling, or gaining esteem, than less visible recycling methods.

Id.

40. HARDIN, *supra* note 9, at 11.

41. *Id.* at 123 (selective incentives). Olson's and Hardin's examples do not conceive of government as a source of selective incentives. With the benefit of hindsight from which one can discern historical trends, one can trace this to the effort in economics to develop market-based models. Supply and demand are enough to maintain a market in equilibrium apart from any direct government intervention. This is the basic type of explanation sought by the rational choice theorists for patterns of behavior as well as the provision of market goods. The contemporary law-and-norms project, however, is interested both in the topic of self-sustaining models and models that contemplate a role for government in "norms management."

42. McAdams, *supra* note 1, at 358 (providing conditions for the emergence of a norm: first, individuals must share a consensus about the positive or negative "esteem worthiness" of engaging in an action; second, enough individuals can at least in some instances detect non-compliance with the action; and third, enough individuals can communicate to the relevant community their opinions about the esteem worthiness of the activity). Professor Carlson writes:

In rational actor terms, violating a social norm imposes a cost on the violator that can tip the cost-benefit balance in favor of

norm at work.⁴⁷ Professor Carlson analyzes recycling as a “classic collective action problem.”⁴⁸ In particular, she identifies environmental collective action problems as tragedies of the commons in which the commons is the clean air, clear water, reduced landfills, etc. that will be available to all if cooperative collective behavior can be achieved.⁴⁹ Professor Carlson draws an important distinction as a possible explanation for why cooperative behavior may not be so readily forthcoming in the domain of recycling behavior. The reason is that the instances of cooperation in the classic examples from the rational choice literature are situations in which the cooperation arises among “small, homogeneous groups.”⁵⁰ She notes, however, that the sorts of problems that arise for environmental law and policy arise in situations of a different sort, namely, ones that constitute “large-number, small-payoff collective-action problems.”⁵¹ The large number refers to the “number of people needed to engage in, or stop the behavior,”⁵² and the small payoff refers to the fact that individuals have “little economic incentive” to engage in the cooperative behavior.⁵³ The small payoff, as

she formulates it, is the direct individual benefit provided to the individual from cooperation. She writes: “It is worth stressing that I use ‘small’ with respect to the payoff individuals experience from helping resolve a collective action problem of this sort. The payoff to the collectivity as a whole could be quite large.”⁵⁴

Professor Carlson takes it as a working premise of her article that there exists a general social norm of concern for the environment.⁵⁵ Professor Carlson adopts the model on which people internalize norms such as the environmental concern norm.⁵⁶ She bases this claim on empirical findings of social scientific researchers who question subjects on their environmental beliefs.⁵⁷ In the absence of constraints, the environmental concern norm will cause people who subscribe to it to act in a pro-environmental way. This is true despite the fact that it is against their narrow self-interest and they are in a large-number collective action problem such that free riding would be the narrowly rational response.

Professor Carlson argues that convenience, by which she means the convenience of the putative recyclers with regard to the effort required to recycle, is the most important consideration in explaining recycling behavior. She plausibly interprets the empirical literature as indicating that people are very sensitive to the issue of convenience when deciding whether to recycle. Most specifically, people are much more inclined to recycle when they can do curbside commingling as compared to doing the separating themselves.⁵⁸ Professor Carlson notes: “One of the most consistent findings in the empirical literature on recycling is that, not surprisingly, more people will participate in recycling when it is convenient to do so.”⁵⁹ Participation rates may vary more dramatically when the comparison is with programs where one has to bring the items to a collection center.

Given the dominant role played by convenience, Professor Carlson concludes that the prospects for fruitful, cooperative pro-environmental behavior via norm solutions are quite limited. She says her argument “tempers the most ambitious suggestions of norms enthusiasts.”⁶⁰ Professor

management might be a cheap and effective alternative to more traditional regulatory means.

Carlson, *supra* note 1, at 1233.

54. Carlson, *supra* note 1, at 1234.

55. Norm theorists have drawn heavily from research in behavioral economics to draw conclusions about how the government might better manage or regulate norms. These accounts aim to take account of how people really function—so if people display cognitive biases, or alternatively, moral motivations, the best account of norms management should take proper account so as to better manage people. For example, Professor Carlson appeals to the “endowment effect” to explain why recyclers seem particularly susceptible to the appeal of bottle return recycling programs that allow them to reclaim the deposit they set down for each bottle at the time of purchase. Carlson, *supra* note 1, at 1294.

56. *Id.* at 1235 (“In evaluating these studies, I assume that the strength of one’s prorecycling attitude is indicative of whether, and to what extent, one has internalized a prorecycling norm.”).

57. *See also* Vandenberg, *supra* note 1, at 1117 n.71 (noting studies finding norm).

58. Referring to empirical studies, Professor Carlson notes: “These studies consistently show that curbside service increases recycling rates significantly above drop-off center participation, a finding that is consistent with my earlier hypothesis that making recycling more convenient increases recycling participation.” Carlson, *supra* note 1, at 1278.

59. *Id.* at 1275.

60. *Id.* at 1234.

47. *Id.* at 1232. *See* Sunstein, *supra* note 1, at 906-07; McAdams, *supra* note 1, at 350.

48. Carlson, *supra* note 1, at 1242, 1234 n.8 (following Hardin’s discussion of collective action situations as “latent” in that the “individual gain to any member of the group is likely to be smaller than the individual cost of contributing to the collectivity”). *See* HARDIN, *supra* note 9, at 39-40. *See also* Elinor Ostrom, *A Behavioral Approach to the Rational Choice Theory of Collective Action*, 92 AM. POL. SCI. REV. 1 (1998) (“social dilemmas” a term for common problem of public goods or collective action problem and tragedy of the commons).

49. Carlson, *supra* note 1, at 1244 (“Recycling aims to protect ‘commons’ resources: clean air and water, open space, and energy resources.”).

50. *Id.* at 1233. As Professor Carlson notes, many of the prominent case studies in the law-and-norms literature involve groups of this description. *See, e.g.*, Bernstein, *supra* note 19; Arti Rai, *Regulating Scientific Research: Intellectual Property Rights and the Norms of Science*, 94 NW. U. L. REV. 77 (1999); Mitu Gulati & C.M.A. McCauliff, *On Not Making Law*, 61 L. & CONTEMP. PROBS. 157 (1998). Other case studies have also looked at norms among groups that are not close-knit. *See, e.g.*, Hetcher, *supra* note 27.

51. Carlson, *supra* note 1, at 1234.

52. *Id.* at 1233. Professor Carlson sees recycling as potentially providing two sorts of benefits, either intrinsic or extrinsic: “Recyclers get either intrinsic satisfaction for doing the right thing, approval from friends and neighbors for their environmentally correct behavior, or both.” *Id.* at 1232. Sunstein thinks both sorts of benefits are involved as well. Sunstein, *supra* note 1, at 906-07. My claim is not that recycling may not feel good to some people but rather that this good feeling is not the best explanation for their actions. It is the same as with things that you do that are in your own interest. To get up early on a Saturday and have a very productive day may make you feel good, but that feeling is not the best explanation for your actions; rather, it is all the reasons that lie behind the particulars of those actions that are their main rationale. The empirical data show that norm strengthening may occur best through personal face-to-face contact and through detailed behavioral feedback. Carlson, *supra* note 1, at 1236.

53. Carlson, *supra* note 1, at 1233-34. On Professor Carlson’s interpretation, the benefits calculus must take account of the “added psychic benefit or pain from failing to recycle.” *Id.* at 1235. It does appear that someone feels good about recycling. *See* Jeff Bailey, *Curbside Recycling Comforts the Soul, But Benefits Are Scant*, WALL ST. J., Jan. 19, 1995, at A1. On Professor Carlson’s account, the key to the norm is the psychic benefit. She adopts and characterizes the account of Sunstein and Lessig in the following manner:

[I]f governments can change the psychic cost or benefit of a particular behavior without resort to formal law or financial inducements, and hence persuade large numbers of people to engage in or stop that behavior (wearing seat belts, using condoms, quitting smoking, recycling solid waste), social norms

Carlson sets up the policy question in terms of whether it makes more sense to try to strengthen a “social norm in favor of recycling”⁶¹ as compared to relying on more traditional means of regulation such as increasing the convenience of recycling.⁶² She concludes that norm management efforts will be better spent on efforts to make recycling more convenient.⁶³

As already noted, Professor Carlson characterizes the types of situations that characterize environmental policy concerns as collective action problems with a large-number, small-payoff structure. Each of these factors merits comment. First, the whole framework of the collective action problem is problematic due to the fact that this model contemplates strategic interactions of a sort not possible when the interests of future generations are at stake. The classic discussion of the collective action problem in the interdisciplinary literature is Garrett Hardin’s famous article, *The Tragedy of the Commons*, in which he develops examples of direct impact to the environment.⁶⁴ The tragedy of the commons of course has direct application to so-called common pool resources such as fisheries. It is worth keeping in mind, however, that not all environmental problems fit into this model. The iterated game theory model assumes strategic interactions among two or more participants in a social situation in which their utilities are interdependent. Prototypically, the putative free rider contemplates the question as to whether her cooperation will have any impact on other cooperators who, in turn, each ask themselves the same question. Under the model, a cooperative practice may result if the parties are in the sort of iterative or overlapping structure such as will allow them to be able to make choices that maximize over the long run rather than defect in favor of one-shot gains. As such, this model does not account for one of the key normative sources of the environmental protection norm, which is the concern for future generations. The normative claims of future generations are not aptly captured by the “prisoner’s dilemma” model as it only captures the strategic motivation of current players. One cannot interact with people who do not yet exist—however liberal one’s conception of psychic benefits. One may, of course, act in a moral manner out of concern for the welfare of future generations, and environmental norm entrepreneurs not surprisingly encourage such behavior. The point is that such normative gains are not best modeled under the rubric of solving collective action problems.

Regarding the consideration of large numbers of actors, Professor Carlson notes that environmental problems are unlike the types of situations in which cooperation has been shown to come about in the case studies best known in the norms literature. In making this assertion, however, it is not clear whether Professor Carlson views the number in question for the norm as the whole population of the United States or whether it is to be understood community by community. She appears to mean the former as the “large number.”

Yet the situation with recycling is different from that of other collective goods involving large groups. A venerable

example in the collective goods literature is national defense.⁶⁵ All Americans benefit from an effective national defense, and it is a public good in the sense that when it is provided for one, it is provided for all. Note, however, that recycling is not precisely parallel, as the benefit that comes from having less garbage in the landfill will redound to those in the area of the landfill. Thus, a rational actor in Miami is not benefitted from the dutiful acts of a recycler in Boston. Those who have the collective action problem are this smaller group—the Bostonians—who stand to benefit if cooperation is achieved.

By application of norms theory, then, one would like to see whether recycling varies according to the extent to which the landfill group is close-knit. Professor Carlson lives in Los Angeles, which is not plausibly seen as close-knit, whereas up in Shasta County, California, where Professor Ellickson did his research, close-knittedness may matter.⁶⁶ If this community was close-knit for the purposes for which Professor Ellickson examined it, it may be close-knit as well when it comes to recycling. A consideration of the recycling programs Professor Carlson looks at, however, indicates that some of the factual situations that she examines are of communities no larger than the community under study by Professor Ellickson.⁶⁷ Thus, close-knittedness may indeed explain cooperative behavior in such circumstances.⁶⁸

Thus while we may for convenience talk about the recycling norm per se—and as such, it applies to a “large number” of people—whether we will expect to see actual cooperative behavior will depend on other factors such as the size, structure, and current existence of each particular group in which the recycling norm is to be instantiated. Based on the foregoing discussion, we may conclude that in the many cities across America where the recycling norm is extant but the city is of such a size that it is not close-knit, the cooperative behavior is best explained as due to altruism.

Next consider the “small-payoff” portion of Professor Carlson’s formulation with regard to recycling. Under her analysis, the small payout is the payout to the individual from a mutually cooperative outcome as compared to the mutually non-cooperative outcome.⁶⁹ Professor Carlson seems to be saying that there will be little chance of mutually beneficial cooperation because the payoff is so small to the individual. It is unclear, however, why she focuses on this factor. The only choice open to the individual is not that between mutual cooperation and mutual non-cooperation

65. See Thomas S. Ulen, *Rational Choice and the Economic Analysis of Law*, 19 L. & Soc. INQUIRY 487, 492-93 (1994) (national defense and clean air as public goods).

66. Being rural, Shasta County has no recycling. Would it be close-knit for barrel burning purposes?

67. Carlson, *supra* note 1, at 1263 (Winona, Minnesota, population 26,000).

68. Professor Carlson notes that cooperative recycling behavior may be enhanced when there is face-to-face interaction such as is created by recycling campaigns that involve block captains promoting recycling. *Id.* at 1249. She notes that the best explanation of higher recycling rates under this type of scenario may be due to the fact that these sorts of neighborhood-specific activities involve close-knit interaction. Nevertheless, such hands-on recycling advocacy is the exception to the rule. Note that by contrast esteem does not require close-knit interactions, although it is plausible that people might more highly value the esteem of those they interact with repeatedly, although this issue bears testing.

69. *Id.* at 1234 n.8.

61. *Id.* at 1232.

62. *Id.* at 1232-33

63. *Id.* at 1236.

64. Garrett Hardin, *The Tragedy of the Commons*, 162 SCIENCE 1243 (1968).

but rather that between individual cooperation and individual non-cooperation. And here, there is no “small payoff” for cooperation. Rather, there will always be a net cost to the individual for her cooperation—by definition of the prisoner’s dilemma.

This point is best seen graphically by looking at the payoff matrix of the prisoner’s dilemma.

Figure 1: The Prisoner’s Dilemma⁷⁰

		Others	
		Cooperate	Not Cooperate
Individual	Cooperate	3, 3	1, 4
	Not Cooperate	4, 1	2, 2

Professor Carlson’s small payoff is a comparison of the northwest quadrant as compared to the southeast quadrant, that is, between the payoff when all parties are able to cooperate in providing the collective good (recycling) as compared to the situation in which the parties are not able to cooperate and the non-cooperative outcome for all is the result (no recycling). But the individual does not choose between these two quadrants. Rather, her choice is between the southwest and the northwest quadrants, that is, between her personal cooperation and her personal non-cooperation. As the matrix indicates, a choice to cooperate would involve no small gain.

It will be helpful to bear the above formal points in mind in evaluating Professor Carlson’s central argument regarding the role of convenience. The response to her overall argument is simple. Contrary to Professor Carlson’s position, suppose that the important role that convenience plays in no way undercuts the existence of the role of norms. This is for the all important reason that even when recycling is made more convenient, it requires a sacrifice that cannot be explained in terms of individual self-interest. Even those marginal recyclers who only recycle as recycling becomes more convenient are nevertheless engaging in a type of behavior that is not predicted by the narrow economic model as such behavior is personally costly.

Elsewhere, I have further developed a theory first enunciated by Howard Margolis and Greg Kavka called predominant egoism. Kavka states four propositions that capture the features of *predominant egoism*.⁷¹ The one of particular in-

terest to the present discussion is the following: “For most people in most situations, the ‘altruistic gain/personal loss’ ratio needed to reliably motivate self-sacrificing action is large.”⁷² As these quotes indicate, on the theory of predominant egoism, it is not the case that people are either narrowly self-interested or uniformly altruistic. Rather, peoples’ “other-regarding behavior” has texture and nuance. In terms of Kavka’s proposition, people are more inclined to do altruistic actions when the amount of personal sacrifice they must make to contribute toward a moral outcome is small in relation to the good produced. At the extreme, even the most selfish of people might well be inclined to save the world from nuclear holocaust if this outcome would result from the simple lifting of their finger.

The traditional rational actor model explicitly provides an account of actions not mental states. On the traditional account, there is an answer to the question of when an actor will perform a pro-environmental act, namely, when it promotes her narrow self-interest to do so. This is a more determinative answer than simply saying that the act will follow when not prohibited by cost, because it tells us something about the costs, namely, that they are outweighed by the benefit to the actor.⁷³

An attractive and important feature of predominant egoism is that it provides similarly determinative answers. The answer to the question of when a person will perform an altruistic act such as recycling is when it is the best use of her limited altruism budget. Thus, if one type of pro-environmental behavior is made less costly to the individual relative to another pro-environmental behavior, we can predict that we will see more of the former behavior and less of the latter behavior. If pro-environmental behavior becomes more expensive relative to some nonenvironmental sort of altruistic behavior, we can predict that at the margin people will shift away from pro-environmental behavior and into the other sort of altruistic behavior.

If predominant egoism is correct, we cannot see recycling as necessarily a good thing, as there may be a better allocation of the scarce resource of altruistic motivation toward some more pressing environmental problem. Like any other limited resource, then, altruistic motivation must be allo-

but now each of us has gained a psychic benefit as well. Such benefits are mysterious and should be avoided if possible. Fortunately it is possible. Alex Geisinger similarly talks about how social identity may play a role in norm conformity. Alex Geisinger, *A Group Identity Theory of Social Norms and Its Implications*, 78 TUL. L. REV. 605 (2004). This also represents a challenge to the first-generation rational actor account. Methodological individualism requires tracing motivations back to the individual. The first-generation theorist would say that invoking the notion of group identity is simply a new label for the same old trick of the sociologist of explaining moral behavior by assuming a motive to be moral, but here the motive is that of the group since it is the group whose normative identity drives the individual’s behavior. The first-generation theorist will be only too happy to supply examples in which individuals identify with groups and yet act in their own interest and against the interest of the group when circumstances cause the two to diverge.

70. Higher numbers represent more desirable payoffs, such that 4 is the best individual outcome while 1 is the worst individual outcome. The first number represents the outcome to the individual, and the second number represents the outcome to “others” so that “4, 1” means that there is a high outcome for the individual but a low outcome for others.

71. HETCHER, *supra* note 5, at 98-101. A virtue of the posit of predominant egoism is that it avoids the assumption of suspicious entities such as the “psychic” costs and benefits. Professor Carlson assumes such costs and benefits and thinks them to be inherent to the rational actor model. Carlson, *supra* note 1, at 1232. In its effort to explain altruistic behavior, the first-generation economic account posited the psychic benefit so as to argue that seemingly altruistic acts are really to one’s benefit, all things considered, when the psychic benefits are counted in. Such psychic benefits are open to the double counting problem, however. If you and I each give one another a present of \$100, on the psychic benefit view, the world has been made a better place as we each have the same amount of money as at the beginning

72. KAVKA, *supra* note 6, at 65. And, “The scope of altruistic motives that are strong enough to normally override self-interest is, for most people, small, that is, confined to concern for family, close friends, close associates, or particular groups or public projects to which the individual is devoted.” *Id.*

73. RICHARD H. THALER, *THE WINNER’S CURSE: PARADOXES AND ANOMALIES OF ECONOMIC LIFE* 10 (1992) (distinguishing “strong” versus “weak” formulations of the free rider hypothesis. On the weak hypothesis, not all people free ride while on the strong version nearly all will free ride. Richard Thaler comments that the weak version does not allow for “precise predictions.”).

cated efficiently. Indeed, it may be the case that the most efficient use of this limited resource is not in the environmental domain at all. There is no shortage of social problems that might be solved or alleviated by the application of more altruism. Public schools would be better if more parents devoted time to the Parents Teachers Association and like activities. Our political leaders would be better if more citizens sacrificed their time to be better informed on the central political issues of the day and voted accordingly. Thus, it would seem that any norm entrepreneur whose project requires a dose of altruism owes us an explanation as to why the scarce resource is best spend on her pet norms. Lurking in the background is a notion of an altruism budget. Predominant egoists who are efficiency minded will seek to allocate their altruism most effectively.

Predominant egoists will, other things being equal, be more likely to recycle as it becomes more convenient. The government may be the cheapest cost avoider here in the sense that it is cheaper for it to do the collecting than for each household to drive the recycling elsewhere. The same consideration holds true for separating recyclable items as opposed to curbside commingling, as having to separate items in the house requires additional storage space, which many homes lack. It may be more reasonable, then, given these legacy costs, for this activity to be done centrally. If one assumes that people have altruism budgets, in the sense of a limited amount of altruism that they must budget for, then it makes sense that they would parcel out their other-regarding actions in an efficient manner, just as they parcel out their time devoted to their own projects in an efficient manner. Thus, a preference for curbside collection may be consistent with predominant egoism.

The predominant egoist profile maps nicely onto the situation presented by the recycling norm as analyzed by Professor Carlson regarding the role of convenience. The fact that convenience is a factor that is predictive of recycling behavior does not contradict the notion that there is an altruistic norm at work because paying heed to convenience is entirely consistent with the theory of predominant egoism. As the cost of other-regarding behavior goes down, this increases the ratio of personal loss versus altruistic gain, thus making the nonconforming action more likely. The more convenient it is to recycle, the greater the ratio that exists between one's personal sacrifice and the amount of altruistic good that one is able to perform. Thus, the fact that convenience is importantly predictive of recycling does not show that the environmental concern norm is marginal; rather, it shows that the environmental concern norm is a norm that may be held by a population that are neither narrowly self-interested nor necessarily strongly altruistic. In other words, Professor Carlson misidentifies convenience as a non-normative consideration. Paying heed to personal convenience is certainly consistent with egoism but does not provide sure evidence for it.⁷⁴ While it may be appropriate to make the egoist assumption when performing economic analysis of unrelated topics, it is inappropriate when the very topic at issue is the most appropriate starting point regarding human motivation. For predominant egoists, con-

venience may well be an element of an all-things-considered normative appraisal of a situation.

Imagine your favorite moral saint—say Gandhi, Mother Theresa, or Martin Luther King Jr. Note that in their decision calculus in any given morally charged situation, convenience will be a factor to consider in weighing various options, and indeed may be a determining factor. In fact, these examples may show too much in that they show that even for predominant or pure altruists, convenience will play a role in their decision calculus. If one's goal is to establish that people are characteristically predominantly altruistic, one would presumably wish to make this point with regard to Professor Carlson's argument. The goal here is a different one, however, one driven by underlying concerns. For reasons of parsimony, we should assume as little moral motivation as possible in explanations of putatively moral behavior, such as recycling behavior. Earlier, we saw that without some element of moral motivation, one cannot get the recycling explanation off the ground. Once we move to an assumption of predominant egoism in order to address this failure of the egoist assumption, then the introduction of convenience as a significant explanatory factor neither creates a tension with the assumption of predominant egoism nor would be more compatible with an assumption of pure or predominant altruism. Thus, to further invoke the principle of parsimony, we should not move any further in the direction of assuming altruism than is required by the data at hand, namely, pervasive recycling behavior.

In sum, the preceding discussion has left us with reasonable assurance that cooperation—recycling—is a moral act, and thus moral motivation plays an essential role in the recycling norm, at least when the recycling community is not close-knit. Given the social pervasiveness of recycling, this may be an especially significant finding as one might optimistically hope these results could be extended to produce other environmentally friendly, or just plain friendly, norms.

IV. The VBN Model of Norm Activation

The VBN model of norm activation is a theory developed in the social sciences to account for how abstract values such as valuing the environment may be activated via belief change so as to produce concrete norms such as the recycling norm. The VBN model should be of interest for us, given the previous look at the recycling norm. Recycling behavior appears to require altruism to sustain the practice, and the VBN model purports to explain where such altruism may come from and to what uses it may be put.⁷⁵ The VBN model is a social-scientific model, and thus while it concerns normativity, it concerns it in a non-normative, social-scientific way. The VBN model describes how, as a matter of empirical fact, people characteristically go from having abstract normative commitments (values) to having concrete normative commitments of a sort that are directly action-guiding.⁷⁶ On the VBN model, beliefs activate norms. To activate a concrete norm, an individual must hold two

74. Either recycling is in one's narrow self-interest or it is not. There may exist narrowly self-interested actors who are on the margin of recycling for purely narrowly self-interested reasons and who are pushed over the edge by recycling becoming cheaper. On this scenario, convenience is a determinative factor for purely egoistic reasons.

75. Professor Carlson draws the policy conclusion that "norm strengthening efforts should be targeted at lower socioeconomic households . . ." Carlson, *supra* note 1, at 1292. But if morality is a luxury good, then this conclusion may not hold.

76. See Shalom H. Schwartz, *Normative Influences on Altruism*, in *ADVANCES IN EXPERIMENTAL SOCIAL PSYCHOLOGY* 221 (L. Berkowitz ed., 1977).

types of beliefs. She must be aware of the consequences (AC) of her act regarding the objects of an abstract norm. Second, she must accept responsibility (AR) for causing or preventing those consequences.⁷⁷

Recently, the VBN model has begun to have influence in the environmental policy debate. Professor Carlson takes note of the theory while Prof. Michael Vandenberg has recently begun to effectively utilize the model in his efforts to promote better environmental norms through more effective utilization of toxic release data.⁷⁸ As Professor Vandenberg notes, the model allows for the development of falsifiable hypotheses.⁷⁹ The emergence of the recycling norm strongly suggests adherents to the VBN model seek to develop hypotheses to explain this behavior and then seek to test these hypotheses. The following section will consider whether the VBN model offers insight into understanding the emergence of the recycling norm. Subsequent discussion will examine whether the VBN model is consistent with predominant egoism. At first glance, these core assumptions may appear consistent, and yet, there is a tension—predominant egoism says that altruism is measured out in careful doses while the VBN model appears to have a very expansive conception of the role of moral motivation, as on the model, such motivation is only held in check from influencing behavior by the factor of cost.

As noted earlier, there has historically been a tension between sociological approaches and economic approaches. While the VBN model is being developed by social psychologists and not sociologists per se, nevertheless, it is closer in its assumptions and methodology to a sociological approach than an economic approach. Thus, an auxiliary goal of the following discussion will be to begin to get a better sense of whether a law-and-norms approach is compatible with the stated and unstated assumptions of the VBN model.

A. The VBN Model of Norm Activation Applied to Recycling

The conceptual starting point for the VBN model is the claim that individuals hold or accept “abstract” norms. These norms can be elicited by social scientists by methods such as the use of questionnaires. For people who hold such abstract norms, the model seeks a method to take these norms and activate them so that individuals will act on them in concrete settings.⁸⁰ The norm activation model

involves a set of connected psychological events. For an individual who holds an abstract personal norm, the theory holds that changes in beliefs concerning AC and AR pertaining to the abstract norm will produce a sense of duty to act consistently with the concrete norm and guilt if the individual fails to conform to the norm. Professor Vandenberg refers to this as a sense of obligation and argues that it will lead to the formation of a behavioral intention.⁸¹ The actual behavior will only result, however, according to the VBN model if other constraints do not impede the action. The constraints range from financial constraints to actual physical constraints.⁸²

The best place to turn for understanding the essentials of the VBN model of the environmental norm generally is by looking at Professor Vandenberg’s seminal utilization of the model in the context of toxic release data. Like Professor Carlson, Professor Vandenberg notes that environmental collective action problems may make for especially difficult problems as they lack the feature that has led to the solution of collective action problems in the standard sorts of situations that have dominated the academic discussion, namely, situations where the participants are close-knit such that their relationships are repeating and overlapping so as to allow for the development of multi-game cooperative strategies to develop. As Professor Vandenberg notes, the paradigm problems created in environmental policy present problems in which the group is large and the interactions are not repeating in the manner necessary for Professor Ellickson-like, iterated-game solutions. Professor Vandenberg characterizes these as “negative-payoff, loose-knit group” situations.⁸³ He writes: “The behaviors that release dioxin and many other pollutants, however, often occur in situations that raise a more difficult question: whether norms also have a meaningful influence when the payoff to the individual is negative and the behavior does not occur in close-knit groups.”⁸⁴ Professor Vandenberg borrows the distinction made by sociologists between “personal norms” and “social norms” to apply to the situation.⁸⁵ Social norms are conformed to for external reasons while personal norms are conformed to due to motivation intrinsic to the individual.⁸⁶ Professor Vandenberg argues that personal norms can be activated so as to cause individuals to perform indi-

norms are far too general and detached to govern behavior.” Joseph R. Hooper & Joyce M. Nielson, *Recycling as Altruistic Behavior: Normative and Behavioral Strategies to Expand Participation in a Community Recycling Program*, 23 ENV’T & BEHAV. 195, 200 (1991).

77. Vandenberg, *supra* note 1, at 1120.

78. Carlson, *supra* note 1, at 1240 (discussing Shalom Schwartz’s views); Vandenberg, *supra* note 1, at 1110 (“conscripts” norm activation theory). As Professor Vandenberg notes, we are only at the beginning of attempting to transport the model into legal analysis.

79. Vandenberg, *supra* note 1, at 1113. He writes:

I suggest that we may be expecting too much too soon from norms theory, and in the process may be missing opportunities to develop theories that generate falsifiable hypotheses and viable legal reforms for important categories of behavior. Instead of seeking to develop universal models that account for all personal norm effects or ignoring personal norms altogether, I follow a more inductive approach that tailors norms theory to specific clusters of behaviors and periods of time, and allows for rigorous testing of its predictive capacity for these behaviors and time periods.

Id.

80. Schwartz says that social norms are “values and attitudes of significant others; we expect others to act in the morally proper way, and they in turn expect the same of us. By themselves, however, these

81. Vandenberg, *supra* note 1, at 1124 n.104.

82. *Id.* at 1121, 1124. Professor Vandenberg writes: “[I] assume that absent other constraints behavioral intentions will lead to behavior.” *Id.* at 1124 n.104.

83. *Id.* at 1105 n.21. Regarding loose-knit groups, Professor Vandenberg says: “I refer to situations in which the individual’s actions are not observable by others and situations in which the actions are observable but occur in non-close-knit groups as loose-knit group situations.” *Id.* at 1105.

84. *Id.* at 1104-05.

85. *Id.* at 1104. According to Professor Vandenberg, social norms are, “informal obligations that are enforced through social sanctions or rewards,” while personal norms are “obligations that are enforced through an internalized sense of duty to act and guilt or related emotions for failure to act.” *Id.* Professor Carlson comments that the distinction between “personal” and “social” norms is similar to the distinction drawn between McAdams and Robert D. Cooter regarding internalization. See McAdams, *supra* note 1, at 355, 358.

86. Vandenberg, *supra* note 1.

vidually costly but socially advantageous acts. Finally, Professor Vandenberg argues that even if activated norms do not in the end produce the desired course of pro-environmental behavior directly, they may nevertheless work toward the same goals indirectly via an increased propensity toward pro-environmental political participation.⁸⁷

The abstract norm that Professor Vandenberg is concerned to activate is the norm of environmental concern.⁸⁸ He argues that this norm may be best activated when done in combination with another abstract norm he calls the reciprocity norm.⁸⁹ He draws on empirical studies in support of his claim that abstract norms of environmental protection and of reciprocity are widespread and have a large influence on individual behavior.⁹⁰ Professor Vandenberg focuses on toxic chemical releases in particular.⁹¹ He argues that “[i]n this large-payoff, close-knit group situation, information about the dioxin releases and their potential effects may be sufficient to change behavior.”⁹²

The norms literature on the expressive function of law has indicated a few means by which changing a law can serve to change peoples’ beliefs.⁹³ Professor Vandenberg is interested in a third means of belief change that has received less attention. This is belief change that occurs through the required disclosure of information that is targeted at the types of beliefs that activate norms. In the particular context at hand, Professor Vandenberg argues: “To activate concrete norms related to the abstract environmental protection norm, the law should induce individuals to believe that the environmental problems caused by their behavior are significant (AC), and that if they change behavior these problems can be ameliorated (AR).”⁹⁴

Professor Vandenberg of course realizes that it is not practical to gather such information on particular individuals, both for reasons of cost and privacy.⁹⁵ His remedy for this problem is to develop his model around the hypothesis that information on the mean individual may also lead to norm activation. He notes that

[f]or an individual who holds the abstract norm of environmental protection, the environmental norm activation theory suggests that norm activation will occur if new information induces the individual to believe that the mean individual’s behavior or that individual’s behavior in the aggregate causes an environmental problem (AC) and that reductions in the behavior (e.g., backyard burning or driving) by the mean individual or by individuals in the aggregate will ameliorate the problem

87. *Id.* at 1136.

88. *Id.* at 1117 n.71.

89. Professor Vandenberg notes that he uses the term “reciprocity norm” to get at the same topic that has been studied experimentally under a few names, such as the “fair share” norm or the “fairness norm.” *Id.* at 1119 n.78. *See also id.* at 1115 (citing Kahan to the effect that people will “contribute their fair share to securing collective goods. By the same token, most individuals loathe being taken advantage of. Accordingly, if they perceive that most other individuals are shirking, they too hold back to avoid feeling (or being) exploited.” Dan Kahan, *The Logic of Reciprocity: Trust, Collective Action, and Law*, 102 MICH. L. REV. 71, 78 (2003)).

90. Vandenberg, *supra* note 1, notes accompanying pages 1116-19 (citing numerous studies).

91. *Id.* at 1106.

92. *Id.* at 1110.

93. *Id.* at 1115, 1122.

94. *Id.* at 1120.

95. *Id.* at 1123.

(AR). These belief changes will activate a concrete norm against engaging in the behavior.⁹⁶

Professor Vandenberg thinks information given to the public can have an effect in activating the reciprocity norm. He argues that the law should provide information about the relative share of the mean effects of toxic releases as compared to industry and other sources in order to activate norms related to reciprocity.⁹⁷

Professor Vandenberg notes that norm campaigns often do not provide the information necessary to activate norms.⁹⁸ In particular, the crucial information that is not often communicated to people is the fact that individuals as a group have become a major source of environmental degradation. Professor Vandenberg notes that as a result, “individuals do not believe that individual behavior is a substantial cause of pollution.”⁹⁹ He argues that this type of misconception may contribute to individuals’ tendency to underestimate the environmental problems caused by individual behavior.¹⁰⁰ Once people possess the relevant data, the theory predicts that based on this information about use of toxic substances by the mean individual, they may then accept the consequences of this use—which are that the environment is degraded—and then they may also accept responsibility. If they accept the consequences and accept the responsibility, then the abstract norm of environmental concern may motivate concrete pro-environmental actions or practices, such as proper disposal of toxic household chemicals.

The relevant question for our purposes is whether the VBN model can help explain the recycling norm. Professor Carlson does not explicitly discuss the VBN model so we must apply the VBN model to recycling *de novo*. As noted, this model of norm activation consists of a two-stage process. In the first stage, the AC stage, the subject accepts consequences of her actions. In the second stage, the AR stage, the subject accepts responsibility for the untoward consequences she has caused. In the present context, the question is which beliefs of recyclers were changed such that the abstract environmental concern norm combined with new information, causing recyclers to change beliefs and come to accept certain consequences and accept responsibility for those consequences. The basic questions then are: what information, what beliefs, what consequences, and what responsibility? The answers seem fairly straightforward.

The abstract norm or value at issue is that of environmental concern. The concrete norm at issue is of course recycling. What information allows us to connect these dots? Generically, the answer is obvious. The information is information that goes to establish that failing to recycle will be bad for the environment in comparison to recycling. Presumably, the subject digests the information and forms the belief that the abstract value can be promoted through a concrete particular action, thus reaching the practical conclusion that recycling is a behavior that should be taken up. What consequences must be accepted? Presumably one must accept that a consequence of failing to recycle is that the local landfill will be fuller, an additional tree segment will be cut down, additional aluminum will need to be

96. *Id.*

97. *Id.* at 1106.

98. *Id.* at 1136.

99. *Id.* at 1130.

100. *Id.*

smelted, etc. Finally, regarding responsibility, presumably one accepts responsibility for the fact that one's actions have a moral impact on others because a better environment is better for people than a worse environment.

Regarding AC, as the saying goes, recycle—save a tree. It has become an oft-stated cultural belief that recycling can reduce the number of trees cut down and that this is good for the environment. Though there is no popular meme about mining aluminum, it is a natural consequence to accept by parallel reasoning that recycling soda cans will reduce the amount of new aluminum that must be produced. The relevant question in terms of the VBN model is whether these norms can be plausible as providing information to people on their individual causal connection to the undesirable consequences.

Professor Vandenberg claims that the U.S. Environmental Protection Agency (EPA) has not been good about providing people with information that individuals are important sources of pollution. What is the case with regard to recycling? Note that the government has made efforts to inform the public about individuals as pollution sources. Since there is a norm in place, is recycling the exception that proves the rule? For example, the government runs advertising campaigns.¹⁰¹ While data is scarce, it seems plausible that these effects have been a factor in the rise of the recycling norm. Professor Vandenberg's model would predict that providing such information should increase recycling behavior. An obvious question that would be worth further exploration is whether EPA could change its message in any way to better serve the goal of giving the public the sort of information that would cause them to see how the consequences of some concrete norm of behavior connect up with a more general value, such as the value of environmental concern.

Regarding accepting responsibility, is the idea that one accepts responsibility for one's marginal contribution toward the need for additional mining of aluminum and incremental space taken for landfill? The notion of accepting responsibility is a complex one. The type of good involved may have an impact on what it means to accept responsibility. Specifically, whether the good is a "step good" or a "continuous good" may matter. If an election is otherwise valid, one vote more or less either way will not matter at all. By contrast, with recycling, each additional can, bottle, or cardboard container not recycled is one more item in the landfill, or worse, along the highway.

From the perspective of the recycling norm entrepreneur, recycling has the favorable feature that there are these individuals connected up to particular discrete objects; objects that these individuals feel some possessory interest over, namely, the cans, bottles, etc. in the possession of particular individuals. This is like littering. The norm is to refrain from littering. But the norm does not require one to pick up the litter of other people. Thus, recycling and refraining from littering fall in line with a more general norm that one should be responsible for one's objects. Thus, it may matter to people that there is a discrete bottle that will either end up being used again or in a landfill for thousands of years, and that they are a but-for cause of the eventual disposition of the bottle.

On the whole, then, we may conclude that the VBN model combined with the assumption of predominant egoism appears to make sense of the emergence of the recycling norm, providing an alternative explanation of the recycling norm than does Professor Carlson's account that relies crucially on the role of convenience. Comparing convenience to altruism, clearly altruism is the most important consideration, as recycling is not really convenient at all. It is to varying degrees inconvenient. Without altruism, there is no norm; without convenience, the norm would be smaller. This raises the difficult question as to how far we may extend this finding. For instance, should we now suppose that the VBN model as conceived in social psychology is overall the best account of the prospects for norm emergence across the board? This would be a dramatic conclusion to draw, however, as the VBN model allows scope for a significant degree of altruistic behavior of a sort completely alien to *homo economicus*. Thus, it is important to better understand the implications of our findings with respect to the VBN model and recycling with respect to the issue of the emergence of altruistic norms more generally.

B. The Cost Structure of the Recycling Norm

Science proceeds by a mutual adjustment process between theoretical assumptions and empirical findings. Empirical findings will cause us to tinker with our theoretical assumptions and the resulting improved conceptual framework may provide added coherence to the interpretation of disparate empirical findings. The finding of key import in the above discussion is that the best explanation of recycling behavior appears to require the assumption of altruistic behavior. Does anything follow from this finding?

As noted in Part II, there has been an historical tension between the economic approach and the sociological approach. A rapprochement is needed. This rapprochement must connect up the two senses of a norm; a norm as a linguistic entity and a norm as a pattern of behavior. Creating this linkage is necessary as the VBN model treats norms as mental or linguistic elements. Doing so illegitimately allows the VBN model to sidestep the crucial topic of costs. A full account of the recycling norm necessarily takes account of costs, particularly those arising from conflicting norms. It often costs little or nothing to accept a norm qua linguistic entity, and, thus, one would predict more norms endorsed verbally than ensconced in behavior.

The term "norm" is ambiguous between two meanings; a norm as a linguistic entity, statement, or internal commitment, and a norm as a pattern of behavior.¹⁰² Overemphasis on the linguistic element creates error in our understanding. This ambiguity is replicated in the present context, as the VBN model adherents' view of norms as intentional states allows for a set of norms most of which will never be reflected in behavior. The essence of the criticism here is not that this account would be incorrect per se, but rather fundamentally incomplete for failing to include a detailed account of norms qua social practices.

Given the large numbers of abstract values that presumably can be shown to be endorsed by people in experimental settings, it would appear that the only thing standing between us and a better set of concrete norms is simply the pro-

101. EPA is currently running a television advertising campaign featuring the actress Joanne Woodward explaining and promoting recycling.

102. HETCHER, *supra* note 5.

vision of more information and the input of resources to overcome the cost factor. This is an optimistic picture of the potential of effective social norm management. There are, however, a few concerns that may warrant caution in our assessment of the potential for the VBN model as a tool of norm management. The first criticism to address is a line of argument sure to be leveled on behalf of law and economics. At its core, this criticism is based on the claim that the VBN model diverges from the methodological assumption of *homo economicus* and, therefore, is bound to fail in predictive power. The one thing we know is that if the empirical findings of recycling altruism are true, the methodological assumption of narrow self-interest is wrong and vice versa.

As discussed earlier, the VBN model posits the existence of a set of mental states as set out in the model around and regarding the holding of general values and more particular norms. For example, Professor Vandenberg's account draws on guilt, etc., on the part of the would-be conformer. The compatibility question appears to turn on whether the rational actor approach can tolerate such mental states. As noted in Part II, such states are generally foreign to the economic approach. One obvious response to this question is that of course there can be no compatibility here as the economic model rejects an account of moral actors possessed by good intentions, motivated by guilt, etc., in favor of an account of man as narrowly self-interested. The issue is not obvious in this way, however, as on its more sophisticated version, the rational actor approach need not delve into explanations of mental items—one way or another. What matters is accurate prediction. Thus, the mere fact that people hold abstract values and these can be processed into concrete norms does not conflict with the economic account. What matters is whether their behavior is best modeled under the assumption of narrow self-interest or pure egoism. Any incompatibility will be measured in terms of behavior. Rational choice theory, first and foremost, is a theory about behavior, not beliefs. The theory can accept that people often explain their actions as motivated by a set of normative concerns. The economic account is only controverted to the extent that people act contrary to their interests. What is important then about the recycling example is that there is actual behavior that must be explained. In conforming to the norm, people do appear to be acting contrary to their own interests. But one swallow does not a summer make. Only if we see numerous other examples of actual conforming behavior should we be prepared to accept the model in its full generality. As Professor Vandenberg has noted, we need more empirical testing of the sort that he envisions regarding the issues of toxic releases.

Altruism as well is ultimately about normative actions not normative commitments. It is possible that a person could hold all sorts of normative commitments in the sense that the VBN model tests, and yet this person's actions contained little or nothing by way of actual altruistic behavior. Given the importance of behavior, then, there is a gap in the VBN model, as the theory predicts the formation of concrete norms understood as mental elements, not actions. The VBN model gets us to a mental state, the requisite beliefs and intentions to act in a concrete manner to the extent that cost is not a factor. But cost is always a factor. The term "norm activation" has "act" in it and yet the VBN model is not really about actions at all. Talk is cheap and so are good

intentions.¹⁰³ Potentially catastrophic environmental disasters such as global warming will not be abated through mental states no matter how worthy. Thus, if the VBN model is to play a comprehensive role, it must be an element in an account of how effective environmental action comes about. Currently, it provides necessary but not sufficient conditions to satisfy this goal, as it has no account of how to bridge the gap between good intentions and good acts. Thus, the VBN model must be supplemented with an account of the economics of turning concrete normative intentions into actual conforming actions.

As noted, VBN theorists hold that cost is the factor that prevents the behaviors that follow from the logic of the norm. The following discussion argues that the cost question is more complex than at first meets the eye. Talk of costs in a generic sense suggests that they are fungible. There may be norms, however, that conflict with other norms held by the same person. Thus, the cost of conformity may not be monetizeable but may involve an inevitable trade off among two or more norms all held by the same actor.

Consider the hypothesis that the environmental concern norm should become more activated as wealth increases. This appears to be a plausible hypothesis given the role of costs in the VBN model. If we take the abstract norm as given, and we take the current amount of information as given, then as wealth increases, costs should be less of a factor inhibiting the full activation of the norm. There is strong reason to think that this hypothesis will prove to be incorrect, however. The reason is that there is a tension for many people between adherence to the environmental concern norm and their adherence to other norms. For example, a widely held norm is that one should take care for the safety of one's children. The environmental concern norm says be concerned for the environment. This would get concretized in such terms as that one should drive a Honda Prius, or at least a Honda Civic. But it is safer to drive a heavier car such as a BMW, Mercedes, or Volvo. Owners of these heavier vehicles who also have children are providing a safer driving experience for their children than people driving Priuses or Civics. Whatever one's moral judgment of this situation, that is a plain fact of physics. The environmental concern norm says buy the Prius but the child safety norm says buy the heavier car. Notice that it is not a matter of cost in the sense that if driving the smaller car becomes less expensive relative to the larger vehicle—say because the price of gas increased—the tension would still exist. In this example, the VBN model would have given an incorrect hypothesis, as it would claim that as wealth increased and cost became less of a factor, we would expect to see more Civics and Priuses, whereas I would predict the opposite, that we will see more BMWs, Volvos, and Mercedes. So it is not necessarily the case that cost constrains environmental norms but rather the

103. There are obvious rational reasons why people would proclaim norms verbally regardless of whether they are ever realistically likely to act on them. One way of stating my quibble with Professor Carlson is to note that I think she focuses on the wrong conception of a norm. For her it is the strength with which one holds a position, as tested by social scientific studies. Once strength of conviction is identified as the key element, then the operative issue becomes how to make this commitment stronger. But if one instead thinks of norms as strategic structures, then these may continue to be in place and operative on individuals quite apart from the strength of their commitment. Carlson, *supra* note 1, at 1236. See Sunstein, *supra* note 1, at 915 (defining norms as "social attitudes of approval and disapproval").

fact that they conflict with other norms. At the limit, the question is can there be an unlimited number of activated norms? The answer appears to be no, since these norms may come into conflict internally.

V. Conclusion

The tendency in the past has been for scholars to take an all or nothing approach toward the methodological assumption regarding human motivation; either people are basically narrowly self-interested—*homo economicus*—or people are basically moral—*homo sociologicus*. This Article has advocated for a third approach. First, for methodological reasons we begin from the assumption of narrow self-interest. The study of recycling proved to provide substantial evidence in support of questioning this assumption. But it represents a false dichotomy to think that once we question the narrow self-interest assumption that we therefore must embrace the assumption of *homo sociologicus*. The same methodological considerations that caused us to adopt the assumption of *homo economicus* in the first place should still hold sway to the extent such that we seek to move away from this assumption only to the extent mandated by our findings. Accordingly, we should move first to the assumption of predominant egoism rather than the assumption of predominant altruism or pure altruism as represented by *homo sociologicus*. The relevant question in the present context then is whether the assumption of predominant egoism functions in an adequate explanation of recycling behavior. We saw that it did. It explains the pivotal role that the consideration of convenience plays in peoples' recycling behavior. If people were completely egoistic, they would not recycle at all. And if people were completely altruistic, their recycling behavior would not show such a sensitivity to the personal cost involved in recycling. The assumption of predominant egoism accords well with what seems intuitively to be the case with recycling, namely, that large numbers of people will indeed be self-sacrificing in such a manner as to recycle in the name of promoting their normative belief in environmental protection, but they will only do so when the personal sacrifice is not substantial. In other words, their altruism with regard to recycling is limited, or conversely, while they are not completely egoistic regarding recycling, they are nevertheless predominantly egoistic in this regard.

The preceding discussion also considered the broader normative implications of the analysis of the recycling norm. We first discussed Professor Carlson's pessimistic conclusion regarding the potential for further efforts at norms management in the environmental context. Her pessimism was misplaced as it was predicated on a faulty conception of the possible array of options constitutive of norms management. We saw that her policy prescriptions regarding making recycling more convenient are, properly understood, fully within the ambit of techniques of norm management. Indeed, her subtle and sophisticated analysis of the interplay of governmental and private actions whereby recycling may be best promoted serves as an important object lesson for norm theorists and policymakers alike.

While Professor Carlson was unduly pessimistic, we then went on to see how the VBN model of norm activation is unduly optimistic about the potential for norms management in the environmental context. As we saw, the problem with this account is that it sets no limits, besides cost, on the extent to which altruistically maintained norms may result from efforts at norms management. We saw that this false conception was the result of the fact that the model does not deal in norm-conforming actions but is content to end the analysis at concrete normative beliefs. Once we look at actions, however, we see that there are other impediments to promoting desirable behavior through norm management techniques than mere cost. In particular, we saw that concrete behaviors may conflict in a manner such that as costs becomes less of a factor for individuals, we may indeed expect them to recycle more but also to partake of behaviors adverse to the abstract environmental protection norm meant to be promoted by recycling.

The title to this Article raised the prospect of norms as limited resources. We have seen a few ways in which norms are limited resources. First, they are limited in terms of the amount of altruism they may draw from the altruism budget, given the other competing draws. Second, norms are limited in their ability to move from linguistic entities to actual behavioral practices by inherent internal conflicts, as seen in the example of the conflict between the environmental norm and the child safety norm. Despite these limits, we have also seen that norms may be purposefully cultivated and the results may be socially significant as exemplified by the recycling norm.