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I. INTRODUCTION

According to one picture of practical reasoning, people are decision-making animals, assessing the advantages and disadvantages of proposed courses of action and choosing in accordance with that assessment. This picture plays a familiar role in economics and decision theory[1]; in various forms, it is central to leading descriptions of reasoning in law and politics.[2] Even in psychology, where models of bounded rationality are pervasive and where it is common to speak of "satisficing" rather than optimizing, the deviations can be understood only against the background of this picture.[3]

As many people have noticed, this understanding of practical rea-

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1. See, e.g., Gary Becker, *Accounting for Tastes* (Cambridge, Mass.: Harvard University Press, 1996). Of course some economically oriented discussions address some of the issues discussed here (see, e.g., Louis Kaplow, "Rules and Standards: An Economic Analysis," *Duke Law Journal* 42 [1992]: 181–232) and, as we note, numerous people, including many within the utilitarian tradition, have insisted that people devise strategies and institutions to overcome myopia or self-control problems.

2. Thus, the most complete treatment of legal reasoning, Ronald Dworkin (*Law's Empire* [Cambridge, Mass.: Harvard University Press, 1986]), deals well with the use of precedent but not at all with the use of strategies to simplify the burdens of decision; this is a serious gap. Helpful discussions of aspects of that topic can be found in Joseph Raz, *Practical Reason and Norms,* 2d ed. (Princeton, N.J.: Princeton University Press, 1991), pp. 37–45 (discussing rules and exclusionary reasons) and *The Authority of Law* (Oxford: Oxford University Press, 1986), pp. 201–6 (discussing analogies). In the political domain, see Yuen Foongh Khong, *Analogies at War* (Princeton, N.J.: Princeton University Press, 1992).

3. A prominent exception is George Ainslie, *Picoeconomics* (Cambridge: Cambridge University Press, 1995), but Ainslie's focus is on precommitment, only one of the set of solutions discussed here, and Ainslie does not clearly distinguish between rules and other kinds of precommitment strategies.

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soning is quite inadequate.[4] An important problem is that it ignores the existence of simplifying strategies that people adopt well before on-the-spot decisions must be made.[5] Debates over rule utilitarianism have of course emphasized the importance of these strategies, and precommitments, plans, and rules have received prominent attention from (among others) Jon Elster,[6] Edward McClennen,[7] Richard Thaler,[8] and Frederick Schauer.[9] A central point here is that people seek to overcome their own shortcomings—calculative, moral, or otherwise—by making some metachoice before the moment of ultimate decision. But there are significant gaps in these discussions. They do not take sufficiently seriously the reluctance of ordinary people and social institutions to make on-the-spot decisions,[10] and they offer a truncated and undifferentiated sense of the range of potential strategies for improving, or reducing, the burdens of first-order decisions. They do not, for example, investigate why an agent might adopt a firm rule or instead a soft presumption or a standard; nor do they deal with choices between these options and delegating to others or proceeding via small, reversible steps.[11] The result is to give an inade-

4. See, e.g., Jon Elster, *Solomonic Judgments* (Cambridge: Cambridge University Press, 1990), pp. 36–53; John Rawls, "Two Concepts of Rules," *Philosophical Review* 64 (1955): 3–32; Edward McClennen, *Rationality and Dynamic Choice* (Cambridge; Cambridge University Press, 1990). See also the useful survey of a number of treatments in McClennen, pp. 219–38. Within economics, see, e.g., Thomas Schelling, "Enforcing Rules on Oneself," *Journal of Law, Economics, and Organization* 1 (1985): 357–70, p. 357; Kaplow; Richard Thaler, *Quasi-Rational Economics* (New York: Russell Sage, 1993), pp. 77–90; Eric Rasmussen, "Managerial Conservatism and Rational Information Acquisition," *Journal of Economics and Management Strategy* 1 (1992): 175–202, and *Games and Information* (Oxford: Blackwell, 1994), p. 129.

5. Mill himself emphasized the point; see John Stuart Mill, "Utilitarianism," in his *On Liberty and Other Essays,* ed. John Gray, pp. 131–201 (Oxford: Oxford University Press, 1991), pp. 151–53.

6. See Jon Elster, *Ulysses and the Sirens* (Cambridge: Cambridge University Press, 1979), pp. 36–47.

7. See McClennen, pp. 50–85.

8. See Thaler, pp. 77–90.

9. See Frederick Schauer, *Playing by the Rules* (Cambridge: Cambridge University Press, 1992), which contains useful institutional discussion, particularly of the relationship between courts and legislatures. Conrad Johnson, *Moral Legislation* (Cambridge: Cambridge University Press, 1991), is in some ways complementary, discussing the differences between decisions at the legislative level and individual choices.

10. For example, Elster's (see *Ulysses and the Sirens,* p. 37) principal concern is with the particular problem of weakness of will, which is important but, as we will see, only one of a large number of grounds for second-order decisions. Thaler and Schelling are similarly concerned with self-control problems. McClennen's principal interest is in dynamic consistency; see p. 219. Mill's brief but important discussion involves the cognitive demands of constant calculation; see p. 152.

11. Johnson is typical in not exploring the second-order alternatives to rules (such as presumptions) as ways of promoting consequentialist goals. Elster offers illuminating discussions of some of these strategies, but separately and in various places, without discussing how agents can and do choose among them, and with little treatment of institutional

quate understanding of how agents and institutions do or should proceed, and no real sense of the political, moral, and legal issues involved.

By 'second-order decisions' we refer to decisions about the appropriate strategy for reducing the problems associated with making a first-order decision. Second-order decisions thus include the strategies that people use in order to avoid getting into an ordinary decision-making situation in the first instance. There are important issues here about cognitive burdens and also about responsibility, equality, and fairness. In law, for example, some judges favor a second-order decision in favor of rules, on the ground that rules promote predictability and minimize the burdens of subsequent decisions. In politics, legislatures often adopt a second-order decision in favor of a delegation to some third party, like an administrative agency. But there are various alternative strategies, and serious ethical and even democratic questions are raised by rule-bound decisions (as opposed, for example, to small, reversible steps) and by delegations (as opposed, for example, to rebuttable presumptions).

We aim here to clarify the choice among second-order strategies. We do so by showing that these strategies differ in the extent to which they produce mistakes and also in the extent to which they impose informational, moral, and other burdens on the agent and on others, either *before* the process of ultimate decision or *during* the process of ultimate decision. We identify three especially interesting kinds of cases. The first involves second-order decisions that greatly reduce burdens at the time of ultimate decision but require considerable thinking in advance. Decisions of this kind, which we call High-Low, may be difficult to make before the fact; the question is whether the burdens are worth incurring in light of the aggregate burdens, moral, cognitive, and otherwise, of second-order and first-order decisions taken together. The second we call Low-Low. Some second-order strategies impose little in the way of decisional burdens either before or during the ultimate decision. This is a great advantage, and a major question is whether the strategy in question (consider a decision to flip a coin) produces too much unfairness or too many mistakes. The third we call Low-High. Some second-order strategies involve low ex ante decisional burdens for the agents themselves, at the cost of imposing possibly high subsequent burdens on someone else to whom the first-order decision is "exported"; a delegation of power to some trusted associate, or to an authority, is the most obvious case.

By drawing on actual practices, individual and institutional, we attempt to provide guidance for seeing when one or another strategy will be chosen, when one or another makes best sense, and how both rational

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questions. See Elster, *Solomonic Judgments,* pp. 36–45 (discussing randomization); Elster, *Ulysses and the Sirens,* pp. 36–47 (discussing precommitment, apparently via rules).

and boundedly rational persons and institutions might go about making the relevant choices.[12] No particular strategy can be said to be better in the abstract; but it is possible to identify, in the abstract, the factors that push in favor of one or another strategy and also the contexts in which each approach makes sense. We suggest, for example, that a second-order decision in favor of firm rules (a form of High-Low) is appropriate when an agent faces a large number of decisions with similar features and when advance planning is especially important; in such cases, the crudeness of rules is easily tolerated because of their overall advantages. By contrast, a second-order decision in favor of small, reversible steps (a form of Low-Low) is preferable when the agent lacks reliable information and reasonably fears unanticipated bad consequences; this point helps explain the method that is often at work among common law courts (and argues against some of the critics of that method). A sensible agent will choose the alternative second-order strategy of delegating to another person or institution (a form of Low-High) when there is a special problem with assuming responsibility—informational, moral, or otherwise—and when an appropriate delegate, with sufficient time and expertise, turns out to be available; this point helps illuminate debates over delegations within the family and from legislatures to administrative agencies.[13] In the process we address a range of ethical, political, and legal issues that are raised by various second-order decisions.

II. DECISIONS AND MISTAKES

A. Strategies

The following catalog captures the major second-order strategies. The taxonomy is intended to be exhaustive of the possibilities, but the various items should not be seen as exclusive of one another; there is some overlap between them.

Rules.—People anticipating hard or repetitive decisions may do best to adopt a rule. A key feature of a rule is that it amounts to a full, or nearly full, ex ante specification of results in individual cases. People might say, for example, that they will never cheat on their taxes or fail to meet a deadline. A legislature might provide that judges can never make

12. Of course second-order decisions might operate as a rational response, by boundedly rational persons or institutions, to their own bounded rationality; but such decisions might also suffer from bounded rationality and go wrong because of cognitive or motivational problems.

13. Self-interested participants in politics will attempt to exploit arguments of this kind in order to produce their preferred outcome. An industry representative nervous about its chances of success in the legislature might argue strongly on behalf of a delegation, in the hopes that the delegate will be more receptive to its arguments (or more vulnerable to its influence). We deal only in passing with the strategic considerations involved in second-order strategies; this is a fertile area for further work, both empirical and theoretical.

exceptions to the speed-limit law or the law banning dogs from restaurants, or that everyone who has been convicted of three felonies must be sentenced to life imprisonment.

Presumptions.—Sometimes ordinary people and public institutions rely not on a rule but instead on a presumption, which can be rebutted. The result, it is hoped, is to make fewer mistakes while at the same time incurring reasonable decisional burdens.[14] An administrative agency might presume, for example, that no one may emit more than *X* tons of a certain pollutant, but the presumption can be rebutted by showing that further reductions are not feasible.

Standards.—Rules are often contrasted with standards.[15] A ban on "excessive" speed on the highway is a standard; so is a requirement that pilots of airplanes be "competent" or that student behavior in the classroom be "reasonable." These might be compared with rules specifying a fifty-five miles per hour speed limit, or a ban on pilots who are over the age of seventy, or a requirement that students sit in assigned seats.

Routines.—Sometimes a reasonable way to deal with a decisional burden is to adopt a routine. By this term we mean something similar to a habit but more voluntary, more self-conscious, and without the pejorative connotations of some habits (like the habit of chewing one's fingernails). Thus a forgetful person might adopt a routine of locking his door every time he leaves his office, even though sometimes he knows he will return in a few minutes; thus a commuter might adopt a particular route and follow it every day, even though on some days another route would be better.

Small steps.—A possible way of simplifying a difficult situation at the time of choice is to make a small, incremental decision, and to leave other questions for another day. When a personal decision involves imponderable and apparently incommensurable elements, people often take small, reversible steps first.[16] For example, Jane may decide to live with Robert before she decides whether she wants to marry him; Marilyn

14. It is important here to distinguish between a presumption and a rule-with-exceptions. A rule-with-exceptions has the following structure: "Do X—except in circumstances A, in which case you are exempt from doing X." For example, "observe the speed limit—except when you're driving a police car or an ambulance in an emergency, in which cases you may exceed it." By contrast, a typical presumption says something like: "Act on the assumption P—unless and until circumstances A are shown to obtain, in which case, do something else." The two amount to the same thing when the agent knows whether or not circumstances A obtain. The two are quite different when the agent lacks that information. With a presumption, you can proceed without the information; with a rule-with-exceptions, you cannot proceed, i.e., you are justified neither in doing X nor in not doing X. See Edna Ullmann-Margalit, "On Presumption," *Journal of Philosophy* 80 (1983): 143–162.

15. See, e.g., Kaplow, pp. 189–221; Kathleen Sullivan, "Foreword: The Justices of Rules and Standards," *Harvard Law Review* 105 (1993): 22–103.

16. See Edna Ullmann-Margalit, "Opting: The Case of 'Big' Decisions," in *The 1985 Yearbook* of the Wissenschaftskolleg zu Berlin.

may go to night school to see if she is really interested in law. A similar "small steps" approach is the hallmark of Anglo-American common law.[17] Judges typically make narrow decisions, resolving little beyond the individual case; at least this is their preferred method of operation when they are not quite confident about the larger issues, not only in the common law but in constitutional law too.[18]

Picking.—Sometimes the difficulty of decision, or symmetry among the options, pushes people to decide on a random basis. They might, for example, flip a coin or make some apparently irrelevant factor decisive ("it's a sunny day, so I'll take that job in Florida"). Thus they might "pick" rather than "choose" (taking the latter term to mean basing a decision on preference).[19] A legal system might use a lottery to decide who serves on juries or in the military, and indeed lotteries are used in many domains where the burdens of individualized choice are high, and when there is some particular problem with deliberation about the grounds of choice, sometimes because of apparent symmetries among the candidates.

Delegation.—A familiar way of handling decisional burdens is to delegate the decision to someone else. People might, for example, rely on a spouse or a friend or choose an institutional arrangement by which certain decisions are made by authorities established at the time or well in advance. Such arrangements can be more or less formal; they involve diverse mechanisms of control, or entirely relinquished control, by the person or people for whose benefit they have been created.

Heuristics.—People often use heuristic devices, or mental shortcuts, as a way of bypassing the need for individualized choice. For example, it can be overwhelming to figure out for whom to vote in local elections; people may therefore use the heuristic of party affiliation. When meeting someone new, your behavior may be a result of heuristic devices specify-

17. See Edward Levi, *An Introduction to Legal Reasoning* (Chicago: University of Chicago Press, 1948), pp. 3–15. In political science, see Charles Lindblom, "The Science of Muddling Through," *Public Administration Review* 19 (1955): 78–110, p. 79, which offers an influential and relevant argument about incrementalism. See also Charles Lindblom, "Still Muddling, Not Yet Through," *Public Administration Review* 39 (1979): 517–26. Lindblom's discussion is in the same general family as our exploration of small steps, though (oddly) Lindblom does not discuss the judiciary, and he does not explore when other second-order strategies might be preferable.

18. Thus in cases involving the right to die, affirmative action, and sex equality, Justices Sandra Day O'Connor and Ruth Bader Ginsburg much favor small steps as the strategy of choice; this is the ground on which they tend to disagree with Justice Scalia, and in fact it counts as the leading jurisprudential dispute on the current Supreme Court. The tension between the rule of law and the common law method is the basic theme of Antonin Scalia, *A Matter of Interpretation* (Princeton, N.J.: Princeton University Press, 1997), pp. 5–15. For general discussion, see Cass R. Sunstein, *One Case at a Time: Judicial Minimalism on the Supreme Court* (Cambridge, Mass.: Harvard University Press, 1999).

19. See Edna Ullmann-Margalit and Sidney Morgenbesser, "Picking and Choosing," *Social Research* 44 (1977): 757–83.

ing the appropriate type of behavior with a person falling in the general category in which the new person seems to fall. A great deal of attention has been given to heuristic devices said to produce departures from "rationality."[20] But often heuristic devices are fully rational if understood as a way of producing pretty good outcomes while at the same time reducing cognitive overload or other decisional burdens.

B. Costs of Decisions and Costs of Errors

Under what circumstances will, or should, an agent or institution make some second-order decision rather than making an all-things-considered judgment on the spot? And under what circumstances will, or should, one or another strategy be chosen? Many people have emphasized the particular value of rules, which can overcome myopia or weakness of will;[21] but the problem is far more general, and rules are just one of many possible solutions. Our ultimate goal is to suggest the most promising contexts for the principal candidates, especially rules, small steps, and delegation.

We have said that second-order strategies differ in the extent to which they produce mistakes and decisional burdens. In what follows we shall suggest that second-order strategies should be chosen by attempting to minimize the sum of the costs of making decisions and the costs of error, where the costs of making decisions are the costs of coming to closure on some action or set of actions, and where the costs of error are assessed by examining the number, the magnitude, and the kinds of mistakes.[22] We understand "errors" as suboptimal outcomes, whatever the criteria for deciding what is optimal; thus both rules and delegations can produce errors (the rule may be crude; the delegate may be incompetent). If the costs of producing optimal decisions were zero, it would be best to make individual calculations in each case, for this approach would produce correct judgments without compromising accuracy or any other important value. This would be true for individual agents and also for institutions. It is largely because people (including public offi-

20. See, e.g., John Conlisk, "Why Bounded Rationality?" *Journal of Economic Literature* 34 (1996): 669–98.

21. See the discussion of precommitment in Elster, *Ulysses and the Sirens,* and the treatment of "resolute choice" in McClennen.

22. Kaplow illuminatingly uses a framework of this sort but in a way that seems to us too reductionistic. Schauer, pp. 196–206, recognizes that the case for rules depends on empirical considerations. The treatments of precommitment in Elster, *Ulysses and the Sirens,* and Schelling, "Enforcing Rules on Oneself," do not explore the circumstances in which a rule-bound strategy is preferable to some other (second-order) approach, nor do they explore the grounds for choice among the various second-order strategies discussed here. In general, existing treatments of precommitment tend to be ambiguous about whether the relevant strategy is a rule or something else. See, e.g., Elster, *Ulysses and the Sirens,* p. 37–40 (collecting heterogeneous illustrations).

cials) seek to reduce decisional burdens, and to minimize their own errors, that sometimes they would like not to have *options* and sometimes not to have *information;* and they may make second-order decisions to reduce either options or information (or both).[23]

Three additional points are necessary here. The first involves responsibility: people sometimes want to assume responsibility for certain decisions even if others would be better at making those decisions, and people sometimes want to relieve themselves of responsibility for certain decisions even if other people would be worse at making those decisions. These are familiar phenomena in daily life; so too in politics and law, where people with authority encounter formal and informal barriers to their own efforts to delegate. A failure of responsibility might be understood as a special kind of "cost," but it is qualitatively different from the decision costs and error costs discussed thus far and raises separate questions. Special issues are created by institutional arrangements that divide authority, such as the separation of powers; such arrangements forbid people from assuming or delegating certain decisions, even if they would very much like to do so.

The second point comes from the fact that multiparty situations raise distinctive problems. Above all, public institutions (including legislatures, agencies, and courts) may seek to promote *planning* by setting down rules and presumptions in advance. The need for planning can argue strongly against on-the-spot decisions even if they would be both correct and costless to achieve. As we will see, the need for planning can lead in the direction of a particular kind of second-order strategy, one that makes on-the-spot decisions more or less mechanical.

The third and most important point is that a reference to a "sum" of decision costs and error costs should not be taken to suggest that a straightforward cost-benefit analysis is an adequate way to understand the choice among second-order strategies. Of course there is no simple metric along which to align the various considerations. Important qualitative differences can be found between decision costs and error costs, among the various kinds of decision costs, and also among the various kinds of error costs. Thus for any agent the costs of decision may include time, money, unpopularity, anxiety, boredom, agitation, anticipated ex post regret or remorse, feelings of responsibility for harm done to self or others, injury to self-perception, guilt, or shame. We refer to decision costs and error costs in order to start with a relatively simple framework; additional considerations will be introduced as the discussion proceeds.

Things become differently complicated for multimember institu-

23. See Edna Ullmann-Margalit, "On Not Wanting to Know," in *Reasoning Practically* (New York: Oxford University Press, 1999), in press; Gerald Dworkin, "Is More Choice Better than Less?" in *The Theory and Practice of Autonomy* (New York: Cambridge University Press, 1988), pp. 62–83.

tions, where these points also apply, but where interest group pressures may be important, and where there is the special problem of reaching a degree of consensus. A legislature, for example, might find it especially difficult to specify the appropriate approach to global warming, given the problems posed by disagreement, varying intensity of preference, and aggregation issues; for similar reasons a multimember court may have a hard time agreeing on how to handle an asserted right to physician-assisted suicide. The result may be strategies for delegation or for deferring decision, often via small steps.

An institution facing political pressures may have a distinctive reason to adopt a particular kind of second-order decision, one that will *deflect responsibility for choice.* Jean Bodin defended the creation of an independent judiciary, and thus provided an initial insight into a system of separated and divided powers, on just this ground; a monarch is relieved of responsibility for unpopular but indispensable decisions if he can point to a separate institution that has been charged with the relevant duty.[24] This is an important kind of *enabling constraint,* characteristic of good second-order decisions. In modern states, the existence of an independent central bank is often justified on this ground. In the United States, the President has no authority over the money supply and indeed no authority over the Chairman of the Federal Reserve Board, partly on the theory that this will prevent the President from being criticized for necessary but unpopular decisions (such as refusing to increase the supply of money when unemployment seems too high); the fact that the Federal Reserve Board is unelected is an advantage here. There are analogues in business, in workplaces, and even in families, where a mother or father may be given the responsibility for making certain choices, partly in order to relieve the other of responsibility. Of course this approach can cause problems of fairness, equality, and mistake.

C. Burdens Ex Ante and Burdens on-the-Spot

The inquiry into second-order strategies might be organized by noticing a simple point: some such strategies require substantial thought in advance but little thought on-the-spot, whereas others require little thought before the situation of choice arises and also little thought on-the-spot. Thus there is a temporal difference in the imposition of the burdens of decision, which we describe with the terms 'High-Low', 'Low-Low', and 'Low-High'. To fill out the possibilities, we add the term 'High-High' as well. By the term 'decision costs' we refer to the overall costs, which may be borne by different people or agencies: the work done before the fact of choice may not be carried out by the same actors who will have to do the thinking during the ultimate choice. See figure 1.

24. See Stephen Holmes, *Passions and Constraint* (Chicago: University of Chicago Press, 1996), p. 165.

	low ex ante burdens	high ex ante burdens
low on-the-spot burdens	Low-Low: picking; small steps; various heuristics; some standards (1)	High-Low: rules; presumptions; some standards; routines (2)
high on-the-spot burdens	Low-High: delegation (3)	High-High: Hamlet; characters in Henry James novels; dysfunctional governments (4)

FIG. 1.—Burdens ex ante and burdens ex post

Cell 1 captures strategies that promise to minimize the overall burdens of having to make decisions (whether or not they promote good overall decisions). These are cases in which agents do not invest a great deal of thought either before or at the time of decision. Picking is the most obvious case; consider the analogous possibility of flipping a coin. Small steps are more demanding, since the agent does have to make some decisions, but because the steps are small, there need be comparatively little thought before or during the decision. The most sharply contrasting set of cases is High-High (see cell 4). As this cell captures strategies that maximize overall decision costs, it ought for our purposes to remain empty, or at least nearly so. Fortunately it seems to be represented only by a small minority of people in actual life. Often those who fall in cell 4 seem hopelessly indecisive, but it is possible to imagine people thinking that High-High represents a norm of moral responsibility, or that (as some people seem to think) incurring high burdens of decision is something to relish. It is also possible to urge High-High where the issue is extremely important and where there is no other way of ensuring accuracy; consider, for example, the decision when to wage or terminate a war, a decision that may reasonably call for a great deal of deliberation both before and during the period of choice.

Cell 2 captures a common aspiration for national legislatures and for ordinary agents who prefer their lives to be rule-bound. Some institutions and agents spend a great deal of time choosing the appropriate rules; but once the rules are in place, decisions become extremely simple, rigid, even mechanical. Everyone knows people of this sort; they can seem both noble and frustrating precisely because they follow rules to the letter. Legal formalism—the commitment to setting out clear rules in advance and mechanical decision afterward, a commitment defended by Supreme Court Justices Hugo Black and Antonin Scalia—is associated with cell 2.[25]

25. See Scalia, pp. 5–20.

When planning is important and when a large number of decisions must be made, cell 2 is often the best approach, as the twentieth-century movement away from the common law, and toward bureaucracy and simple rules, helps to confirm. Individual cases of unfairness may be tolerable if the overall result is to prevent the system from being overwhelmed by decisional demands. Cell 2 is also likely to be the best approach when many people are involved and it is known in advance that the people who will have to carry out on-the-spot decisions constantly change. Consider institutions with many employees and a large turnover (the army, entry levels of large corporations, and so forth). The head of an organization may not want newly recruited, less-than-well-trained people to make decisions for the firm: rules should be in place so as to insure continuity and uniform level of performance. On the other hand, the fact that life will confound the rules often produces arguments for institutional reform in the form of granting power to administrators or employees to exercise "common sense" in the face of rules.[26] An intermediate case can be found with most standards; the creation of the standard may itself require substantial thinking, but even when the standard is in place, agents may have to do some deliberating in order to reach closure.

Cell 3 suggests that institutions and individuals sometimes do little thinking in advance but may or may not minimize the aggregate costs of decision. The best case for this approach involves an agent who lacks much information, or seeks for some other reason to avoid responsibility, and a delegate who promises to make good decisions relatively easily. As we have seen, delegations may require little advance thinking, at least on the substance of the issues to be decided; the burdens of decision will eventually be faced by the delegate. Of course while some delegations are almost automatic (say, in a family), some people think long and hard about whether and to whom to delegate. Also, some people who have been delegated power will proceed by rules, presumptions, standards, small steps, picking, or even subdelegations. Note that small steps might be seen as an effort to "export" the costs of decision to one's future self; this is related to an important theme in the common law, and an aspect that is highly valued by many judges.

It is an important social fact that many people are relieved of the burdens of decision through something other than their own explicit wishes. Consider prisoners, the mentally handicapped, young children, or (at some times and places) women; in a range of cases, society or law makes a second-order decision on someone else's behalf, often without any indication of that person's own desires. The usurpation of another's decisions, or second-order decisions, is often based on a belief that the

26. See Phillip Howard, *The Death of Common Sense* (New York: Warner, 1996), pp. 12–51.

relevant other will systematically err. This of course relates to the notion of paternalism, which can be seen as frequently arising when there is delegation without consent.

In some cases, second-order decisions produce something best described as Medium-Medium, with imaginable extensions toward Moderately High–Moderately Low and Moderately Low–Moderately High. As examples, consider some standards, which, it will be recalled, structure first-order decisions but require a degree of work on the spot, with the degree depending on the nature of the particular standard. But after understanding the polar cases, analysis of these intermediate cases is straightforward, and hence we will not undertake that analysis here.

We now turn to the contexts in which agents and institutions will, or should, follow one or another of the basic second-order strategies.

III. LOW-HIGH (WITH SPECIAL REFERENCE TO DELEGATION)

A. Informal and Formal Delegations

As a first approximation, a delegation is a second-order strategy that exports decision-making burdens to someone else, in an effort to reduce the agent's burdens both before and at the time of making the ultimate decision. A typical case involves an agent who seeks to avoid responsibility (for some strategic or ethical reason, or because of a simple lack of information) and who identifies an available delegate whom he trusts to make a good, right, or expert decision.

Informal delegations occur all the time. Thus, for example, one spouse may delegate to another the decision about what the family will eat for dinner, what investments to choose, or what car to buy. Such delegations often occur because the burdens of decision are high for the agent but low for the delegate, who may have specialized information, who may lack relevant biases or motivational problems, or who may not mind (and who may even enjoy) taking responsibility for the decision in question. (These cases may then be more accurately captured as special cases of Low-Low.) The intrinsic burdens of having to make the decision are often counterbalanced by the benefits of having been asked to assume responsibility for it (though these may be costs rather than benefits in some cases). Thus some delegates are glad to assume their role; this is important to, though it is not decisive for, the ethical issue whether to delegate (consider the question of justice within the family). And there is an uneasy line, raising knotty conceptual and empirical questions, between a delegation and a division of labor (consider the allocation of household duties). A key issue here is whether the recipient of the delegation has the authority to decline.

Government itself is a large recipient of delegated decisions, at least if sovereignty is understood to lie in the citizenry. On this view, various

public institutions—legislatures, courts, the executive branch—exercise explicitly or implicitly delegated authority, and there are numerous subdelegations, especially for the legislature, which must relieve itself of many decisional burdens. A legislature may delegate because it believes that it lacks information about, for example, environmental problems or changes in the telecommunications market; the result is an Environmental Protection Agency (EPA) or a Federal Communications Commission. Or the legislature may have the information but find itself unable to forge a consensus on underlying values about, for example, the right approach to affirmative action or to age discrimination. Often a legislature lacks the time and the organization to make the daily decisions that administrative agencies are asked to handle; consider the fact that legislatures that attempt to reconsider agency decisions often find themselves involved in weeks or even months of work, and fail to reach closure. Or the legislature may be aware that its vulnerability to interest group pressures will lead it in bad directions, and it may hope and believe that the object of the delegation will be relatively immune. Interest group pressures may themselves produce a delegation, as where powerful groups are unable to achieve a clear victory in a legislature but are able to obtain a grant of authority to an administrative agency over which they will have power. The legislature may even want to avoid responsibility for some hard choice, fearing that decisions will produce electoral reprisal. Self-interested representatives may well find it to their electoral advantage to enact a vague or vacant standard ("the public interest," "reasonable accommodation" of the disabled, "reasonable regulation" of pesticides), and to delegate the task of specification to someone else, secure in the knowledge that the delegate will be blamed for problems in implementation.

B. When to Delegate

Delegation deserves to be considered whenever an appropriate and trustworthy delegate is available and there is some sense in which it seems undesirable for the agent to be making the decision by himself. But obviously delegation can be a mistake—an abdication of responsibility, an act of unfairness, a recipe for more rather than fewer errors, or for even higher (aggregate) costs of decision. And since delegation is only one of a number of second-order strategies, an agent should usually consider other possibilities before delegating.

Compared to a High-Low approach, a delegation will be desirable if the legislature, or the delegator, is unable to generate a workable rule or presumption (and if anything it could come up with would be costly to produce) and if a delegate would therefore do better on the merits. This may be the case on a multimember body that is unable to reach agreement, or when an agent or institution faces a cognitive or motivational

problem, such as weakness of will or susceptibility to outside influences. A delegation will also be favored over High-Low if the delegator seeks to avoid responsibility for the decision for political, social, or other reasons, though the effort to avoid responsibility may also create problems of legitimacy, as when a legislator relies on "experts" to make value judgments about environmental protection or disability discrimination.

As compared with small steps or picking, a delegation may or may not produce higher total decision costs (perhaps the delegate is slow or a procrastinator). Even if the delegation does produce higher total decision costs, it may also lead to more confidence in the eventual decisions, at least if reliable delegates are available. In the United States, for example, the Federal Reserve Board has a high degree of public respect and hence there is little pressure to eliminate or reduce the delegation. But a delegate—a friend, a spouse, an Environmental Protection Agency—may prove likely to err, and a rule, a presumption, or small steps may emerge instead. Special issues are raised in technical areas, which create strong arguments for delegation, but where the delegate's judgments may be hard to oversee (even if they conceal controversial judgments of value; return to the EPA[27]).

There is also the independent concern for fairness. In some circumstances, it is unfair to delegate, for example, to a friend or a spouse the power of decision, especially but not only because the delegate is not a specialist. Issues of gender equality arise when a husband delegates to his wife all decisions involving the household and the children, even if both husband and wife agree on the delegation. Apart from this issue, a delegation by one spouse to another may well seem inequitable if (say) it involves a child's problems with alcohol, because it is an abdication of responsibility, a way of transferring the burdens of decision to someone else who should not be forced to bear them alone.

In institutional settings, there is an analogous problem if the delegate (usually an administrative agency) lacks political accountability even if it has relevant expertise. The result is the continuing debate over the legitimacy of delegations to administrative agencies.[28] Such delegations can be troublesome if they shift the burden of judgment from a democratically elected body to one that is insulated from political control. What we are adding here is that the long-standing debate over delegations offers a far too limited sense of the alternatives. A legislature is not confronted only with the choice whether or not to delegate; if the legislature wants to avoid the degree of specificity entailed by rule-bound

27. This is the basic theme of Marc Roberts et al., *The Environmental Protection Agency: Asking the Wrong Questions*, 2d ed. (Oxford: Oxford University Press, 1996).

28. Compare David Schoenbrod, *Power without Responsibility* (New Haven, Conn.: Yale University Press, 1995) with Jerry Mashaw, *Chaos, Greed, and Governance* (New Haven, Conn.: Yale University Press, 1997).

law, it might instead enact a presumption or take small steps (as, e.g., through an experimental pilot program). Related issues are raised by the possibly illegitimate abdication of authority when a judge delegates certain powers to law clerks (as is occasionally alleged about Supreme Court justices) or to special masters who are expert in complex questions of fact and law (as was alleged in connection with a delegation of fact-finding power to a prominent law professor in the Microsoft litigation, a delegation that was ultimately ruled invalid).

C. Complications

Three important complications deserve comment. First, any delegate may itself resort to making second-order decisions, and it is familiar to find delegates undertaking each of the strategies that we have described. Sometimes delegates prefer High-Low and hence generate rules; almost everyone knows that this is the typical strategy of the Internal Revenue Service. Alternatively, delegates may use standards or proceed by small steps. This is the general approach of the National Labor Relations Board, which (strikingly) avoids rules whenever it can and much prefers to proceed case by case. Or a delegate may undertake a subdelegation. Confronted with a delegation from her husband, a wife may enlist the help of a sibling or a parent. Asked by Congress to make hard choices, the President may and frequently does subdelegate to some kind of commission, for some of the same reasons that spurred Congress to delegate in the first instance. Of course a delegate may just pick.

The second complication is that the control of a delegate presents a potentially serious principal-agent problem. How can the person who has made the delegation ensure that the delegate will not make serious and numerous mistakes, or instead fritter away its time trying to decide how to decide? There are multiple possible mechanisms of control. Instead of giving final and irreversible powers of choice to the delegate, a person or institution might turn the delegate into a mere consultant or advice-giver. A wide range of intermediate relationships is possible. In the governmental setting, a legislature can influence the ultimate decision by voicing its concerns publicly if an administrative agency is heading in the wrong direction, and the legislature has the power to overturn an administrative agency if it can muster the will to do so. Ultimately the delegator may retain the power to eliminate the delegation, and to ensure against (what the delegator would consider to be) mistakes; it may be sufficient for the delegate to know this fact. In informal relations, involving friends, colleagues, and family members, there are various mechanisms for controlling any delegate. Some "delegates" know that they are only consultants; others know that they have the effective power of decision. All this happens through a range of cues, which may be subtle.

The third complication stems from the fact that at the outset, the burdens of a second-order decision of this kind may not be so low after all, since the person or institution must take the time to decide whether to delegate at all and if so, to whom to delegate. Complex issues may arise about the composition of any institution receiving the delegation; these burdens may be quite high and perhaps decisive against delegation altogether. A multimember institution often divides sharply on whether to delegate and even after that decision is made, it may have trouble deciding on the recipient of the delegated authority.

D. Intrapersonal Delegations and Delegation to Chance

Thus far we have been discussing cases in which the delegator exports the burdens of decision to some other party. What about the intrapersonal case? On the one hand, there is no precise analogy between that problem and the cases under discussion. On the other hand, people confronted with hard choices can often be understood to have chosen to delegate the power of choice to their future selves. Consider, for example, such decisions as whether to buy a house, to have another child, to get married or divorced, to move to a new city; in such cases agents who procrastinate may understand themselves to have delegated the decision to their future selves.

There are two possible reasons for this kind of intrapersonal delegation, involving timing and content, respectively. You may believe you know what the right decision is, but also believe it is not the right time to be making that decision, or at least not the right time to announce it publicly. Alternatively, you may not know what the right decision is and believe that your future self will be in a better position to decide. You may think that your future self will have more information, suffer less or not at all from cognitive difficulties, bias, or motivational problems, or be in a better position to assume the relevant responsibility. Perhaps you are feeling under pressure, suffering from illness, or not sure of your judgment just yet. In such cases, the question of intrapersonal, intertemporal choice is not so far from the problem of delegation to others. It is even possible to see some overlapping principal-agent problems with similar mechanisms of control, as people impose certain constraints on their future selves. There are close parallels for judges and legislators, who care a great deal about both timing and content, and who may wait for one or another reason.

From the standpoint of the agent, then, the strategy of small steps, like delay, can be seen as a form of delegation. Also, the strategy of delegation itself may turn into that of picking when the delegate is a chance device. When I make my future decision depend on which card I draw from my deck of cards, I have delegated my decision to the random card-drawing mechanism, thereby effectively turning my decision from choosing to picking.

IV. HIGH-LOW (WITH SPECIAL REFERENCE TO RULES AND PRESUMPTIONS)

We have seen that people often make second-order decisions that are themselves costly, simply in order to reduce the burdens of later decisions in particular cases. This is the most conventional kind of precommitment strategy.[29] The most promising setting for rule-bound precommitment involves a large number of similar decisions and a need for advance planning (as opposed to improvisation). In such a setting, the occasional errors inevitably produced by rules are likely to be worth incurring. When this process is working well, there is much to do before the second-order decision has been made, but once the decision is in place, things are greatly simplified.[30]

A. Diverse Rules, Diverse Presumptions

We have suggested that rules and presumptions belong in the High-Low category, and frequently this is true. But the point must be qualified; some rules and presumptions do not involve high burdens of decision before the fact. For example, a rule might be picked rather than chosen —drive on the right-hand side of the road, or spoons to the right, forks to the left. Especially when what is important is to allow all actors to coordinate on a single course of conduct, there need be little investment in decisions about the content of the relevant rule. A rule might even be framed narrowly, so as to work as a kind of small step. A court might decide, for example, that a law excluding homosexuals from the armed services is unconstitutional, and this decision might be framed as a rule; but the court's opinion could be issued in such a way as to leave undecided most other issues involving the constitutional status of homosexuals. Rules often embody small steps. Of course the same points can be made about presumptions, which are sometimes picked rather than chosen and which might be quite narrow.

For present purposes we focus on situations in which an institution or an agent is willing to deliberate a good deal to generate a rule or a presumption that, once in place, turns out greatly to simplify (without impairing and perhaps even improving) future decisions. This is a familiar aspiration in law and politics. A legislature might, for example, decide in favor of a speed limit law, partly in order to ensure coordination among drivers, and partly as a result of a process of balancing various considerations about risks and benefits. People are especially willing to expend a great deal of effort to generate rules in two circumstances:

29. See, e.g., Elster, *Ulysses and the Sirens*; Schauer.

30. See, e.g., Elster; and Schelling, "Enforcing Rules on Oneself," who see that precommitment strategies are often appropriate, but who do not discuss the choice between rules and alternative candidates, or whether some other second-order strategy might be better.

(1) when planning and fair notice are important and (2) when a large number of decisions will be made.[31]

In most well-functioning legal systems, for example, it is clear what is and what is not a crime. People need to know when they may be subject to criminal punishment for what they do. In theory if not in practice, the American Constitution is taken to require a degree of clarity in the criminal law, and every would-be tyrant knows that rules may be irritating constraints on his authority. So too, the law of contract and property is mostly defined by clear rules, simply because people could not otherwise plan, and in order for economic development to be possible they need to be in a position to do so. When large numbers of decisions have to be made, there is a similar tendency to spend a great deal of time to clarify outcomes in advance. In the United States, the need to make a large number of decisions has pushed the legal system into the development of rules governing social security disability, workers' compensation, and criminal sentencing. The fact that these rules produce a significant degree of error is not decisive; the sheer cost of administering the relevant systems, with so massive a number of decisions, makes a certain number of errors tolerable.

Compared to rules, standards and "soft" presumptions serve to reduce the burdens of decision ex ante while increasing those burdens at the time of decision. This is both their virtue and their vice. Consider, for example, the familiar strategy of enacting rigid, rule-like environmental regulations while at the same time allowing a "waiver" for special circumstances. The virtue of this approach is that the rigid rules will likely produce serious mistakes—high costs, low environmental benefits—in some cases; the waiver provision allows correction in the form of an individualized assessment of whether the statutory presumption should be rebutted. The potential vice of this approach is that it requires a fair degree of complexity in a number of individual cases. Whether the complexity is worthwhile turns on a comparative inquiry with genuine rules. How much error would be produced by the likely candidates? How expensive is it to correct those errors by turning the rules into presumptions?

B. Of Institutions, Planning, and Trust

Often institutions are faced with the decision whether to adopt a High-Low strategy or instead to delegate. We have seen contexts in which delegation is better. But in three kinds of circumstances the High-Low approach is to be preferred. First, when planning is important, it is important to set out rules (or presumptions) in advance. The law of property is an example. Second, there is little reason to delegate when the agent or institution has a high degree of confidence that a rule (or pre-

31. See Kaplow.

sumption) can be generated at reasonable cost, that the rule (or presumption) will be accurate, and that it will actually be followed. Third, and most obviously, High-Low is better when no trustworthy delegate is available, or when it seems unfair to ask another person or institution to make the relevant decision. Liberal democracies take these considerations as special reasons to justify rules in the context of criminal law: the law defining crimes is reasonably rule-like, partly because of the importance of citizen knowledge about what counts as a crime, partly because of a judgment that police officers and courts cannot be trusted to define the content of the law. Generally legislatures tend in the direction of rule-like judgment when they have little confidence in the executive; in America, parts of the Clean Air Act are a prime example of a self-conscious choice of High-Low over delegation.

When would High-Low be favored over Low-Low (picking, small steps)? The interest in planning is highly relevant here and often pushes in the direction of substantial thinking in advance. If the agent or institution has faith in its ability to generate a good rule or presumption, it does not make much sense to proceed by random choice or incrementally. Hence legislatures have often displaced the common law approach of case-by-case judgment with clear rules set out in advance. In England and America, this has been a great movement of the twentieth century, largely because of the interest in planning and decreased faith in the courts' ability to generate good outcomes through small steps. Of course mixed strategies are possible. An institution may produce a rule to cover certain cases but delegate decision in other cases; or a delegate may be disciplined by presumptions and standards; or an area of law, or practical reason, may be covered by some combination of rule-bound judgment and small steps.

C. *Private Decisions: Ordinary People, Intrapersonal Collective Action Problems, and Recovering Addicts*

Thus far we have been stressing public decisions. In their individual capacity, people frequently adopt rules, presumptions, or self-conscious routines in order to guide decisions that they know might, in individual cases, be too costly to make or be made incorrectly because of their own motivational problems. Sarah might decide, for example, that she will turn down all invitations for out-of-town travel in the month of September, or John might adopt a presumption against going to any weddings or funerals unless they involve close family members, or Fred might make up his mind that at dinner parties, he will drink whatever the host is drinking. Rules, presumptions, and routines of this kind are an omnipresent feature of practical reason; sometimes they are chosen self-consciously and as an exercise of will, but more often they are, or become, so familiar and simple that they appear to the agent not to be choices at all. Problems arise when a person finds that he cannot stick

to his resolution, and thus High-Low may turn into High-High, and things may be as if the second-order decision had not been made at all.

Some especially important cases involve efforts to solve the kinds of intertemporal, intrapersonal problems that arise when isolated, small-step first-order decisions are individually rational but produce harm to the individual when taken in the aggregate. These cases might be described as involving "intrapersonal collective action problems."[32] Consider, for example, the decision to smoke a cigarette (right now), or to have chocolate cake for desert, or to have an alcoholic drink after dinner, or to gamble on weekends. Small steps, which are rational choices when taken individually and which produce net benefits when taken on their own, can lead to harm or even disaster when they accumulate. There is much room here for second-order decisions. As a self-control strategy, a person might adopt a rule: cigarettes only after dinner; no gambling, ever; chocolate cake only on holidays; alcohol only at parties when everyone else is drinking. But a presumption might work better—for example, a presumption against chocolate cake, with the possibility of rebuttal on special occasions, when celebration is in the air and the cake looks particularly good.

Well-known private agencies designed to help people with self-control problems (Alcoholics Anonymous, Gamblers Anonymous) have as their business the development of second-order strategies of this general kind. The most striking cases involve recovering addicts, but people who are not addicts, and who are not recovering from anything, often make similar second-order decisions. When self-control is particularly difficult to achieve, an agent may seek to delegate instead. Whether delegation (Low-High) is preferable to a rule or presumption (High-Low) will depend in turn on the various considerations discussed above.

V. LOW-LOW (WITH SPECIAL REFERENCE TO PICKING AND SMALL STEPS)

A. Equipoise, Responsibility, and Commitment

Why might an institution or agent pick rather than choose? When would small steps be best? At the individual level, it can be obvious that when you are in equipoise, you might as well pick; it simply is not worthwhile to go through the process of choosing, with its high cognitive or emotional costs. As we have seen, the result can be picking in both low-stakes (cereal choices) and high-stakes (employment opportunities) settings. Picking can even be said to operate as a kind of delegation, where the object of the delegation is "fate," and the agent loses the sense of responsibility that might accompany an all-things-considered judgment.

32. See Thomas Schelling, "Self-Command in Practice, in Policy, and in a Theory of Rational Choice," *American Economic Review* 74 (1984): 1–22.

Thus some people sort out hard questions by resorting to a chance device (like flipping a coin).

Small steps, unlike a random process, are a form of choosing. Students in high schools tend to date in this spirit, at least most of the time; often adults do too. Newspapers and magazines offer trial subscriptions; the same is true for book clubs. Often advertisers (or for that matter prospective romantic partners) know that people prefer small steps and they take advantage of that preference ("no commitments"). In the first years of university, students need not commit themselves to any particular course of study; they can take small steps in various directions, sampling as they choose. Typical cases for small steps thus involve a serious risk of unintended bad consequences because of a disproportion between the paucity or dearth of information and the magnitude of the decision; hence reversibility is especially important.

On the institutional side, consider lotteries for both jury and military service. The appeal of a lottery for jury service stems from the relatively low costs of operating the system and the belief that any alternative device for allocation would produce more mistakes, because it would depend on a socially contentious judgment about who should be serving on juries, with possibly destructive results for the jury system itself. The key point is that the jury is supposed to be a cross section of the community, and a random process seems to be the best way of serving that goal (as well as the fairest way of apportioning what many people regard as a social burden). In light of the purposes of the jury system, alternative allocation methods would be worse; consider stated willingness to serve, an individualized inquiry into grounds for excuse, or financial payments (either to serve or not to serve). For military service, related judgments are involved, in the form of a belief that any stated criteria for service might be morally suspect, and hence a belief that random outcomes produce less in the way of error.[33]

B. Change, Unintended Consequences, and Reversibility

Lotteries involve random processes; small steps do not. We have said that Anglo-American judges often proceed case by case, as a way of minimizing the burdens of decision and the consequences of error. In fact many legal cultures embed a kind of norm in favor of incremental movement. They do this partly because of the distinctive structure of adjudication and the limited information available to the judge: in any particular case, a judge will hear from the parties immediately affected but little from others whose interests might be at stake. Hence there is a second-order decision in favor of small steps.

33. On ethical and political issues associated with lotteries in general, see Elster, *Solomonic Judgments*, pp. 36–122.

Suppose, for example, that a court in a case involving a particular patient seeking a "right to die" finds that it has little information; if the court attempted to generate a rule that would cover all imaginable situations in which that right might be exercised, the case would take a very long time to decide. Perhaps the burdens of decision would be prohibitive. This might be so because of a sheer lack of information, or it might be because of the pressures imposed on a multimember court consisting of people who are unsure or in disagreement about a range of subjects. Such a court may have a great deal of difficulty in reaching closure on broad rules. Small steps are a natural result.

When judges proceed by small steps, they may do so precisely because they know that their rulings create precedents; they want to narrow the scope of future applications of their rulings given the various problems described above, most importantly the lack of sufficient information about future problems. A distinctive problem involves the possibility of too *much* information. A particular case may have a surplus of apparently relevant details, and perhaps future cases will lack one or more of the relevant features, and this will be the source of the concern with creating wide precedents. The existence of (inter alia) features X or Y in case A, missing in case B, makes it hazardous to generate a rule in case A that would govern case B. The narrow writing and reception of the Supreme Court's decision in the celebrated Amish case, allowing an exemption of Amish children from mandatory public schooling, is an example.

Small steps can also make special sense if circumstances are changing rapidly. Perhaps relevant facts and values will change in such a way as to make a rule quickly anachronistic even if it is well suited to present conditions. Thus it is possible that any decision involving the application of the first amendment to new communications technologies, including the Internet, should be narrow, because a broad decision, rendered at this time, would be so likely to go wrong. On this view, a small step is best because of the likelihood that a broad rule would be mistaken when applied to cases not before the court.

In an argument very much in this spirit, Joseph Raz has connected a kind of small step—the form usually produced by analogical reasoning—to the special problems created by one-shot interventions into complex systems.[34] In Raz's view, courts reason by analogy in order to prevent unintended side effects from large disruptions. Similarly supportive of the small-step strategy, the German psychologist Dietrich Dorner has done some illuminating computer experiments designed to see whether people can engage in successful social engineering.[35] Participants are asked to solve problems faced by the inhabitants of some region of the world. Through the magic of the computer, many policy initiatives are

34. Joseph Raz, *The Authority of Law,* pp. 201–6.

35. See Dietrich Dorner, *The Logic of Failure* (New York: Free Press, 1994).

available to solve the relevant problems (improved care of cattle, childhood immunization, drilling more wells). But most of the participants produce eventual calamities, because they do not see the complex, systemwide effects of particular interventions. Only the rare participant is able to see a number of steps down the road—to understand the multiple effects of one-shot interventions on the system. The successful participants are alert to this risk and take small, reversible steps, allowing planning to occur over time. Hence Dorner, along with others focusing on the problems created by interventions into systems,[36] argues in favor of small steps. Judges face similar problems, and incremental decisions are a good way of responding to the particular problem of bounded rationality created by ignorance of possible adverse effects.

From these points we can see that small steps may be better than rules or delegation. Often an institution lacks the information to generate a clear path for the future; often no appropriate delegate has that information. If circumstances are changing rapidly, any rule or presumption might be confounded by subsequent developments. What is especially important is that movement in any particular direction should be reversible if problems arise. On the other hand, a small steps approach embodies a kind of big (if temporary) decision in favor of the status quo; a court that tries to handle a problem of discrimination incrementally may allow unjust practices to continue, and so too with a state that is trying to alleviate the problem of joblessness in poor areas. A small steps approach might also undermine planning and fail to provide advance notice of the content of law or policy. Thus it cannot be said that a small steps approach is, in the abstract, a rational approach to bounded rationality;[37] whether it is a (fully optimal) response to bounded rationality, or a (suboptimal) reflection of bounded rationality, depends on the context.

The analysis is similar outside of the governmental setting. Agents might take small steps because they lack the information that would enable them to generate a rule or presumption, or because the decision they face is unique and not likely to be repeated, so that there is no reason for a rule or a presumption. Or small steps may follow from the likelihood of change over time, from the fact that a large decision might

36. See James Scott, *Seeing Like a State* (New Haven, Conn.: Yale University Press, 1998).

37. In one form or other, small steps are favored in Scott; Levi, pp. 3–15; Alexander Bickel, *The Least Dangerous Branch* (New Haven, Conn.: Yale University Press, 1962). These discussions fail, however, to notice that there are circumstances in which a form of High-Low is preferable, as where advanced planning is necessary; consider the areas of property and contract law, where a high degree of certainty is extremely important. Thus those who favor Low-Low tend to share the problem with those who favor High-Low, see Scalia; they appear not to see that the virtues and vices of any particular second-order strategy depend on context and on the competence of relevant institutions and cannot rest on a priori arguments.

have unintended consequences, or from the wish to avoid or at least to defer the responsibility for large-scale change.

VI. SUMMARY AND CONCLUSIONS

A. Second-Order Strategies

The discussion is summarized in figure 2. Recall that the terms 'low' and 'high' refer to the overall costs of the decision, which are not necessarily borne by the same agent: with Low-High the costs are split between delegator and delegate; with High-Low they may be split between an institution (which makes the rules, say) and an agent (who follows the rules).

There are two principal conclusions. The first is that no second-order strategy can reasonably be preferred in the abstract. The second is that it is possible to identify the settings in which one or another is likely to make sense, and also the factors that argue in favor of, or against, any particular approach.

B. Do People Actually Make Second-Order Decisions? Should They?

There remains an important underlying issue: do people, or institutions, actually make a self-conscious decision about which second-order strategy to favor, given the menu of possibilities? Sometimes this is indeed the case. A legislature may, for example, deliberate and decide to delegate rather than to generate rules; a court may choose, self-consciously, to proceed incrementally; having rejected the alternatives, a President may recommend a lottery system rather than other alternatives for admitting certain aliens to the country. An institution or a person may well make an all-things-considered decision in favor of one or another second-order strategy.

Usually, however, a rapid assessment of the situation takes place, rather than a full or deliberative weighing of alternative courses of action. This is often the case in private decisions, where judgments often seem immediate. Indeed, second-order decisions might be too costly if they were a product of an optimizing strategy; so taken, they would present many of the problems of first-order decisions. As in the case of first-order decisions, it sometimes makes sense to proceed with what seems best, rather than to maximize in any systematic fashion, simply because the former way of proceeding is easier (and thus may maximize once we consider decision costs of various kinds). For both individuals and institutions, the salient features of the context usually suggest a particular kind of second-order strategy; there is no reason to think long and hard about the second-order decision.

But of course people's second-order decisions may go wrong. When rational actors make second-order decisions to overcome their bounded rationality as it may affect their first-order decisions, these decisions may

Strategies	Examples	Potential Advantages	Potential Disadvantages	Appropriate Context
1. low-high: delegation	spouses, friends; administrative agencies	relief from direct responsibility for ultimate decisions; increased chance for good outcomes	problems relating to trust, fairness, and responsibility; possible high costs in deciding whether and to whom to delegate	availability of appropriate and trustworthy delegate; high burdens of, or perceived likelihood of error in, decision by delegator
2. low-low: picking, small steps, various heuristics	Anglo-American common law; lotteries; big personal decisions	low overall costs; reversibility; coping with change and with unintended consequences	difficulty of planning; high aggregate decision costs; multiple mistakes	equipoise/symmetry of preferences or values; aversion to drastic changes; fear of unanticipated consequences
3. high-low: rules, presumptions, routines	speed limit laws; legal formalism; criminal law; recovering addicts; rigid people	low costs of numerous decisions once in place; uniformity; facilitates planning	difficulty of generating good rules or presumptions; mistakes once in place	sheer number of anticipated decisions/decisionmakers; repetitive nature of future decisions; need for planning, confidence in ability to generate ex ante decisions
4. high-high	Hamlet; Henry James characters; dysfunctional governments	none (unless decision costs are actually pleasant to incur and decisions end up being good)	paralysis; unpopularity; individual or institutional collapse	agency or institution cannot do otherwise

FIG. 2.—Second-order strategies

themselves be made badly, as a result of the same informational or motivational problems that beset people's first-order decisions.

A lack of information may press people and institutions in the direction of suboptimal second-order strategies. An inadequately informed court, for example, may choose small steps even though rules would be better. The reverse may occur too, when an incremental approach would be better than pathologically rigid rules, which can be a serious problem for societies as well as individuals. Motivational problems, such as impulsiveness or myopia, may also lead an agent or institution to bad second-order decisions, for example, when they make them fail to see the extent to which rules will be confounded by subsequent developments. Or, again, unrealistically optimistic agents or institutions may overestimate their capacity to make optimal small steps.

But second-order decisions may go wrong for another important reason as well. Individual agents or institutions may make a bad second-order decision when they are unaware of the alternative second-order decisions available to them. For example, legal formalists, most prominently Justice Antonin Scalia, argue for a High-Low strategy, but often they do so on an a priori basis, without engaging the pragmatic and empirical issues at stake, and without showing that this strategy is preferable to the realistic alternatives.[38] The same can be said about those who argue that rules can promote consequentialism indirectly[39] or favor small steps.[40] There are various ways of handling decisional burdens, and others may be better. At the political and legal level, and occasionally at the individual level too, it is important to be more explicit and self-conscious about the diverse possibilities, so as to ensure that people and institutions do not find themselves making bad second-order decisions.

C. Conclusion

Ordinary people and official institutions are often reluctant to make on-the-spot decisions; they respond with one or another second-order strategy. The diverse candidates raise separable ethical and political problems. Some such strategies involve high initial burdens but generate a relatively simple, low-burden mechanism for deciding subsequent cases. These strategies, generally taking the form of rules or presumptions, are best when the anticipated decisions are numerous and repetitive and

38. See Scalia, pp. 5–24. Schauer sees that the choice of formalism must be largely based on empirical considerations, but he does not identify alternative second-order possibilities or show how they might be compared to rule-bound law.

39. See Johnson. Nothing said here shows that Johnson is wrong; it shows only that a full defense of using rules as a way of promoting consequentialist goals would have to grapple with various second-order alternatives (such as presumptions or standards).

40. See Levi, pp. 3–7; Lindblom, "The Science of Muddling Through" and "Still Muddling, Not Yet Through."

when advance notice and planning are important. Other strategies involve both light initial burdens and light burdens at the time of making the ultimate decision.[41] These approaches work well when a degree of randomization is appealing on normative grounds (perhaps because choices are otherwise in equipoise, or because no one should or will take responsibility for deliberate decision), or when a first-order decision is simply too difficult to make (because of the cognitive or emotional burdens involved in the choice) or includes too many imponderables and a risk of large unintended consequences. A key point in favor of small steps involves reversibility.

Still other strategies involve low initial burdens but high, exported burdens at the time of decision, as when a delegation is made to another person or institution, or (in a metaphor) to one's future self. Delegations take many different forms, with more or less control retained by the person or institution making the delegation. Strategies of delegation make sense when a delegate is available who has relevant expertise (perhaps because he is a specialist) or is otherwise trustworthy (perhaps because he does not suffer from bias or some other motivational problem), or when there are special political, strategic, or other advantages to placing the responsibility for decision on some other person or institution. Delegations can raise serious ethical or political issues and create problems of unfairness, as when delegates are burdened with tasks that they do not voluntarily assume, or would not assume under just conditions, and when the delegation is inconsistent with the social role of the delegator, such as a legislature or a court. Hence delegations can be troubling from the point of view of democracy or the separation of powers.

The final set of cases involve high burdens both before and at the time of decision, as in certain fictional characters, and in highly dysfunctional governments. We have merely gestured in the direction of this strategy, which may make sense under extreme circumstances of superimportant decisions, but which generally can be considered best only on the assumption that bearing high overall burdens of decision is an affirmative good (perhaps for moral reasons) or even something to relish. This assumption might appear peculiar, but it undoubtedly helps explain some otherwise puzzling human behavior—behavior that often provides the motivation to consider the other, more promising second-order decisions discussed here.

41. See Itzhak Gilboa and David Schmeidler, "Case-Based Decision Theory," *Quarterly Journal of Economics* 110 (1995): 605–34; Daniel Kahneman and Don Lovallo, "Timid Choices and Bold Forecasts: A Cognitive Perspective on Risk Taking," *Management Science* 39 (1993): 17–35.