Practical wisdom and organizations

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Abstract

When institutions are not working as they should, their leaders and policy makers typically reach for two tools with which to improve them—detailed rules and "smart" incentives. This paper argues that neither rules, no matter how detailed, nor incentives, no matter how smart, can do the job in any situation that involves human interaction. What *is* needed is character, and most especially the character trait that Aristotle called practical wisdom. People with practical wisdom have the moral will to do the right thing and the moral skill to figure out what the right thing is in any particular situation. The paper further argues that although they may be well intentioned, rules and incentives actually erode wisdom. Excessive reliance on rules deprives people of the opportunity to develop moral skill, and excessive reliance on incentives undermines moral will. Rules and incentives *demoralize* activities and the people who engage in them. Finally, the downward spiral of diminished practical wisdom created by increasing reliance on rules and incentives is taken as an example of "ideology"—a false conception of human nature that comes increasingly to look true as institutional conditions force people to behave in ways that confirm it.

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1. Introduction

The United States is broken. Americans are growing increasingly disenchanted with the institutions on which they depend. People can't trust them. They fail to give people what they need. This is true of schools that are not serving America's kids as well as they should. It is true of doctors who seem too busy to give patients the attention and unhurried care they crave. It's true of banks that mismanage assets and give shady mortgages, of financial advisors who seek commissions rather than investment returns, and of bond-rating agencies that fail to provide an accurate assessment of the risk of possible investments. It's true of a legal system that seems more interested in expedience than in justice. It's true of a workplace in which people fulfill quotas and hit targets and manage systems but wind up feeling disconnected from the animating forces that drew them to their careers in the first place.

If it were only patients, clients, and students who were dissatisfied, it would be easy to affix the blame on the doctors, lawyers, and teachers for not caring or for lacking the expertise to do better. But the disenchantment people experience as recipients of services is often matched by the dissatisfaction of those who provide them. Most doctors want to practice medicine as it should be practiced. But they feel helpless faced with the challenge of balancing the needs and desires of patients with the practical demands of hassling with insurance companies, earning enough to pay malpractice premiums, and squeezing patients into seven-minute visits—all while keeping up with the latest developments in their fields. Most teachers want to teach kids the basics and at the same time excite them with the prospects of educating themselves. But teachers feel helpless faced with the challenge of reconciling these goals with mandates to meet targets on standardized tests, to adopt specific teaching techniques, and to keep up with the ever-increasing paperwork. No one is satisfied—not the professionals and not their clients.

So how do we make things better? Characteristically, when we try to improve how institutions function, we reach for one of two tools. The first tool is a set of rules and administrative oversight mechanisms that tell people what to do and monitor their performance to make sure they are doing it. The second is a set of incentives that encourage good performance by rewarding people for it. The assumption behind carefully constructed rules and procedures, with close oversight, is that even if people *do* want to do the right thing, they need to be told what that is. And the assumption underlying incentives is that people will not be motivated to do the right thing unless they have an incentive to do so. Rules and incentives. What else is there?

There is no doubt that better rules and smarter incentives have an important role to play in improving the way our institutions perform. If you're trying to improve the quality of medical care while simultaneously reducing its costs, it's crazy to reward doctors for doing *more* procedures. And if you want to prevent banks from taking foolish risks with other people's money, it's crazy to let them speculate in whatever way they want, using enormous leverage, confident in the knowledge that if disaster strikes, the government will bail them out.

But rules and incentives are not enough. They leave out something essential. This paper is about what that "something" is. It is what classical philosopher Aristotle (1962) called *practical wisdom* (his word was *phronesis*). Without this missing ingredient, neither rules (no matter how detailed and well monitored) nor incentives (no matter how clever) will be enough to solve the problems we face.[1]

Aristotle thought that our most routine social practices demanded choices—like when to be loyal to a friend, or how to be fair, or how to confront danger, or when and how to be angry—and that making the right choices demanded virtue (we might nowadays say "character") in general, and wisdom in particular. To take the example of anger, the central question for Aristotle was not whether anger was good or bad. It was the particular and concrete question of what to do in a *particular* circumstance: who to be angry at, for how long, in what way, and for what purpose. The wisdom to answer such questions and to act rightly was distinctly practical, not theoretical. It depended on our ability to *perceive* the situation, to have the appropriate *feelings* or desires about it, to *deliberate* about what was appropriate in these circumstances, and to *act*. Ethics, said Aristotle, was not mainly about establishing general moral rules and following them. It was about performing a particular social practice well, which meant wanting to do the right thing and figuring out the right way to do the right thing in a particular circumstance, with a particular person, at a particular time (see Nussbaum, 1995). It was a combination of moral will and moral skill. The subject of Aristotle's *Nicomachean Ethics* was what people needed to learn in order to succeed at their social practices and to flourish as human beings.

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[1] The discussion of practical wisdom in this paper is a much adapted and much abbreviated version of the arguments in Schwartz and Sharpe (2010).

People needed to develop certain virtues or excellences—like loyalty, self-control, courage, fairness, generosity, gentleness, friendliness, and truthfulness. But the master excellence—the virtue at the heart of his *Ethics*—was practical wisdom. None of these other virtues could be exercised well without it. Excellence, Aristotle famously thought, lay in finding the ''mean'' between extremes. Courage, for example, was the mean between cowardice and recklessness. And finding the mean, which was not the average, but the right amount, required practical wisdom (see Grant & Schwartz, 2011, for a general discussion of the importance of the Aristotelian ''mean'').

Why ''wisdom'' rather than a good set of rules to follow? Consider the doctor. How should a doctor balance respect for the autonomy of her patients when it comes to making decisions with the knowledge that sometimes the patient is not the best judge of what is needed? How should the doctor balance empathetic involvement with each patient with the detachment needed to make sound judgments? How should the doctor balance the desire to spend enough time with each patient to be thorough, compassionate, and understanding with the need to see enough patients in a day to keep the office solvent? How should the doctor balance the desire to tell patients the truth, no matter how difficult, with the desire to be kind?

Doctors—and teachers attempting to teach and *inspire*, or lawyers attempting to provide proper counsel *and* vigorous advocacy—are not puzzling over a choice between the ''right'' thing and the ''wrong'' thing. A good doctor needs to be honest with her patients, *and* kind to her patients, *and* to give them the hope they need to endure difficult treatments. But in diagnosing or treating a patient, these aims can be at odds, and the doctor must decide whether to be honest or kind, or more likely how to balance honesty and kindness in a way that is appropriate for the patient in front of her. Aristotle recognized that balancing acts like these beg for wisdom, and that abstract or ethereal wisdom would not do (see Wallace, 1988, for a discussion of the importance of practical wisdom to balancing conflicts between legitimate aims).

Acting wisely also demands that we are guided by the proper aims or goals of a particular activity. Aristotle's word for the purpose or aim of a practice was *telos*. The *telos* of teaching is to educate students; the *telos* of doctoring is to promote health and relieve suffering. Every profession—from banking to social work—has a *telos*, and those who excel are those who are able to locate and pursue it (see MacIntyre, 1981, for a modern update on Aristotle's teleological view of the social world). So a good practitioner is motivated to aim at the *telos* of her practice.

But aiming at the right thing is not sufficient. Translating aims into action demands expertise. Answering the question ''What should I do?'' almost always depends on the particulars of the situation. Friends, doctors, parents, and teachers all need to perceive what others are thinking and feeling. They need to imagine the consequences of what they do. They need to figure out what's possible and not just what's ideal. Practical wisdom is akin to the kind of skill that a jazz musician needs in order to improvise, except that practical wisdom is not an artistic skill. It is a moral skill—a skill that enables people to discern how to treat others in their everyday social activities.

So practical wisdom combines will with skill. Skill without will—without the desire to achieve the proper aims of an activity—can lead to ruthless manipulation of others, to serve one's own interests, not theirs (see Kilduff, Chiaburu, & Menges, 2010 for a review of the dark, manipulative side of the use of social and emotional intelligence in organizations). And will without skill can lead to ineffectual fumbling around—the sort of thing we see in people who ''mean well'' but leave situations in worse shape than they found them.

How, then, are we to learn to be practically wise? For Aristotle, skills are learned through experience, and so is the commitment to the aims of a practice. That's why we associate wisdom with experience. But not just any experience will do. Some experiences nurture and teach practical wisdom; others erode it. And it is here that Aristotle focuses our attention on something critically important: character and practical wisdom must be cultivated by the major institutions in which we practice.

Aristotle would have had a hard time imagining the complexity and breadth of our contemporary institutions, but he would have immediately pointed to a central problem that informs this paper. The rules and incentives that modern institutions rely on in pursuit of efficiency, accountability, profit, and good performance can't substitute for practical wisdom. Nor will they encourage it or nurture it. In fact, they often undermine it.

Working for incentives is not the same as working to achieve the *telos* of an activity. If we simply fix the problem of incentivizing doctors for doing too much (rewarding them with a fee for any service) by paying doctors bonuses for doing less, they may end up doing too little. Worse, they may learn to make their decisions because of the incentives. We want doctors with the will and skill to do the right amount, and do it *because it's the right amount*. This goal can be achieved only if doctors embrace the proper aims of medicine and know how to pursue them. Incentives, even smart ones, will do little to help us reach this goal. Often, we'll see, they may move the goal farther away. We do need rules to

guide and govern the behavior of people who are not wise: one reason we suffered the recent financial crisis was because weak and loosely enforced rules and regulations allowed shrewd money-making schemes to run amok. But tighter rules and regulations, however necessary, are pale substitutes for wisdom. Aristotle might say that we need rules to protect us from disaster. But at the same time, rules alone guarantee mediocrity.

This paper is about the importance of creating institutions that nurture wisdom. It is about how reliance on rules and incentives may ameliorate problems in the short run but exacerbate them in the long run. And it is about how this dynamic, downward spiral is an example of what I have elsewhere (Schwartz, 1997) called ''ideology''—a process by which false claims about human nature come to look true as a result of institutional practices that are shaped by those very claims. Much of what is in this paper will be speculative. It will be a plausibility argument. I make it in the hope that it will encourage research into the kinds of institutional practices that nurture practical wisdom as well as the forces that threaten to undermine it (see Schwartz & Sharpe, 2010, for a much more detailed discussion of the points in this paper).

2. What wisdom is and why we need it

Luke works as a custodian in a major teaching hospital.[2] In an interview with psychologists interested in studying how people structure their work (Dutton, Debebe, & Wrzesniewski, 2002; Wrzesniewski & Dutton, 2001; Wrzesniewski, Dutton, & Debebe, 2003; Wrzesniewski, Dutton, & Debebe, 2009; see also Wrzesniewski, McCauley, Rozin, & Schwartz, 1997), Luke reported an incident in which he cleaned a comatose young patient's room—twice. He had already done it once, but the patient's father, who had been keeping a vigil for months, hadn't seen Luke do it and had snapped at him. So Luke did it again. Graciously. Why? Luke explained it like this (Dutton et al., 2002):

> *Luke*: I kind of knew the situation about his son. His son had been here for a long time and . . . from what I hear, his son had got into a fight and he was paralyzed. That's why he got there, and he was in a coma and he wasn't coming out of the coma . . . and I heard how he got that way. He had got into a fight with a Black guy and the Black guy really, well, you know, because he was here. Well . . . I went and cleaned his room. His father would stay here every day, all day, but he smoked cigarettes. So, he had went out to smoke a cigarette and after I cleaned the room, he came back up to the room. I ran into him in the hall, and he just freaked out . . . telling me I didn't do it. I didn't clean the room and all this stuff. And at first, I got on the defensive, and I was going to argue with him. But I don't know. Something caught me and I said, "I'm sorry. I'll go clean the room."

> *Interviewer*: And you cleaned it again?

> *Luke*: Yeah, I cleaned it so that he could see me clean it. . . I can understand how he could be. It was like six months that his son was here. He'd be a little frustrated, and so I cleaned it again. But I wasn't angry with him. I guess I could understand.

At first glance, the need for wisdom is not built into Luke's work as a custodian. Luke's job description says nothing about responsibility or care for patients. He has a long list of duties, but not a single item on it even mentions another human being. From his job description, Luke could be working in a shoe factory or a mortuary instead of a hospital.

But Luke is doing a different job. Dutton et al. (2002) asked the custodians to talk about their jobs, and the custodians began to tell them stories about what they did. Luke's stories told them that his ''official'' duties were only one part of his *real* job, and that another, central, part of his job was to make the patients and their families feel comfortable, to cheer them up when they were down, to encourage them and divert them from their pain, to give them a willing ear if they felt like talking. Luke aimed to do something different than mere custodial work. Luke was demonstrating a rich repertoire of what would nowadays be called ''organizational citizenship behavior'' or OCB (Morrison, 1994; O'Reilly & Chatman, 1986; Organ, 1990).

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[2] In the spirit of Aristotle's arguments about the ''priority of the particular'' (see Nussbaum, 1995), many of the points made in this paper are made by way of example—of case study—rather than by appeal to systematic empirical investigation. It is not that I think that systematic investigation of practical wisdom is impossible. Rather, I think that at least at the early stages of investigation of a concept as rich as practical wisdom, it is useful to provide a feeling for the relevant phenomena in all of their complexity. I think this is best achieved by case examples.

What Luke aimed at would have grabbed Aristotle's attention. The aims of the practice of medicine—promoting health, curing illness, relieving suffering—needs to be embodied in the institution where that practice takes place. Hospitals need to make promoting health their primary aim; it's the soul of the organization. The practitioners—the hospital staff—need to understand that aim and be encouraged to make it their aim too, as Luke did.

The striking thing about Luke and many of his coworkers was that they understood and internalized these aims in spite of their official job description, not because of it. The job they were actually doing was one they had crafted for themselves in light of the aims of medical care (Wrzesniewski & Dutton, 2001). Mike, another custodian, talked about how he stopped mopping the hallway floor because Mr. Jones, recovering from major surgery, was out of his bed getting a little much-needed exercise by walking slowly up and down the hall. Charlayne talked about how she ignored her supervisor's admonitions and refrained from vacuuming the visitors' lounge while some family members, who were there all day, every day, happened to be napping. These custodians crafted their jobs with the central purpose of the hospital in mind. They were not generic custodians; they were *hospital* custodians. They saw themselves as playing an important role in an institution whose aim was to see to the care and welfare of patients. Though the literature suggests that the way to promote such behavior is by expanding the work role (Morrison, 1994), their employers did no such thing. What they *did* do is avoid excessively close supervision and an increase in job demands, so that Luke and his colleagues had the time and the space to expand their jobs on their own.

Behavior like this by Luke and his colleagues, along with other levels of hospital personnel, does not simply make distressed people *feel* a little better. It is actually essential to effective patient care. The Patient Protection and Affordable Care Act enacted in 2010 made a significant move toward universal health insurance, but it offered little more than a hope of controlling costs. Controlling costs will require a change in the behavior of both doctors and patients. Is such a change possible? Creative programs, often in poor communities, have found ways to cut health care costs by improving, not cutting services. Gawande (2011) surveyed some of the programs that have targeted the highest users of medical services—the chronically ill—and have lowered costs while simultaneously improving health. The key in each case was finding ways to change patient behavior.

Consider Dr. Jeffery Brenner's clinic in Camden, New Jersey. One of Brenner's patients weighed 560 pounds, had a history of smoking and alcohol abuse, and suffered severe congestive heart failure, chronic asthma, uncontrolled diabetes, hypothyroidism, and gout. This patient spent as much time in the ER as out of it. Brenner's clinic could have handed this patient a sheet of instructions—instructions that every one of us could probably recite: take your medicines, lose weight, avoid fats and sugars, stop smoking, exercise. Instead of an instruction sheet, the clinic dealt with the hopelessness that had discouraged the patient from even trying to take care of himself.

A social worker, a nurse, and a medical assistant were all part of a treatment plan that helped the patient get disability insurance, find a stable home, start AA, return to church (he was a devout Christian), learn to cook his own food, start taking his medications, and quit smoking. His improvement was slow but noticeable and his use of the ER declined dramatically. In fact, Brenner's Camden clinic was able to reduce the $1.2 million monthly hospital bills on its 36 "highest-utilizers" by over 50%.

This kind of individualized treatment, to be effective, requires detailed knowledge of the particular patient and his life circumstances, and it requires empathy. It requires "practical wisdom." What is perhaps *the* critical component of Brenner's program and others that Gawande writes about is that their participants appreciate the importance of practical wisdom (though they don't call it that). They appreciate that one-size-fits-all medicine fits no one. In some cases, like doctor Rushika Fernandopulle's Special Care Center, in Atlantic City, a team of doctors, nurses, medical assistants and "health coaches" have learned how to tailor—and monitor—a manageable regimen of behavior and life change for each particular patient, and then encourage them to stick with it. For example, 57-year-old Vibha Gandhi has finally started to deal with her diabetes, obesity, and congestive heart failure, not simply because she had her third heart attack, and not just because her health insurance allowed her to see doctors, but because she has started to listen to Jayshree, her health coach.

And why does she listen? "Because she talks like my mother," said Vibha. Not just the same language (Gujarati), but the language of care. Her coach has the skill to understand Vibha and to get her to have the courage and hope to do things she was unable or unwilling to do in the past—the Yoga classes, the new diet, adjusting her medications, and carefully monitoring her diabetes. "High-utilizer work is about building relationships with people who are in crisis," explained Brenner. "The ones you build a relationship with, you can change behavior." The ways to reduce health-care costs, he found, are "high-touch."

And high-touch care is what is needed. The U.S., and most developed countries have largely solved the ''acute disease'' problem. We know how to save people when they have heart attacks. And infectious disease, through vaccination and drug development, is mostly under control. But our medical system is not so great at handling the chronic diseases that are a major source of our personal and national health care bills. Hypertension, diabetes, arthritis, chronic back pain, HIV, and cardiovascular disease can't be treated effectively unless the patient can break bad habits and develop, and stick to, better ones. When it comes to managing diseases like these, the patient must be a partner. Doctors may know exactly what to tell patients who have these chronic conditions, but they don't know how to get them to do what they're told.

The needed behavior change will not be accomplished by giving patients best-practice instruction sheets. The task for the doctor is to come up with instructions that are feasible for *this* particular patient and to inspire the patient to adhere to the items on the list. This in turn requires the development of a genuine relationship of trust and empathy between the doctors and their patients—a patient–doctor partnership—which in turn requires that doctors actually get to know their patients as complex people living complex lives rather than as organ systems or pathologies. The doctors need to become more like the coaches in Rushika Fernandopulle's clinic, who, despite their previous lack of medical training, have an ability to understand and relate to people, especially people who are suffering and are afraid. ''We recruit for attitude and train for skill,'' Fernandopulle says. Fernandopulle's Atlantic City clinic has reduced ER visits and hospital admissions by 40%, and surgical procedures by a quarter. Preliminary studies have shown a 25% drop in costs, and the patients are healthier.

Aristotle knew that figuring out what to do in situations like the one faced by Luke demanded more than just knowledge of ''the facts.'' It demanded more than knowledge of the job description. There was no general rule or principle to which Luke could turn to balance or choose among several good aims that were in conflict. To do this kind of balancing and choosing, Luke needed wisdom. He needed practical moral skill.

Aristotle emphasized two capacities that were particularly important for such practical moral skill—the ability to *deliberate* about such choices and the ability to *perceive* what was relevant in a particular circumstance.[3] Good deliberation and discernment were at the heart of practical wisdom. Luke's deliberation took place in circumstances in which we largely expect neither wisdom nor nuanced accountability. He figured out that the confrontation with the father was not one that should be framed in terms of honesty and integrity, nor as a defense of Luke's rights. Although Luke was tempted to react to the father's demands as an issue of injustice, he quickly saw that something else was at stake—helping to comfort and heal the sick and injured. So Luke framed the issue as one of how to care for and sustain the relationship of *this* father and *this* son at *this* particular trying moment in their lives. Justice and fairness could wait for another day.

And Luke's deliberation went further. He also had to figure out what courses of action were possible in this situation. Should he calmly explain to the father that he recognized the father's pain and understood? Should he offer to sit down and discuss the situation? Luke chose not make an issue of it, not to fuel the father's anger. He decided that the best and most practical way to handle the situation was to clean the room again and to let the father think he'd accomplished something for his son. Luke had the skill to respond generously and with good grace.

Figuring out what is appropriate in a particular interpersonal situation rests on perception and imagination. Luke had to perceive what the father was thinking and feeling. If Luke had been unable to discern this, he wouldn't have had a clue about what the problem was, what the options were, or what the consequences of his response to the father might be. And Luke had to imagine how arguing with the father would affect the man's feelings of anger and frustration, and his ability to remain hopeful and to maintain his vigil day after day. The ability to see how various options will play themselves out and the ability to evaluate them is critical to moral skill.

Not surprisingly, then, empathy—the capacity to imagine what someone else is thinking and feeling—is essential for the perception that practical wisdom demands. Such empathy involves both cognitive skill—the ability to perceive the situation as it is perceived by another—and emotional skill—the capacity to understand what another person is feeling. Luke had to put himself in the shoes of the father even though he knew the father was wrong. Emotion is

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[3] It may not be obvious that the examples of Luke and his fellow custodians, or of the people working with high-utilization patients at the inner-city clinics is ''moral.'' My view is that any activity that involves interaction with other human beings has a moral dimension, so my use of the word ''moral'' is perhaps unusually inclusive. In addition, if you accept that good practitioners pursue the proper aims—the proper *telos*—of a practice, then even activities that do not involve other human beings have a moral dimension (see MacIntyre, 1981).

critical to moral perception in another way. It is a signaling device (Pizarro, 2000). The emotion of the father signaled to Luke that something was wrong. Faced with that kind of anger, the signal was not subtle, but often it is. Reading the facial expressions, the body language, the tone of voice of another alerts us that something is wrong and that we need to make choices about how to respond. Our own feelings of anger, guilt, compassion, or shame signal us to reflect, to pay special attention to what is happening. This may sound obvious, but all too often the rules and incentives that govern our lives are all about removing emotion from our decision-making—are in fact teaching us not to trust the signal we're sending ourselves.

There is a long history of suspicion that emotion is the enemy of good reasoning and sound judgment, and rightly so. Emotions can often control us instead of the reverse. Emotions can prejudice us toward people we love, and against those we don't. Emotions can be unstable and therefore unreliable as guides. Emotions are sometimes *too* particular: we can feel so passionately about something that happened to us, or about this wronged patient or that ill-fed child, that our judgment is clouded about ''what is just'' or ''what is fair'' in general. And emotions almost got the better of Luke. For a moment, he felt angry at the injustice of the father's demand. But emotion also served Luke well. He felt compassion for the father: ''It was like six months that his son was here. He'd be a little frustrated, and so I cleaned it again. But I wasn't angry with him.'' So emotion was critical in guiding Luke to do the right thing. Luke's emotions were not random—unstable and uneducated. He was compassionate about the right things and angry about the right things. And he had the self-control—the emotion-regulating skills—to choose rightly. Emotions properly trained and modulated, Aristotle told his readers, are essential to being practically wise.

Thus, Luke helps us understand some of the key characteristics of practical wisdom. To summarize:

1. A wise person knows the proper aims of the activity she is engaged in. She wants to do the right thing to achieve these aims—wants to meet the needs of the people she is serving.
2. A wise person knows how to improvise, balancing conflicting aims and interpreting rules and guiding principles in light of the particularities of each context.
3. A wise person is perceptive, knows how to read a social context, and knows how to move beyond the black and white of rules and see the gray in a situation.
4. A wise person knows how to take on the perspective of another—to see the situation as the other person does and to understand how the other person feels. This perspective-taking is what enables a wise person to feel empathy for others and to make decisions that serve the client's (student's, patient's, friend's) needs.
5. A wise person knows how to make emotion an ally of reason, to rely on emotion to signal what a situation calls for, and to inform judgment without distorting it. He can feel, intuit, or ''just know'' what the right thing to do is, enabling him to act quickly when timing matters. His emotions and intuitions are well educated.
6. A wise person is an experienced person. Practical wisdom is a craft and craftsmen are trained by having the right experiences. People learn how to be brave, said Aristotle, by doing brave things. So, too, with honesty, justice, loyalty, caring, listening, and counseling.

Schwartz and Sharpe (2010, Chapters 4–6) suggest that although the development of practical wisdom makes significant cognitive and emotional demands on people, much modern research in psychology and cognitive science suggests that human beings are ''born to be wise.'' Though there is not space to rehearse the arguments here, the key points are these:

1. Rules are black and white, but the social world is gray. The nature of human conceptual structure admits degrees of gray. There are clear and ambiguous instances of concepts but so-called ''natural'' concepts have fuzzy boundaries.
2. Human judgments are exquisitely sensitive to context.
3. Human judgments typically integrate thinking and feeling—cognition and emotion. Indeed, in the absence of such integration, almost no goal-directed action is possible (Damasio, 1994, 1999).
4. Human beings have the capacity to develop empathic understanding of others.
5. Much of the ability to make sense of the world involves the ability to recognize patterns, and to appreciate both the respects in which a current situation is similar to past situations and the respects in which it is unique. Network models of the organization of cognition capture the system's ability to appreciate both similarity and difference. More important, they capture the critical importance of experience to the development of sophisticated cognitive networks. And not just any experience will do. To ''tune up'' wise networks requires varied experience—trial and

error—with feedback, and not the same experience over and over again. Thus, though people are ''born to be wise,'' they are certainly not born wise. Are they having the kind of experience that turns the potential for wisdom into reality?

3. War on wisdom: the destructive effects of rules and incentives

I have suggested, following Aristotle, that if we want people to do the right thing, we must pay attention to the cultivation of character in general, and practical wisdom in particular. Wisdom rides herd on other virtues, enabling people to resolve conflicts among virtues, to find the ''mean,'' and to tailor behavior to the demands of the specific situations they face. I also said that our characteristic response to dissatisfaction with the institutions on which we depend has ignored the importance of character, and focused instead on developing sound and detailed rules and procedures that tell people the right thing to do, and smart incentives that get people to want to do the right thing. Rules are substitutes for moral skill, and incentives are substitutes for moral will. In this section of the paper, I will suggest that not only are rules and incentives inadequate substitutes for practical wisdom, but they actually erode wisdom, by depriving people of the opportunity to develop moral skill, and the desire to sustain and deploy moral will.

3.1. Rules and moral skill

3.1.1. Wildland firefighters

How do wildland firefighters make decisions in life-threatening situations when, for instance, a fire explodes and threatens to engulf the crew? They are confronted with endless variables, the most intense, high-stakes atmosphere imaginable, and the need to make instant decisions. Weick (2001) found that traditionally, successful firefighters kept four simple survival guidelines in mind:

1. Build a backfire if you have time.
2. Get to the top of the ridge where the fuel is thinner, where there are stretches of rock and shale, and where winds usually fluctuate.
3. Turn into the fire and try to work through it by piecing together burned-out stretches.
4. Do not allow the fire to pick the spot where it hits you because it will hit you where it is burning fiercest and fastest.

But starting in the mid-1950s, this short list of survival rules was gradually replaced by much longer and more detailed ones. The current lists, which came to exceed forty-eight items, were designed to specify in ever-greater detail what to do to survive in each particular circumstance (e.g., fires at the urban–wildland interface).

Weick (2001) reports that teaching the firefighters these detailed lists was a factor in *decreasing* the survival rates. The original short list was a general guide. The firefighters could easily remember it, but they knew it needed to be interpreted, modified, and embellished based on circumstance. And they knew that experience would teach them how to do the modifying and embellishing. As a result, they were open to being taught by experience. The very shortness of the list gave the firefighters tacit permission—even encouragement—to improvise in the face of unexpected events. Weick found that the longer the checklists for the wildland firefighters became, the more improvisation was shut down. Rules are aids, allies, guides, and checks. But when general principles morph into detailed instructions, formulas, and unbending commands the important nuances of context are squeezed out. Weick concludes that it is better to minimize the number of rules, give up trying to cover every particular circumstance, and instead do more training to encourage skill at practical reasoning and intuition.

Weick likens the skills of an experienced firefighter to the improvisational skills of a good jazz musician. Good improvisation is not making something out of nothing, but making something out of previous experience, practice, and knowledge. So jazz improvisation, writes Weick, ''materializes around a simple melody, formula, or theme that provides the pretext for real-time composing. Some of that composing is built from pre-composed phrases that become meaningful retrospectively as embellishments of that melody. And some comes from elaboration of the embellishments themselves'' (p. 333).

The know-how that experienced firefighters develop as they improvise lacks the moral dimension that practical wisdom contains, but it illustrates how too many rules can interfere with the skill needed to cope with an ever-changing set of circumstances. The next examples involve know-how that *is* moral.

3.1.2. Justice by numbers

"Michael's case appeared routine," explained Judge Lois Forer (1992). When he was brought before the Criminal Division of Philadelphia's Court of Common Pleas, "he was a typical offender: young, Black, and male, a high-school dropout without a job. . . And the trial itself was, in the busy life of a judge, a run-of-the-mill event" (p. 12). The year before Michael had held up a taxi driver while brandishing a gun. He took $50. Michael was caught and tried. "There was no doubt that Michael was guilty," said Forer. She needed to mete out punishment. She turned to the state's sentencing guidelines. They recommended a minimum sentence of twenty-four months, but the sentence could be as much as five years because the crime had been committed in a "public conveyance." The law seemed to offer clear instruction, until Forer looked at the particular circumstances. The gun that Michael brandished, Forer explained, was a toy gun. Further, this was his first offense:

> Although he had dropped out of school to marry his pregnant girlfriend, Michael later obtained a high school equivalency diploma. He had been steadily employed, earning enough to send his daughter to parochial school—a considerable sacrifice for him and his wife. Shortly before the holdup, Michael had lost his job. Despondent because he could not support his family, he went out on a Saturday night, had more than a few drinks, and then robbed the taxi (p. 13).

Judge Forer thought that even the twenty-four-month sentence was disproportionate, and the sentencing guidelines allowed a judge to deviate from the prescribed sentence if she wrote an opinion explaining the reasons. "I decided to deviate from the guidelines," she explained, sentencing Michael to eleven and a half months in the county jail and permitting him to work outside the prison during the day to support his family:

> I also imposed a sentence of two years probation following his imprisonment conditioned upon repayment of the $50. My rationale for the lesser penalty, outlined in my lengthy opinion, was that this was a first offense, no one was harmed, Michael acted under the pressures of unemployment and need, and he seemed truly contrite. He had never committed a violent act and posed no danger to the public. A sentence of close to a year seemed adequate to convince Michael of the seriousness of his crime (p. 14).

Two years after Judge Lois Forer had sentenced Michael for the toy-gun hold up, Michael had fully complied with the sentence. He had paid restitution to the taxi driver. He had returned to his family and obtained steady employment. He had not been rearrested. But Forer's sentence had not sat well with the prosecutor. He appealed her decision, asking the Pennsylvania Supreme Court to require Forer to sentence Michael to a five-year sentence for a serious offense committed in or near a public transportation facility. Michael's full compliance with Judge Forer's judgment was not relevant to the court's decision. It ordered Judge Forer to resentence Michael to the five years. Forer said:

> I was faced with a legal and moral dilemma. As a judge I had sworn to uphold the law, and I could find no legal grounds for violating an order of the Supreme Court. Yet five years' imprisonment was grossly disproportionate to the offense. The usual grounds for imprisonment are retribution, deterrence, and rehabilitation. Michael had paid his retribution by a short term of imprisonment and by making restitution to the victims. He had been effectively deterred from committing future crimes. And by any measurable standard he had been rehabilitated. There was no social or criminological justification for sending him back to prison. Given the choice between defying a court order or my conscience, I decided to leave the bench where I had sat for sixteen years (p. 16).

That didn't help Michael, of course. He was resentenced by another judge to serve the balance of the five years: four years and fifteen days. Faced with this prospect, he disappeared. And Judge Forer resigned from the bench.

3.1.3. Wisdom in the line of fire

Lieutenant Colonel Chris Hughes had a tough mission in the religious center of Najaf on the morning of April 3, 2002. The Iraq war was in its early weeks, and he had been trying to get in touch with the most important Shiite cleric in Iraq, Grand Ayatollah Ali al-Sistani. The soldiers in his small unit were walking along a street when suddenly hundreds of Iraqis poured out of the surrounding buildings, waving fists, shrieking, and full of rage. They pressed in on the Americans who looked at one another with terror. Lieutenant Colonel Hughes, impassive behind surfer sunglasses, stepped forward, rifle high over his head, barrel pointing to the ground. "Take a knee," he ordered his men. They looked at him as if he was crazy. Then, one after another, they knelt before the angry crowd, pointing their guns at the ground. The Iraqis fell silent. Their anger subsided. Hughes ordered his men to withdraw.

Journalist Dan Baum (2005) called Hughes after seeing this incident live on CNN and asked him who had taught him to tame a crowd like that. Hughes said that no one had prepared him for an angry crowd in an Arab country, much less in Najaf. Officers learn certain techniques like using the rotor wash from a helicopter to drive away a crowd or firing warning shots. ''Problem with that is, the next thing you have to do is shoot them in the chest,'' said Hughes. The Iraqis already felt that the Americans were disrespecting their mosque. For Hughes, the obvious solution was a gesture of respect.

But what made this solution obvious? Hughes had to read the context—what this crowd was thinking, what they understood or more likely misunderstood, and he had to discern how he might get through to them. He had to imagine the consequences of any steps he took and make a decision in a complex and unpredictable situation with competing goals (protect his men, not harm civilians, make contact with Sistani). He had never trained for this situation. He had no rules to follow. Like the wildland firefighters, he had to improvise, and he had to do it quickly.

Even before the Iraq invasion, the U.S. Army had become concerned that many of its officers lacked the ability for this kind of improvisation. As reported by Baum (2005), in 2000, Army Chief of Staff General Eric Shinseki, wanted to figure out why, and what could be done about it. He sought help from retired Lieutenant Colonel Leonard Wong, a research professor of military strategy at the Army War College and a professional engineer.

In the army, wartime experience is considered the best possible teacher, at least for those who survive the first weeks. Wong (2002) found another good one—the practice junior officers get while training their units. The decisions these officers have to make as teachers help develop the capacity for the judgment they will need on the battlefield. But Wong discovered that in the 1980s, the army had begun to restructure training in ways that had the opposite results.

Traditionally, company commanders had the opportunity to plan, execute, and assess the training they gave their units. ''Innovation,'' Wong explained, ''develops when an officer is given a minimal number of parameters (e.g., task, condition, and standards) and the requisite time to plan and execute the training. Giving the commanders time to create their own training develops confidence in operating within the boundaries of a higher commander's intent without constant supervision'' (Wong, 2002, p. 18). The junior officers develop practical wisdom through their teaching of trainees, but only if their teaching allows them discretion and flexibility. Just as Weick (2001) found studying firefighters, experience applying a limited number of guidelines teaches soldiers how to improvise in dangerous situations.

Wong's research showed that the responsibility for training at the company level was being taken away from junior officers. First, the time they needed was being eaten away by cascading requirements placed on company commanders from above. There was such a rush by higher headquarters to incorporate every good idea into training that the total number of training days required by all mandatory training directives actually exceeded the number of training days available to company commanders. Company commanders somehow had to fit 297 days of mandatory requirements into 256 available training days.

Second, headquarters increasingly dictated *what* would be trained and *how* it would be trained, essentially requiring commanders to follow a script. Commanders lost the opportunity to analyze their units' weaknesses and plan the training accordingly. Worse, headquarters took away the assessment function from battalion commanders. Certifying units as ''ready'' was now done from the top.

The learning through trial and error that taught officers how to improvise, Wong found, happens when officers try to plan an action, then actually execute it and reflect on what worked and what didn't. Officers who did not have to adhere to strict training protocols were in an excellent position to learn because they could immediately see results, make adjustments, and assess how well their training regimes were working. And most important, it was this kind of experience that taught the commanders how to improvise, which helped them learn to be flexible, adaptive, and creative on the battlefield. Wong was concerned about changes in the training program because they squeezed out these learning experiences; they prevented officers from experiencing the wisdom-nurturing cycle of planning, executing, experiencing results, and reevaluating the original plan.

The top-down approach in the army's new training model did have benefits. The higher echelons, for example, could provide more information than any individual commander about the lessons being learned from worldwide deployments. Training was more uniform and standardized. It seemed to promise quality control. In fact, the assumption beneath this way of organizing training is one that has long underpinned much modern thinking about efficient industrial organization and management. It is assumed that an organization is most efficient if there is a division of labor between those who conceive and plan the work and those who actually execute the plans. There are

the specialists in "theory" and the specialists in "practice." Similarly there is a presumption that assessment is best left in the hands of the planning specialists. They have more information and objectivity.

But Wong found a distinct downside to this division of labor. Too many rules and requirements removed all discretion and stifled the development of flexible officers, resulting in reactive instead of proactive thought, compliance instead of creativity, and adherence instead of audacity. These are not the kinds of officers the army needs in unpredictable and quickly changing situations where specific orders are absent and military protocol is unclear. The army is creating cooks, says Wong, leaders who are "quite adept at carrying out a recipe," rather than chefs who can "look at the ingredients available to them and create a meal" (Wong, 2002, p. 47).

3.1.4. Classrooms as factory floors

The same thing can be said about public school teachers.

Donna Moffett teaches first grade at Public School 92 in Brooklyn (Goodenough, 2001). At forty-six, full of idealism and enthusiasm, she abandoned her $60,000-a-year job as a legal secretary to earn $37,000 teaching in one of New York's most troubled schools. When she began her "literacy block" at 11:58 one Wednesday, she opened the textbook to Section 1, "Pets Are Special Animals." Her mentor, veteran teacher Marie Buchanan, was sitting in. When Ms. Moffett got to a line about a boy mischievously drawing on a table, she playfully noted, "Just like some students in here." Mrs. Buchanan frowned. "You don't have to say that." When Ms. Moffett turned to a page that suggested an art project related to the story and started passing out paper, Ms. Buchanan chided: "You're not going to have time to complete that." After the lesson, Ms. Buchanan pulled her aside. "You have to prepare for these lessons and closely follow your teacher's guide. We're going to do this again tomorrow, and you're not going to wing it."

The teacher's manual Ms. Moffett was using (which includes an actual script and specifies the time to spend on each activity, from thirty seconds to forty minutes) was also being used in hundreds of schools nationwide and was required in New York's low-performing schools. The manual's fixed routines and careful instructions are sometimes helpful to novice teachers like Ms. Moffett; they can act as training wheels on a bicycle, helping them keep their balance when they first start teaching in the chaotic environment of an inner-city public school. Ms. Moffett admits that the step-by-step script and the instructions from Ms. Buchanan helped ease her transition into the classroom. But when Ms. Moffett applied to the teaching program in New York she wrote: "I want to manage a classroom where children experience the thrill of wonder, the joy of creativity and the rewards of working hard. My objective is to convey to children in their formative years the sheer pleasure in learning." Now, she rankles under the tight script she has to follow. She is facing the same problems Wong noticed among the military officers: she is not being given the kind of experience she needs to learn to improvise. And worse, many school systems make it difficult to take the training wheels off, no matter how much experience the teacher has.

The New York Board of Education required teachers in low-performing schools like P.S. 92 to follow a lockstep curriculum, and this is common in many school systems. In some systems, teachers' annual evaluations, and even pay, are based on their students' performance on standardized tests (the scripted curricula are written to prepare students to pass these tests). In other systems, the kind of micromonitoring of teacher behavior that Mrs. Buchanan was doing as a temporary mentor is permanently built into the system. When Texas, for example, began experimenting with mechanisms to hold teachers accountable in the 1980s, teachers were scored to determine their place on the "Career Ladder," and their pay increments. School administrators were sent in to observe teachers, armed with a generic checklist applicable to all subjects, all grade levels, all children, and all teachers. An hour's teaching was broken down into forty-five observable, measurable behaviors. Teachers earned points for required behaviors such as maintaining eye contact with the students, and having the objective for the day written on the board for all to see. To ensure that all teachers knew a variety of "positive verbal responses," the teachers were supplied with a list of one hundred approved "praise words" (McNeil, 2000). Some teachers kept lists of praise words on the desk and tried to slip them in as often as they could. When a similar system was tried in Florida (Florida Performance Measurement System, or FPMS), the 1986 Teacher of the Year failed to earn a bonus because the principal observing his laboratory lesson found a deficiency of required behaviors. Teachers in Florida were downgraded for asking questions that "call for personal opinion or that are answered from personal experience," although students often learn best exactly when they can make these connections. Teachers were also marked down for answering a question with a question (Darling-Hammond, 1997).

Current educational reforms aimed at improving performance through standardization are rooted in early-twentieth-century attempts to impose "scientific" organization on factory workers, using techniques developed by

Taylor (1911/1967), the father of what came to be known as ''scientific management.'' In the early 1900s, Taylor encouraged American managers to improve efficiency by carefully breaking down the movements of workers on the shop floor, timing and analyzing each one to the hundredth of a second, and then using these ''time-and-motion'' studies to reorganize the workplace to get the same results in less time. Planning and assessment would be in the hands of management. Assembly lines would run more quickly, efficiently, and profitably. When these efficiency experts went into the schools in the early 1900s, they used stopwatches to figure out the number of arithmetic problems students should be able to do and at what speed, the facts they should be able to recall, and the words they should know how to spell. Standardized scripted curricula tied directly to high-stakes tests are today's version of such scientific management. ''High stakes'' means schools and teachers are rewarded (more money) or punished (funds denied, schools closed, staff dismissed or reassigned) based on student test performance. Most states have such systems and the No Child Left Behind Act of 2001 required all states to administer standardized reading and math tests in third and eighth grade. School systems risk losing federal funding if students consistently fail to meet the standards. Standardized tests gave birth to standardized, scripted curricula. If schools and teachers would be rated, funded, or paid based on student test performance, it made sense to mandate that teachers use materials explicitly designed so that students could pass the tests.

Supporters of lockstep curricula and high-stakes standardized tests were not out to undermine the wisdom, creativity, and energy of good teachers. Nor were the promulgators of detailed rules and checklists out to undermine the safety of firefighters or the leadership ability of military field commanders. Quite the opposite was true. The rules were meant to make things better. The scripted curricula and tests were aimed at improving the performance of weak teachers in failing schools. If lesson plans were tied to tests, teachers' scripts would tell them what to do to get the students ready. If students still failed, the teachers could be ''held accountable.'' Equality would seemingly be achieved (no child left behind) by using the same script, thus giving the same education, to all students. But this also meant that all teachers, novice or expert, weak or strong, would be required to follow the standardized system.

Teachers on the front lines often point to the considerations left out of the teach-to-test paradigm. Tests are only one indicator of student learning, and poor performance on tests has other causes aside from poor teaching—poorly funded urban schools, students from poor or immigrant backgrounds with few resources at home and sometimes little or no English, overcrowded classrooms with not enough teachers, poor facilities, lack of books and equipment, students with learning problems or other disabilities. But one of the chief criticisms many teachers make is that the system is dumbing down their teaching. It is de-skilling them. It reflects a lack of trust in their judgment (see e.g., Strickland, 1958, for a classic argument along these lines), which in turn demoralizes them. The system is not allowing them—or teaching them—the judgment they need to do good teaching. Sooner or later, ''turning out'' kids who can turn out the right answers the way you turn out screws, or hubcaps, comes to seem like normal practice. Worse, it comes to seem like ''best practice.'' There is evidence for this type of effect in the business world as well, where studies show that close monitoring coupled with sanctions for deficient performance can undermine both the quality of work and the productivity of workers (Pfeffer, 1994, 1998; Tenbrunsel & Messick, 1999).

3.2. Incentives and moral will

If detailed rules and close oversight are not the way to get the kind of excellent performance that we want and need, then what about the second tool in our toolkit—smart incentives? Of course, we all know that it is possible to implement dumb incentives—incentives that get teachers to teach to the test, or even cheat, incentives that induce finance companies to offer ''no-document, liar'' loans, incentives that have CEOs chasing quarterly profits at the expense of the long-term interests of the company. But the problem, in each of these cases, it is often argued, is that incentives are badly designed. There is nothing wrong with incentives per se. Indeed, how else are we to motivate employees. In this section, I will suggest that although some incentive schemes are worse than others, no incentive scheme is ''smart'' enough to get us what we want.

3.2.1. On the bubble

Ms. Dewey teaches third grade at Beck Elementary School in Texas. Many of the students are economically disadvantaged and most are Hispanic—longtime residents of Texas as well as first-, second-, and third-generation immigrants (Booher-Jennings, 2005, 2007). The principal wants to get the test scores up. So do the teachers. Scores on these high-stakes tests are the metric of evaluation under the Texas Accountability System. Since 1992, Beck

Elementary has been doing okay, but only okay. The state rates it ''acceptable,'' but the administration and most of the teachers are anxious to achieve the more prestigious ''recognized'' status, which requires that more than 80 percent of the students pass the state tests. The system is, in the words of administrators, ''data driven,'' and there is only one kind of data that ensures officially sanctioned success—scores on a standardized test. All third-grade students must pass the reading test to move on to fourth grade. The teachers regularly administer ''practice'' tests throughout the year.

Ms. Dewey, a twenty-year-veteran, listens as a consultant hired by the district explains how to use the data from practice tests:

> Using the data, you can identify and focus on the kids who are close to passing. The bubble kids. And focus on the kids that count—the ones that show up after October won't count toward the school's test scores this year. Because you don't have enough special education students to disaggregate scores for that group, don't worry about them either (Booher-Jennings, 2005, p. 241).

To make this concept tangible for teachers, the consultant passes out markers in three colors: green, yellow, and red:

> Take out your classes' latest benchmark scores, and divide your students into three groups. Color the ''safe cases,'' or kids who will definitely pass, green. Now, here's the most important part: identify the kids who are ''suitable cases for treatment.'' Those are the ones who can pass with a little extra help. Color them yellow. Then, color the kids who have no chance of passing this year and the kids that don't count—the ''hopeless cases''— red. You should focus your attention on the yellow kids, the bubble kids. They'll give you the biggest return on your investment (Booher-Jennings, 2005, p. 245).

Focus on the bubble kids. Tutor only these students. Pay more attention to them in class. This is what most of Ms. Dewey's colleagues have been doing, and test scores have gone up. The community is proud, and the principal has been anointed one of the most promising educational leaders in the state. At every faculty meeting, the principal presents a ''league table,'' ranking teachers by the percentage of their students passing the latest benchmark test. And the table makes perfect fodder for faculty room gossip.

Ms. Dewey has made compromises, both large and small, throughout her career. Every educator who's in it for the long haul must. But this institutionalized policy of educational triage weighs heavily. In her angrier moments, Ms. Dewey pledges to ignore this test-centered approach and to teach as she always has, the best way she knows how. Yet, if she does, Ms. Dewey risks being denounced as a traitor to the school's effort to increase scores.

3.2.2. Incomplete contracts

Ms. Dewey, reluctantly, and her colleagues, enthusiastically, are responsive to the reward structure that operates in their school. Incentives (recognition, tenure, bonuses, raises) are in place to encourage the teachers at Beck elementary to get test scores up. Some kind of material incentive structure is an ineliminable part of any workplace situation. People have to make a living. But incentives are a remarkably blunt instrument for achieving any but the simplest goals. Incentives induce people to do only what the incentives depend on (e.g., Schwartz, 1982, 1990, 1994). Yet, good teachers do ''whatever it takes,'' and ''whatever it takes'' depends on the particulars of the situation and of the children. How could we ''incentivize'' Luke and his colleagues to provide the compassionate care that lies outside their formal job descriptions?

What makes incentives such a blunt instrument? The main reason, I think, is that most jobs—and certainly all jobs involving substantial interactions with other people—have traditionally been organized around incomplete contracts (see Bowles, 2008). Some of the job duties are specified explicitly, but many are not. Doctors prevent disease, diagnose it, treat it, and ease suffering. But exactly how they do these things is left to them to figure out—with guidelines, of course, but only guidelines. And how doctors interact with their patients is also left for them to figure out. Lawyers serve their clients, but how to counsel, how to advocate, and how to balance the two is up to them. Teachers impart knowledge, but the best way to reach each child is left for the teachers to judge. Being caring and sensitive to patients and their families is not part of Luke's ''contract,'' nor are there any rules or procedures that specify how to be caring, nor any obvious tools for measuring how ''caring'' Luke is.

Detailed scripts and rules may enable us to make contracts that are more complete, but moving in that direction will compromise the quality of the services that doctors, lawyers, teachers, and custodians provide. More complete contracts allow us to incentivize what we think we want (''perform tasks A, B, and C in the manner X, Y, and Z and you get a bonus''). But what we really want is ''make a good-faith effort to do whatever it takes to achieve our objective.''

We can have confidence that our service providers will do ''whatever it takes'' only if they have the will to do the right thing.

When we lose confidence that people have the will to do the right thing, and we turn to incentives, we find that we get what we pay for. It is an old adage in management that managers should ''be careful what you measure, because what you measure is what you'll get.'' Teachers teach to the test, so that test scores go up without students learning more. Tests are a mere index of what we actually care about, and they might even be a reliable index, but when teachers teach to the test, test scores stop being a reliable index of anything. When incentives are tied to the specific things that doctors do, doctors do more, or fewer, procedures (depending on the incentives) without improving the quality of medical care. Custodians just ''do their jobs,'' leaving unhappy, uncomfortable patients in their wake. As economist Fred Hirsch (1976) said thirty years ago, ''The more that is in the contracts, the less can be expected without them; the more you write it down, the less is taken, or expected, on trust'' (p. 88; see Ordonez, Schweitzer, Galinsky, & Bazerman, 2009; Schweitzer, Ordonez, & Douma, 2004 for a discussion of how rigid goal-setting can undermine moral concern. Also see Staw & Boettger, 1990; Wright, George, Farnsworth, & McMahan, 1993, for examples of how excessive control and incentive-enforced goal-setting reduces the level of trust and the quality of work performance). The solution to incomplete contracts is not more complete ones; it is a nurturing of moral will.

Why can't we leave incomplete contracts incomplete, and just incentivize ''doing the job well,'' leaving it to the discretion of the supervisors to judge whether a doctor, lawyer, teacher, or janitor *is* doing the job well? In theory, we could. But the problem is that much of what is left incomplete (e.g., Luke's caring) is extremely difficult to quantify. Is Ms. Dewey a good teacher, worthy of praise, a bonus, and tenure? In the absence of clearly identified criteria for ''goodness,'' we have to trust the judgment of Ms. Dewey's supervisor. Would another supervisor, from another school, agree? If we are unwilling to trust the judgment of Ms. Dewey, why would we be willing to trust the judgment of her supervisor? Complete contracts seem attractive because they promise uniformity, fairness, and objectivity. They identify objective metrics by which the performance of employees can be scored. And especially when money is on the line, people feel the need for this objectivity. So incentives don't *inevitably* lead to standardizing and objectivizing criteria for evaluation, but they exert a powerful push in this direction.

When incentives misfire, as they so often do, the temptation is always to try to make the incentives smarter. When we think we've licked the problem of doctors doing too many tests with an incentive scheme that encourages them to do too few, we adjust. And when we find problems with the new, adjusted scheme, we adjust again. What we hope and expect is that over time, incentives that get us ever closer to what we want will evolve. Manipulating incentives seems easier and more reliable than nurturing moral will.

And what's the harm? If incentives can't do the job by themselves, perhaps they can contribute to improving performance, both by telling people (doctors, teachers) how they're doing and by motivating them to do better. They can't hurt. Or can they? As it turns out, there is harm in incentives, and the harm can be quite considerable.

3.2.3. Motivational competition

An Israeli day care center was faced with a problem: more and more parents were coming late—after closing—to pick up their kids. Since the day care center couldn't very well lock up and leave toddlers sitting alone on the steps awaiting their errant parents, they were stuck. Exhortation to come on time did not have the desired effect, so the day care center resorted to a fine for lateness. Now, parents would have two reasons to come on time. It was their obligation, and they would pay a fine for failing to meet that obligation (Gneezy & Rustichini, 2000a).

But the day care center was in for a surprise. When they imposed a fine for lateness, lateness *increased*. Prior to the imposition of a fine, about 25 percent of the time, parents came late. When the fine was introduced, the percentage of latecomers *rose*, to about 33 percent. As the fines continued, the percentage of latecomers continued to go up, reaching about 40 percent by the sixteenth week.

Why did the fines have this paradoxical effect? To many of the parents, it seemed that a fine was just a price, and it was a price worth paying. We know that a fine is not a price. A price is what you pay for a service or a good. It's an exchange between willing participants. A fine, in contrast, is punishment for a transgression. When a fine is treated as a price, any notion of moral sanction is lost. You're not doing the ''wrong'' thing by coming late; you're doing the cost-effective thing.

That seems to be exactly what happened in the day care center. Prior to the imposition of fines, parents knew it was wrong to come late. Obviously, many of the parents did not regard this transgression as serious enough to get them to

stop committing it, but there was no question that what they were doing was wrong. But when fines were introduced, the moral dimension of their behavior disappeared. It was now a straightforward financial calculation. The fines *de*moralized what had previously been a moral act. And this is what incentives can do in general. They can change the question in people's minds from ''Is this right or wrong?'' to ''Is this worth the price?''

Once lost, this moral dimension is hard to recover. When, near the end of the study, the fines for lateness were discontinued, lateness became even more prevalent. By the end of the study, the incidence of lateness had almost doubled. It's as though the introduction of fines permanently altered parents' framing of the situation from a moral transaction to an economic one. When the fines were lifted, lateness simply became a better deal (see Deci, 1975; Lepper & Greene, 1978; and Lepper, Greene, & Nisbett, 1973 for classic, related demonstrations of how incentives can undermine ''intrinsic motivation'').

Another example of the demoralizing effects of incentives comes from a study of the willingness of Swiss citizens to have nuclear waste dumps in their communities (Frey & Oberholzer-Gee, 1997). In the early 1990s, Switzerland was getting ready to have a national referendum about where it would site nuclear waste dumps. Citizens had strong views on the issue and were well informed. Frey and Oberholzer-Gee went door-to-door, asking people whether they would be willing to have a waste dump in their community. Fifty percent of respondents said yes—this despite the fact that people generally thought such a dump was potentially dangerous and would lower the value of their property. The dumps had to go somewhere, and like it or not, people had obligations as citizens.

Frey and Oberholzer-Gee then asked their respondents whether, if they were given an annual payment equivalent to six weeks' worth of an average Swiss salary, they would be willing to have the dumps in their communities. They already had one reason to say yes—their obligations as citizens. They were now given a second reason—financial incentives. Yet in response to this question, only twenty-five percent of respondents agreed. Adding the financial incentive cut acceptance in half.

It seems self-evident that if people have one good reason to do something, and you give them a second, they'll be more likely to do it. Yet when the parents at the day care center were given a second reason to be on time—the fines—it undermined their first reason, that it was the right thing to do. And the Swiss, when given two reasons to accept a nuclear waste site, were *less* likely to say yes than when given only one (and Frey and Oberholzer-Gee ruled out the reasonable possibility that respondents took the offer of compensation as a signal about the dangers of the waste site). Frey and Oberholzer-Gee explained this result by arguing that reasons don't always add; sometimes, they compete. When they were not offered incentives, people had to decide whether their responsibilities as citizens outweighed their distaste for having nuclear wastes dumped in their backyards. Some thought yes, and others, no. But that was the only question they had to answer (see Staw, Calder, Hess, & Sandelands, 1980, for related evidence that confirms this interpretation).

The situation was more complex when citizens were offered cash incentives. Now, they had to answer another question before they even got to the issue of accepting the nuclear wastes. ''Should I approach this dilemma as a Swiss citizen or as a self-interested individual? Citizens have responsibilities, but they're offering me money. Maybe the cash is an implicit instruction to me to answer the question based on the calculation of self-interest.'' Taking the lead of the questioners, citizens then framed the waste-siting issue as just about self-interest. With their self-interested hats squarely on their heads, citizens concluded that no amount of money was enough.

A series of studies, by Heyman and Ariely (2004; see also Gneezy and Rustichini, 2000b), makes a similar point. In one study, people were asked if they would be willing to help load a couch onto a van. Some were offered a modest fee and some were not. Those offered a modest fee were less likely to agree to do the task than those offered nothing. As Heyman and Ariely explain their findings, participants in the studies can construe the task they face as either a social transaction (doing someone a favor) or a financial one (working for a fee). Absent the offer of a fee, they are inclined to view the situation in social terms and agree to help. The offer of a fee induces the participants to reframe the transaction as financial. Now, the fee had better be substantial. The offer of money leads people to ask, ''Is this worth my time and effort?'' That is not a question they ask themselves when someone asks them for a favor. Thus, social motives and financial ones compete.

And so, just as rigid and detailed rules undermine the development and deployment of moral skill, reliance on incentives undermines moral will. Rules and incentives—the two tools people reach for to improve the performance of unsatisfactory organizations—demoralize both the practices that rely on them and the practitioners engaged in those practices.

4. Wisdom and "Idea Technology"

> So far as I am aware, we are the only society that thinks of itself as having arisen from savagery, identified with a ruthless nature. Everyone else believes they are descended from gods... Judging from social behavior, this contrast may be a fair statement of the differences between ourselves and the rest of the world. We make both a folklore and a science of our brutish origins, sometimes with precious little to distinguish between them (Sahlins, 1976, p. 100).

It is tempting to assume, as economists typically do, that motivation is exogenous to the situation at hand. If you want to influence people to do something, you have to *discover* what motivates them and then structure a situation so that those motives can be satisfied. Related to that deep assumption is the additional one that money—the "universal pander"—is a good proxy for the idiosyncratic motives that individuals possess, because money can be exchanged for almost anything else. In contrast, the studies just described suggest that rather than being exogenous to situations, motives can be *created* by situations. Israeli parents do not view their lateness as a market transaction *until* they are fined. Swiss citizens do not view their willingness to accept a waste dump as a market transaction *until* they are offered compensation. Offers of payment or threats of fines do not tap into a motivational structure so much as they *establish* a motivational structure. So long as society endorses the legitimacy of different motives for different actions in different situations, Israeli parents or Swiss citizens might ask themselves what motives *ought* to govern their actions in the particular situation they face. They know that they have moral obligations. The question is, should those obligations govern their behavior in this particular case? However, when one motive gets society's official seal of approval to dominate all others, people may stop appreciating that there are multiple types of motivations from which to choose. Modern Western society's enthusiastic embrace of the view that self-interest simply *is* what motivates human behavior has led us to create social structures that cater to self-interest. As a result, we have shaped a society in which the assumption that self-interest is dominant is often true. We have not so much discovered the power of self-interest as we have created the power of self-interest. With a debt to Karl Marx, I call such processes "ideology" (Schwartz, 1997, in press; see also Ferraro, Pfeffer, & Sutton, 2005).

We live in a culture and an age in which the influence of scientific technology is obvious and overwhelming. No one who uses a computer, a smart phone, or an MP3 player needs to be reminded of the power of technology. Nor do people having PET, CT, and MRI scans, fetuses monitored, genes spliced, or organs transplanted. None of this is news. Adjusting to ever-advancing technology is a brute fact of contemporary life. Some of us do it grudgingly, and some of us do it enthusiastically, but everyone does it.

When we think about the modern impact of science, most of us think about the technology of computers and medical diagnostics—what might be called "thing technology." However, science produces another type of technology that has a similarly large impact on us but is harder to notice. We might call it "idea technology." In addition to creating things, science creates concepts—ways of understanding the world and our place in it—that have an enormous effect on how we think and act. If we understand birth defects as acts of God, we pray. If we understand them as acts of chance, we grit our teeth and roll the dice. If we understand them as the product of pre-natal abuse and neglect, we take better care of pregnant women.

If we define "technology" broadly as the use of human intelligence to create objects or processes that change the conditions of daily life, then it seems clear that ideas are no less products of technology than computers. However, two factors distinguish idea technology from thing technology. First, ideas are intangible and thus cannot be sensed directly. Therefore, they can suffuse through the culture and profoundly affect people before being noticed. Second, idea technology, unlike thing technology, can profoundly affect people even if the ideas are *false*. I call idea technology that is based on untrue ideas "ideology." Thing technologies generally do not affect people's lives unless the things work. Companies cannot sell useless technological objects—at least not for long. In contrast, untrue ideas can affect how people act as long as people believe them.

The potentially potent role of ideology can be illustrated with an example, a critical interpretation of the work of B.F. Skinner that I developed with two colleagues several years ago (Schwartz, Schuldenfrei, & Lacey, 1978; see also Schwartz, 1986, 1988, 1990). Skinner's central claim was that virtually all animal and human behavior is controlled by its rewarding or punishing consequences. Skinner illustrated that claim with research on pigeons and rats: if a rat receives food pellets consistently after pressing a lever, it will press the lever more often; if the rat receives a painful electric shock after lever pressing, it stops. For Skinner, the behavior of the lever-pressing rat tells the explanatory story

of virtually all the behavior of all organisms. To understand behavior, it is necessary and sufficient to identify rewarding and punishing consequences.

Most of Skinner's critics over the years challenged him for being too reductive and for denying the importance, or even the existence, of concepts such as mind, freedom, and autonomy. Those critics contended that Skinner's account was not so much false as incomplete and inadequate with regard to human behavior; if one looked with any care at human behavior, one would find numerous phenomena that did not fit the Skinnerian worldview. Skinner and his followers usually responded to such criticisms by offering Skinnerian interpretations of the putatively disconfirming phenomena.

Our own approach was different. We suggested that just a casual glance at the nature of life in modern industrial society provided ample justification for the Skinnerian worldview; that is, we agreed with Skinner that virtually all behavior in modern industrial society is controlled by rewards. If one looks at the behavior of industrial workers in a modern workplace, it would be difficult to deny that rats pressing levers for food has a great deal in common with human beings pressing slacks in a clothing factory. Unlike Skinner, however, we argued that this does not reflect basic, universal facts about human nature, but rather reflects the conditions of human labor ushered in by industrial capitalism. We suggested that with the development of industrial capitalism, work organization was restructured so that it came to look just like rat lever-pressing. The last stages of that restructuring, influenced by the ''scientific management'' movement of Taylor (1911/1967), deliberately eliminated all influences on the rate and quality of human labor other than the wage—the reward. Each worker's tasks became so tedious and trivial that he simply had no other reasons to work hard. The manager could thus exercise complete control over workers by simply manipulating wage rates and schedules. Skinner developed his own theory in a world in which people spent much of their time behaving just as he said they would.

What followed from our argument was that human behavior could look more or less like the behavior of rats pressing levers depending on how the human workplace and other social institutions like schools were structured. And the more that the institutions were structured in keeping with Skinner's theory, the truer that theory would be. Thus, Skinner's theory was ideology—a false piece of idea technology that came to seem more and more true as social institutions were shaped in its image.

Thus, we argued that Skinner's view of human behavior was substantially plausible in the social and economic context in which it arose, though it would not have been plausible in all other contexts. Moreover, and more important, as the theory was embraced and applied by introducing Skinnerian techniques broadly throughout society, it would come to look more and more plausible. Thus, someone growing up in a post-Skinnerian world in which rewards were routinely manipulated by parents, teachers, principals, managers, physicians, and law enforcement agents would surely believe that the control of human behavior by such rewards was universal and inevitable. Such a person would be right about the universality but not about the inevitability.

It is important to understand that we were not arguing that Skinner's worldview was an invention. It captured a significant social phenomenon that he saw all around him. We argued instead that the social phenomenon was itself an invention and that once it was in place, it made Skinner's worldview seem plausible. Further, we were not arguing that simply believing Skinner's worldview was sufficient to make it true. Rather, we argued that believing Skinner's worldview would lead to practices that shaped social institutions in a way that made it true. That dynamic is what makes Skinner's worldview an example of ideology. It is false as a general account of human nature. But then it is embraced and used to reshape one social institution after another. When such reshaping occurs, dramatic changes in behavior follow. As a result, an initially false idea—a bit of ideology—becomes increasingly true.

A very similar type of analysis was offered by Ferraro et al. (2005) in a discussion of how theories of rational choice in economics come to shape the behavior of both individuals and institutions. In describing the development of trading practices on the Chicago Board Options Exchange (CBOE), they observe the following (Ferraro et al., 2005, pp. 12–13):

> In a fascinating historical case study, MacKenzie and Millo (2003) studied the development of the CBOE, which opened in 1973 and quickly became one of the most important financial derivatives exchanges in the world. The same year the CBOE opened, Black and Scholes (1973) and Merton (1973) published what were to become the most influential treatments of option pricing theory, for which the authors were to win the Nobel Prize in Economics. The formula developed in this work expressed the price of an option as a function of observable parameters and of the unobservable volatility of the price of the underlying asset. It is important to note that this formula originally did not accurately predict option prices in the CBOE, with deviations of 30 to 40 percent

common in the first months of option trading. Yet, as time passed, deviations from the model diminished substantially so that, for the period August 1976 to August 1978, deviations from the Black–Scholes price were only around 2 percent (Rubinstein, 1985). This success in the theory's predictions of option prices led Ross to characterize option pricing theory as ''the most successful theory not only in finance, but in all of economics'' (1987, p. 332). MacKenzie and Millo (2003) showed that this increasing accuracy resulted because people and organizations acted as if the theory were true, which made its predictions come true. Interviews with market participants revealed, for example, that traders started to use the theoretical value sheets obtained from the Black–Scholes equation to determine their bids. The model also became increasingly institutionalized in the regulatory framework of the market, in its language, and in its technological infrastructure, especially in the Autoquote system software launched by the exchange in 1986 that implemented the Black–Scholes formula and provided traders with theoretical prices for all the options being traded. ''Financial economics, then, helped create in reality the kind of markets it posited in theory'' (MacKenzie & Millo, 2003, p. 54).

There are at least three different routes by which ideology can become true (Schwartz, 1997). The first is by changing how people think about or construe their own actions (for example, ''I thought I was acting altruistically. Now social scientists are telling me that I work in a homeless shelter for ego gratification.''). If that reconstrual mechanism is acting, nothing outside the person necessarily changes. The person simply understands her actions differently. But of course, how we understand our past actions is likely to affect our future actions.

The second mechanism works via the ''self-fulfilling prophesy.'' Here, ideology changes how other people respond to the actor, which, in turn, changes what the actor does in the future (see Jussim, 1986, for a critical review). The paradigm example of that mechanism is the teacher who pays more attention and works harder with children identified as ''smart,'' than children identified as ''slow,'' thereby making the ''smart'' ones ''smarter.'' Thus, being labeled as ''smart'' or ''slow'' does not itself make kids smarter or slower. The teacher's behavior must also change accordingly.

The final mechanism—the one that I believe has the most profound effects—is when institutional structures are changed in a way that is consistent with the ideology (Ferraro et al., 2005; Moore, Tetlock, Tanlu, & Bazerman, 2006 offer a related account, which they term ''issue-cycle theory''). The industrialist believes that workers are only motivated to work by wages and then constructs an assembly line that reduces work to such meaningless bits that there is no reason to work aside from the wages. The politician believes that self-interest motivates all behavior, that people are entitled to keep the spoils of their labors, and that people deserve what they get and get what they deserve. Said politician helps enact policies that erode or destroy the social safety net. Unsurprisingly, people start acting exclusively as self-interested individuals. ''If it's up to me to put a roof over our heads, put food on the table, and make sure there's money to pay the doctor and the kids' college tuition bills, then I better make sure I take care of myself.'' Because I think it is much harder to change social structures (Mechanism 3) than it is to change how people think about themselves (Mechanism 1), which psychotherapy may effectively address, or how they think about others (Mechanism 2), which education may effectively address, and because social structures affect multitudes rather than individuals, we should be most vigilant about the effects of ideology on social structures.

It is not hard to imagine how, guided by ideology, people would come to understand all their behavior, including their relations with their work and with others, in terms of operative incentives (see Schwartz, 1994). And the nature of those relations would change as a result. In a world like this, we would not have to worry that financial motives would crowd out moral ones, because the moral ones would already have disappeared.

A suggestion that such a change in people's understanding of their social relations and responsibilities to one another can occur on a society-wide scale comes from a recent content analysis of Norwegian newspapers by Nafstad, Blakar, Carlquist, Phelps, and Rand-Hendriksen (2009). The analysis, which covered a period from 1984 to 2005, found a shift from what the authors call ''traditional welfare ideology,'' long the dominant sociopolitical characteristic of Norwegian society, to what they call ''global capitalist ideology.'' That shift included increased use of market-like analysis to discuss all aspects of life, increased reference to the values of individualism and self-interest, and a redefinition of the social contract between individuals and society along incentive-based lines. Of course, the fact that newspapers write about social relations in a particular way does not mean that people live them in that way, but it is at least plausible that newspaper coverage either captures a shift in how people think about and act toward one another, or facilitates such a shift, or both.

Miller (1999) has presented evidence of the pervasiveness what he calls the ''norm of self-interest'' in American society. College students assume, incorrectly, that women will have stronger views about abortion issues than men and

that students under the age of 21 will have stronger views about the legal drinking age than those over 21, because women and minors have a stake in those issues that men and older students do not. The possibility that one's views could be shaped by conceptions of justice or fairness, rather than self-interest, does not occur to most people. And yet, they are. Empathy, and care and concern for the well being of others, are routine parts of most people's character. Yet, they are in danger of being crowded out by exclusive concern for self-interest—a concern that is fostered by the incentive-based structure of the workplace.

Even Adam Smith, the father of free market economics, understood that there was more to human nature than self-interest. *The Wealth of Nations* (1776/1937), his paean to the marvels of the market, followed another book, *The Theory of Moral Sentiments* (1753/1976), in which he suggested that a certain natural sympathy for one's fellow human beings provided needed restraints on what people would do if they were left free to ''barter, truck, and exchange one thing for another.'' Smith's view, too much ignored or forgotten by modernity, was that efficient market transactions were parasitic on aspects of character developed in non-market social relations. As I have argued elsewhere (Schwartz, 1986, 1994), Smith was right about the importance of ''moral sentiments,'' but wrong about how ''natural'' they are. In a market-dominated society, the ''moral sentiments'' may disappear so that nothing can rein in self-interest. The same can happen if market activities are walled off from the social relations that exist in other spheres of life, where moral attributes like sympathy might actually be nurtured (see Polanyi, 1944).

Amartya Sen (1976) has argued that the concern for doing the right thing originates from a source that the logic of the market cannot encompass. He calls that source of concern ''commitment.'' To act out of commitment is to do what one thinks is right and what will promote the public welfare, regardless of whether it promotes one's own. It is to act out of a sense of responsibility as a citizen. Acts of commitment—what in the literature on organizational behavior might be called ''organizational citizenship behavior''—include voting in large general elections and doing one's job to the best of one's ability—going beyond the terms of the contract, even if no one is watching and there is nothing to gain from it. They include refusing to price gouge during times of shortage, refusing to capitalize on fortuitous circumstances at the expense of others, willingness to tolerate nuclear waste dumps in one's community, and coming to pick up one's toddlers from daycare on time.

Acts of commitment like that occur routinely. They hold society together. But they are a problem for the logic of self-interest. As Sen says: ''commitment . . . drives a wedge between personal choice and personal welfare, and much of traditional economic theory relies on the identity of the two'' (p. 329). He continues:

> The economic theory of utility . . . is sometimes criticized for having too much structure; human beings are alleged to be ''simpler'' in reality . . . precisely the opposite seems to be the case: traditional theory has *too little* structure. A person is given *one* preference ordering, and as and when the need arises, this is supposed to reflect his interests, represent his welfare, summarize his idea of what should be done, and describe his actual choices and behavior. Can one preference ordering do all these things? A person thus described may be ''rational'' in the limited sense of revealing no inconsistencies in his choice behavior, but if he has no use for this distinction between quite different concepts, he must be a bit of a fool. The *purely* economic man is indeed close to being a social moron.

Said more prosaically, the economists' conception of human beings as rational self-interest maximizers is too reductive. Like Skinner's conception of human beings as reward seekers, it exalts one aspect of a human nature that is complex and multi-faceted and ignores all the rest. But because of the self-fulfilling character of ideology, we should not be sanguine that this reductive distortion of human nature will reveal itself. Unless there is a collective effort to combat ideology, we will all become the rational self-interest maximizers that economists have always assumed we were.

4.1. Ideology and practical wisdom

The concept of ideology, and the self-fulfilling feedback loops that ideology can give rise to, helps explain, I think, why it is that excessive reliance on rules and incentives undermines practical wisdom. If you think that people lack the *skill* for wise judgment, you impose detailed rules of conduct. As a consequence, people never get the opportunity to develop wise judgment. Your lack of faith in the judgmental skills of the people you oversee is vindicated, leading you to impose still more rules and still greater oversight. And if you think that people lack the *will* to use their judgment in pursuit of the right aims, you create incentives that enable people to do well by doing good. In so doing, you undermine

whatever motivation people might have to do the right thing because it is the right thing. Once again, your lack of confidence is vindicated. Instead of putting in place procedures that nurture moral will and moral skill, the manager, convinced that such attributes are a very slender reed on which to build and run an organization, puts practices in place that undermine them. Before long, practical wisdom disappears—from the classroom, from the courtroom, from the boardroom, and from the examining room.

5. Conclusion

In his book, *A conflict of visions: Ideological origins of political struggles*, Sowell (1987) distinguishes between what he calls ''constrained'' and ''unconstrained'' visions of human nature. The constrained vision, exemplified by Thomas Hobbes, focuses on the selfish, aggressive, dark side of human nature, and assumes that we cannot change human nature but must instead impose constraints through an all-powerful state, the Leviathan. The unconstrained vision, perhaps best exemplified by Jean-Jacques Rousseau, sees enormous human possibility, and condemns the state for subverting all that is good in human nature. This paper has argued that both Hobbes and Rousseau are wrong. ''Nature'' dramatically underspecifies the character of human beings. Within broad limits, we are what society asks and expects us to be. If society asks little, it gets little. Under those circumstances, we must be sure that we have arranged social rules and incentives in a way that induces people to act in ways that serve the common good. If we ask more of people, and arrange our social institutions appropriately, we will get more. As Clifford Geertz (1973) has said, human beings are ''unfinished animals,'' and what we can reasonably expect of people depends on how our social institutions ''finish'' them.

''Rational, self-interested economic man'' as a reflection of human nature is a fiction—an ideology. But it is a powerful fiction, and it becomes less and less fictional as it increasingly pervades our institutions and crowds out other types of social relations. Because of its self-fulfilling character, we cannot expect this fiction to die of natural causes. To extinguish it, we must hold onto the alternatives. And that will not be easy.

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