

Pragmatism and the untenable dualism of means and ends: Why rational choice theory does not deserve paradigmatic privilege

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Even as rational choice theory is increasingly used in sociology, finding its way into such diverse subdisciplines as the sociology of the family, religion, gender, crime, race, stratification, and economic sociology, it remains hotly contested.¹ It has spurred a rancorous debate that, at its worst, “degenerates into a caricatured contrast between a cold and calculating egoist engaged at the breakfast table in a cost-benefit assessment of the value of continuing his/her marriage and an oversocialized goody-two-shoes programmed in early childhood to cherish the values and conform to the norms that sustain the social order by serving the common good.”² Nevertheless, most of the numerous and contentious salvos fired by the theory’s detractors do little damage. From even a cursory reading of papers specifically on the merits and demerits of rational choice theory – including important symposia in *The American Sociologist* (1997) and the *American Journal of Sociology* (1998) – it is clear that its proponents believe that, even when largely accepted, the standard criticisms do not undermine rational choice models of human behavior.³ I contend that much conventional sociological critique of rational choice theory is inherently unable to remove that theory’s “paradigmatic privilege” because both sides of the debate implicitly accept what Barry Hindess calls the “portfolio” model of the actor, in which individuals carry a relatively stable and pre-existing set of beliefs and desires from context to context.⁴ Given the situation, they select from this portfolio “those elements that seem relevant and [use] them to decide on a course of action.”⁵ The seemingly universal conception of an actor with a well-defined set of goals pushes William Goode to equate all purposive action with “rational choice” and make the “surely surprising assertion that it is nearly impossible for us to develop a body of social action theory that is not ultimately and fundamentally a rational action theory.”⁶

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In this article, I use arguments derived from an American Pragmatist philosophical tradition that traces its roots to Charles Sanders Peirce and John Dewey to question the tenability of the dualism between means and ends. From this basis, I construct a positive critique of rational choice theory that synthesizes key points in conventional critiques but that utilizes a fundamentally different conception of the actor. In the pragmatist theory of action, behavior is purposive and even derives from a process of choice, but actors' goals are no longer assumed to be strictly separate from the conditions of action. This formulation contradicts Goode's assertion: we can develop an empirically useful "rational" theory of action that is not "fundamentally a rational action theory" and thus can reject rational choice theory's claim to paradigmatic privilege, without giving up the rational actor.⁷ To illustrate this, I close the article by drawing on Charles Sabel's work on cooperation problems and collective action dilemmas to show the practical utility of pragmatist theory, even when applied to an area of inquiry in which rational choice theory is often thought well-suited.

I sometimes make strong claims against those theorists who claim that rational choice theory can effectively provide a *unifying underlying paradigm* in social theory. However, while I deny that rational choice theory should be the privileged action theory of "first resort," I do *not* wish to fall into the same trap by suggesting that I have found "the" unifying theory of action, the philosopher's stone of social theory. To make such coverage claims would directly contradict the very pragmatist experimentalism that I advocate, in which a theory is better only insofar as it can usefully solve the problems of the day. Rather, as will become clear in the section on Dewey, the question of whether anything – including a theory of action – is better or worse is *situational*.⁸ My theory should be judged (and applied) using this same criterion.

Rational action theory and the portfolio model of the actor

Although details vary slightly across authors, the claim that rational choice theory can supply sociology with a unifying general theory is fundamentally undergirded by an overall agreement on its core elements. A particularly clear formulation is provided by James March, who asserts that there are essentially four parts to a theory of (intentional) choice.⁹ The actor must have:

I. A knowledge of alternatives, or feasible set. These are the possible courses of action, situationally defined and unambiguous. In the simplest models, all “objective” possibilities are included.

II. A knowledge of, or beliefs about the consequences of the various alternatives (the “outcomes” or “what happens”) dependent upon information. In the simplest models, information is assumed to be perfect (subjective expectations are based on “objective” probabilities). I and II combine to form the actor’s *belief set*.

III. An ordering of preferences over outcomes (“states-of-affairs”). These preferences are generally required to be consistent, but that is not necessary, at least for “choice” per se. They represent the actor’s “desires.”

IV. A decision rule, to select amongst the possible alternatives – usually one chooses what is most preferred, though, strange as it may sound, that would not be logically necessary. Generally, the decision rule is that the actor optimizes/maximizes something, argued by Becker and Coleman to be an essential element, at least if the models are to have their explanatory force and easy empirical testability.¹⁰ But since any well-defined system (any regular rule) can be described mathematically as maximizing, this stricture requires only the definition of an element to be maximized.¹¹ The third and fourth elements are often combined and represented by a single function that assigns a utility (if that is what is maximized) level to each outcome, often called the “payoff.”

Any theory that retains all four elements, even in modified or combined form, is positing an actor who goes about with a stable portfolio of “beliefs and desires” as the basis for all decisions, and is thus classified by Hindess as using a “portfolio model” of the actor.¹² Rational choice theories are a subset of the larger class of “portfolio theories.”

Many rational choice explanations of social phenomena focus on ways in which social structures cause the belief set to vary, either by dictating what the actor expects to happen given a particular action (if information is perfect, what *will* happen) or placing limitations on her knowledge of possible courses of action (which implies a “subjective” version of the feasible set).¹³ Although theories usually premise explanation on social structure dictating the outcomes of particular actions, the

(standard) assumption of a fixed preference ordering makes this tantamount to claiming that social structure dictates payoffs (so we often say that changes in behavior are caused by “changed payoffs,” although we really mean “changed outcomes of actions that in turn represent different utility levels”). Preferences can maximize (if that is the decision rule) many different things, but actors must have some final valued state that they behave instrumentally to obtain. The belief that actors always work to obtain money or consumption is a vulgar misunderstanding, as the general claim is that utility (or welfare) is maximized.¹⁴ The key intimation, in the words of John Gray, is that the individual of rational choice theory “must be a calculator rather than a rule follower” who knows exactly what she is trying to calculate.¹⁵ The ends of action are well defined, and the choice faced is simply that of the best means to their achievement, given constraints and payoffs dictated by the social system.

The weakness of conventional critique

I accept without argument that a causal theory of action is useful and worthy of social scientific theorization, and leave outside my purview questions of methodological individualism (MI) per se. I do speak to arguments that *relate* to MI, such as the claim that rational action theory is insufficiently attuned to the role of macro-structural factors in dictating choice, but focus only on those that posit at least a macro-to-micro link (the complementary micro-to-macro of MI is not required for inclusion in my “feasible set”). I will also follow Michael Hechter and Satoshi Kanazawa’s quick dismissal – as a misunderstanding of the aims of rational choice theory – of criticisms that decry the assumption that “we calculate the expected consequences of our options and choose the best of them” as glaringly false and misleading because people in fact “often act impulsively, emotionally, or by force of habit.”¹⁶ This amounts to saying that the theory fails because it could never predict or explain exactly what happens in every instance, but rational choice theory is not *meant* to explain individual behavior in each specific instance, concerning itself instead with macro-level outcomes. Peter Blau quickly writes off this criticism as well: “it is legitimate for a theory to confine itself to explaining some aspect of empirical reality and exclude others.”¹⁷ Why attack a theory for failing at what it is not intended to do?

Beyond these critiques, there is another line of attack, focused on motivational assumptions, that is taken seriously by rational choice theorists. Of this, there are two main types in the mainstream literature. On the one hand, sociologists reiterate in various forms the “Parsonian” attack on the “Utilitarian dilemma,” arguing that rational choice theory necessarily depends upon an exogenous foundation of value formation. On the other, some dissident economists (and some non-economists) advocate *tinkering* with the underlying model and argue for such things as a different mapping of “desires and beliefs” into preferences, adjustments to the decision mechanism, cognizance of the importance of information, and so on. Rational choice theorists often accept as generally valid elements of both these types of critique, but do not think they effectively undermine rational action’s claim to *paradigmatic privilege*: it remains the “first option” in social scientific investigation, to be adjusted only in instances in which it can be shown inadequate.¹⁸ I argue that both the “tinkering” and Parsonian arguments leave intact rational choice pretension to paradigmatic privilege because they ultimately reduce either to the claim that we must adequately describe values or that we need more complex (and perhaps socially structured) decision rules in instances where standard maximizing assumptions are shown to operate at too high a level of abstraction. Neither asks if it is a useful idealization to assume the *existence* of stable desires to be discovered and mapped into action – and thus acritically accept the same underlying portfolio model of the actor.

The Parsonian critique

The dominant line of conventional sociological attack on rational choice theory – that ends, values, and preferences must be *explained* – is generally encompassed by Talcott Parsons’s sophisticated dissection of the “utilitarian dilemma.” Therefore, I discuss his arguments before turning to some recent critiques to show that they implicitly (or explicitly) follow the same reasoning.

The *Structure of Social Action* and other early writings by Parsons show that he accepted much of the basic methodological argument of the neoclassical economists of his day, agreeing that social scientific theories are abstractions from reality and that action should be understood in a means-ends framework.¹⁹ However, he cautioned that “analysis will show that if the means-ends scheme is to have more than descriptive – that is causal – analytical meaning, ends as a factor in

action must be conceived as containing an element independent of the conditions of action, including the ‘given’ features of the actor’s own hereditary equipment.”²⁰

Imputing a causal role to ends – unobservable because they ultimately represent the anticipation of a future state of affairs – created certain problems for economics. The conditions of action are external and coincide to the observations of the scientist, but *end* “may refer to a state of affairs which can be observed by the actor himself or someone else *after* it has been accomplished”; until then, it is necessarily subjective. Parsons accepted the firm separation of causal ends and conditions of action, writing that “ends are ‘subjective’ not merely in the sense of being ‘reflected in the consciousness’ of the actor but in the more radical sense of being adhered to by him independently of those ‘conditions’ of the situation which are outside his control.”²¹ However, he objected that economics’ taking them as given data did not resolve the difficulties engendered by their inobservability, arguing that the existing order in society clearly shows the ends of action to be non-random. Economic theory fails to recognize that at the end of a string of means-ends relationships, the ultimate ends “of the members of a whole society also form to a greater or lesser degree an integrated system which to be understood must be taken as a whole.” Hence, “it is not really possible to make economics a ‘positive’ science on the analogy of the physical sciences without altogether discarding the essential features of the ‘subjective’ means-ends analysis.”²² In short, “ultimate ends” do not come out of thin air, have causal significance, do not vary at random, and cannot be observed in the same manner as the conditions of action.

In *The Structure of Social Action*, Parsons famously argued that all positivistic theories of action (i.e., economics) are caught in a utilitarian dilemma where “either the active agency of the actor in the choice of ends is an independent factor in action, and the end element must be random; or the objectionable implication of the randomness of ends is denied, but then their independence disappears and they are assimilated to the conditions of the situation, that is to elements analyzable in terms of nonsubjective categories.”²³ The choice is unenviable: the first horn renders impossible any explanation of social order; the second means it is not really a theory of action as conceived by Parsons (and many rational choice theorists), failing to treat “things and events *as they appear from the point of view of the actor*.”²⁴ He stressed that “without the independence of ends the distinction between conditions

and means becomes meaningless” and “the active role of the actor is reduced to one of the understanding of his situation and forecasting its future course of development.” Such a theory of action is inadequate to explain the social world.

Parsons’s solution was to replace the positivistic theory of action with a voluntaristic theory that “involved elements of a normative character.”²⁵ The generality of economic theory could be retained by “relegation of the factors which above all account for ... its ultimate ethical values to another science, namely sociology.”²⁶ Economics would be limited to the intermediate aspects of the means-ends chain, while sociology would analyze ends and the “value element,” taking society as a whole, studying its normative structure and rejecting utilitarian atomism. In opposition to the institutionalists, he did not require that the entire economic system be viewed holistically; rather, he advocated an effective social scientific division of labor.

Briefly summarized, the Parsonsian critique argues that any colonization of sociology by a “positivistic” and individualistic rational choice theory must take as given one of the fundamental causal factors, the value element whence spring specific ends, so reducing to a merely descriptive theory. In Parsons’s words, “these positivistic theories somehow, by a kind of logical jugglery rather than by empirical proof, were squeezing what I have ... called the ‘value’ elements out of their interpretation of social life,” value elements that form the basis of the social order in society and that derive from institutions, which, in opposition to the (old) institutionalists and in support of Emile Durkheim, are to be viewed not as “mere habits” but rather as “normative rules ultimately dependent on common ethical values.”²⁷ Sociology was to systematically explain the value system, while economics would explain the process by which particular means and specific actions were chosen.²⁸ Rational choice theory’s neglect of the value element leaves it as economics, bereft of its sociological complement, and thus incomplete and unworthy of paradigmatic privilege.

Modern reiteration of the Parsonsian critique

Much modern sociological criticism is strikingly similar to the Parsonsian line. Frank Lechner writes that in “its theoretical method, rational choice theory assumes what is to be explained” because it “inevitably require(s) the ad hoc introduction of extraneous variables” and thus

falls to the utilitarian dilemma: “either one adopts rational choice assumptions, in which case the ‘ends’ of action remain ‘random,’ or one lets the ends be determined in some way, in which environment overwhelms rational choice.”²⁹ James Bohman also laments the “randomness of ends,” arguing that the mechanisms of preference formation must be explained while “rational choice theory itself should remain narrow and economistic, even in sociology, if it is to retain its explanatory power.”³⁰ David Sciulli objects that “how or why actors arrive at their preferences and whether or why their preferences change over time are issues that they (rational choice theorists) dismiss conceptually as unimportant. Instead, actors’ subjective interests are treated conceptually as either given or random.” *Ex post* anything can be labeled rational, so rational choice theory cannot explain or account for changes in the major institutions and organizations of a civil society, thus bracketing “*a priori* some of the most intriguing research issues unique to sociology or political science.”³¹ Richard Munch holds that “rational choice theory covers only a limited realm of social life” and cannot get at the underlying meanings of social action.³² In a review of Jon Elster’s *Nuts and Bolts*, Marc Gould, who has defended Parsons’s attacks on positivism and utilitarianism, writes that

all rational choice theories [are] tautologous when desires are indeterminate. The only way to avoid this problem of revealed preference, a problem exacerbated by the introduction of social norms into a methodologically individualistic framework, is the sociological reconstruction of economic theory, introducing socially structured mechanisms (including social norms) both to order preferences in a determinate fashion and to serve as vehicles of explanation. The attempt to economically reconstruct sociology is futile.³³

These critiques all follow the path beaten by Parsons, attacking the randomness of ends to show that rational choice theories are necessarily incomplete and beg the question of “ultimate values,” overstepping their bounds in an act of economic imperialism. However, tweaking just this “missing link” of ultimate values but leaving the theory otherwise untouched implies that it successfully models those aspects of the social world to which it is applied, and so cedes paradigmatic privilege to rational choice.³⁴

Rational choice response to the Parsonsian critique

Rational choice theorists are well aware that the “subjective element of the actor’s utilities” matters. Debra Friedman and Michael Hechter

note that “within rational choice models, variations in outcomes can be due logically to variations in preferences, in opportunity costs, and/or in institutional constraints.”³⁵ Nevertheless, explanations, for methodological reasons, “typically place greater emphasis on social structural determinants” because “values and other internal states are far more difficult to measure than structural constraints which are external to individuals.” Consequently, actors’ ends and values must be specified in advance or “rational choice explanations are liable to be tautological.”³⁶

Ends are usually prespecified with the *typical value assumption* “that actors are motivated to attain private and instrumental goods such as wealth” that can then be exchanged for other goods; “once utilities are known and constant, then all variation in social outcomes must logically be due to shifting constraints.”³⁷ Given the numerous social outcomes (i.e., altruism) plainly at variance with this assumption, it is an unsurprising primary target of Parsonsian attacks, leading many rational choice theorists to adjust their models to permit the addition of non-instrumental values to actors’ utility curves. For example, Hechter agrees that this “is not a principled response unless the theorist can endogenize utility – that is, explain why utility functions change and why some people act more selfishly than others,” and proposes, like the Parsonsians, *values* as a source of preferences. He postulates the usual instrumental values but supplements them with *immanent* values, idiosyncratically distributed and generally not substitutable with their instrumental brethren. The inception of immanent values must be explained, of course, and Hechter suggests that they come from, in a nested hierarchy, biological determinants and idiosyncrasies of personal biography.

In short, accepting the Parsonsian critique simply means adding institutional factors as determinants of values, not questioning Gary Becker’s claim that “everyone more or less agrees that rational behavior simply implies consistent maximization of a well-ordered function, such as a utility or profit function.”³⁸ Defending rational choice theory, Goode argues similarly that “the best way to guarantee that we do not commit the errors of the purist economists is to continue to *build into* our analyses the group related variables that inherently introduce a macro or system dimension into our thinking and our results.”³⁹

“Tinkering” critiques: Suggestive but incomplete

Critiques that tinker with either the structure of preferences or with the decision mechanism have been made by some of the most important dissidents in economics, including Amartya Sen, Albert Hirschman, Amatai Etzioni, and Herbert Simon.⁴⁰ Sen objects that the traditional approach reduces people to “rational fools” and that an economic theory based only on revealed preferences is unable to deal with what he calls “commitment.” Often, an actor chooses “an act that he believes will yield a lower level of personal welfare to him than an alternative that is also available to him” because he is “committed” to the act and “commitment is . . . closely connected with one’s morals.” To repair this deficiency, Sen recommends that we consider as well “rankings of preference rankings.” Similarly, Hirschman proposes “meta-preferences,” corresponding roughly to “values,” that dictate our day-to-day preferences but that allow for reflective changes in choice behavior. This would imply in the policy arena that simply raising the “price” of a behavior may be less effective than trying to get people to reflect on their tastes at the level of meta-preferences, perhaps convincing them to “choose” a different preference function. Etzioni suggests that there are distinct and non-comparable dimensions to choices, with no trade-offs between them; people “seek a balance between their moral commitments and their pleasures (a judicious ‘mix’) rather than seeking to maximize either.”

If complete preferences are not problematic enough, there is also Simon’s model of bounded rationality, describing a world too complex for actors to achieve the sort of global maxima postulated by simple rational choice theory – people have limited computational ability, cannot possibly consider all the alternatives and cannot have all the information. Peter Abell cites the many criticisms implying that “actions are characteristically made upon a self-imposed information basis that is more limited than would be requisite for us to be able to speak of objective optimality”: there is no theory of optimal search, there are decision biases, exclusions, limits on the amount of deliberation, “received styles of reasoning” that prevent optimal belief formation, and habits that “systematically lead to exclusions and do not evolve optimally in an evolutionary sense.” In response, he notes that “in each case a conceptual understanding of the apparent limitations of rational action theory is established in terms of the departure from full optimality.” Rational choice theory, “serves, even in default, as a benchmark” and thus still deserves its paradigmatic privilege.⁴¹

In a useful sociological twist on the tinkering critique, Mark Granovetter argues that “most behavior is closely embedded in networks of interpersonal relations.” Consistent with my characterization of the usual debate, he attacks both the “undersocialized” *homo economicus* and the “oversocialized” sociological (Parsonsian) actor for their shared “mechanical” world of atomized actors, and writes that despite sociologists’ reluctance to touch “any subject already claimed by neo-classical economics,” there is an “urgent” need to recognize that economic action is but a “special, if important, category of social action.”⁴² Theorists must recognize that the interests and choices of actors depend fundamentally on their *actual* social relationships; the preference function chosen by the actor may well depend on the situation and the real identities of the other players. However, as Granovetter himself notes, his arguments are consistent with a “broader” version of rational choice theory in which economic goals are supplemented by “sociability, approval, status and power.” “While the assumption of rational action must always be problematic, it is a good working hypothesis that should not easily be abandoned. What looks to the analyst like nonrational behavior may be quite sensible when situational constraints, especially those of embeddedness, are fully appreciated.”⁴³

All of these critiques only *tinker* with the underlying ends and their formation, beliefs about ends, or the feasible set (means), never challenging the utility of building models on such foundations. “Rationality” is imputed either objectively based on the “real” probability of achieving the end with the means chosen, or subjectively, where behavior is classified as irrational only if an act can be shown inconsistent with previous acts. Hirschman writes that “all these complications flow from a single source – the incredible complexity of human nature which was disregarded by traditional theory for very good reasons, but which must be spoonfed back into traditional findings for the sake of greater realism.”⁴⁴ Etzioni cautions that “socio-economic behavior may well be subject to modeling, but not by those models that assume one over-arching utility or goal.”⁴⁵

In identifying problems by finding mismatches between “real” rationality and modeled rationality, theorists cannot undermine Abell’s claim that rational choice theory is worthy of paradigmatic privilege. The changes proposed have real effects, and, importantly, are refreshingly suggestive of the reflexive and situated actor at the core of pragmatist theory. But at the end of the day, the same “rational” process of

selection amongst *fixed* ends just happens at a different level; there is nothing here that does not fit easily with the usual framework.

The crux of the problem: The “portfolio model” of the actor

Neither the Parsonsian nor the tinkering critiques unseat rational action theory as the “first option” because – like their target – they both accept Hindess’s “portfolio model of the actor, in which action is seen as resulting from the interaction of the situation of action and the actor’s more or less stable ‘portfolio’ of beliefs and desires” that is the basis of preferences; “the content of the portfolio may change but at any given time it is assumed to be stable.”⁴⁶ The Parsonsian line of critique decries the inadequate specification of the *source* of the elements of the portfolio, requiring a causal accounting of the internalization of beliefs and desires as a function of actors’ social locations. But this implicitly accepts that action is ultimately explained by the portfolio, so rational choice theorists can easily respond that given the portfolio’s contents, their models will yield accurate predictions with deviations (“irrationality”) defined as residual to a paradigmatic “rational” action. Tinkering critiques take issue with the algorithm by which beliefs and desires map into preferences and adjust it to “add realism,” but they ultimately frame problems as deviations from the core “paradigmatic” model. As long as this core model is accepted, rational action based on stable “beliefs and desires” can claim first shot at explaining behavior, and all criticisms will be subject to two standard responses: (a) it provides rigorously testable hypotheses; and (b) only at the point where it proves inadequate must any other motivation be brought to bear.

There are alternatives, however. In the next section, I draw on the writings of John Dewey to formulate a negation of the means-ends dualism, challenging the portfolio model of the actor and advocating the reconstruction of social science as a problem-solving enterprise.⁴⁷ Hans Joas has used pragmatism to critique rational action theory, but does not focus as explicitly on the nuts and bolts of the means-ends relationship in pragmatist theorizing, nor does he discuss the portfolio model.⁴⁸ Without directly engaging his work, I offer a complement, first by showing explicitly how the Deweyan position points to and supersedes weaknesses in conventional critiques, and second, by explicating some positive implications of a pragmatist theory of action.

John Dewey and the breakdown of the untenable means-ends dualism

Like the Parsonsians, Dewey focused scientific inquiry on the value element, rejecting as incomplete “*a priori*” theories that take values as necessarily given and essentially metaphysical.⁴⁹ However, his arguments require neither that the actor be an automaton acting solely on the basis of norms, nor that we reject the “rational” means-ends schema. Although he agreed that “desires and interests are . . . themselves causal conditions of results,” he did not ascribe the failure of *a priori* theories to their inadequate specification of Parsons’s “ultimate ends,” contesting instead the assumption that any such final state *needed* to be specified.⁵⁰

Means versus ends in a priori theory

A priori theory postulates actors with “values” or “desires” that serve as ends and in turn as the unique source of all valuations; only the appropriate means is *selected*.⁵¹ Ends beyond investigation are held strictly separate from means used only instrumentally. Valuation lies exclusively in the actor’s choosing of “ends-in-themselves” that are not also means (Parsons’s “ultimate ends”). If desires are to cause behavior in these teleological theories, only final ends can be legitimate causes of action, so any removal of the metaphysical foundations of the “ends-in-themselves” leads to an arbitrary rationality lacking a “rational” basis to judge ends. People acting on values based in “vital impulses” (where Dewey locates them, but we will come to that) are behaving irrationally. In *a priori* theory, Dewey writes, “an ideal is arbitrary if it is causally conditioned by actual existences and is relevant to actual needs of human beings.”⁵² However, by utilizing an “instrumental logic of social inquiry,” Dewey’s theory of valuation implies a non-arbitrary rationality independent of phenomena always and only categorized as “ends.”

Means-to-ends-to-means

The oft-cited dualism between means and ends is not tenable.⁵³ An end, or effect, soon becomes a means, or cause, for what follows. Human activity is continuous, and “nothing happens which is final in the sense that it is not part of any ongoing stream of events.”⁵⁴ “Ends are, in fact, literally endless, forever coming into existence as new

activities occasion new consequences,” and each is in a sense a means to ensuing ends. “Means and ends are two names for the same reality. The terms denote not a division in reality but a distinction in judgment” because their distinction arises only “in surveying the course of a proposed line of action, a connected series in time. The end is the last act thought of; the means are the acts to be performed prior to it in time.”⁵⁵ Human action is continuous so any designation of some particular state of affairs as exclusively an “end” implies a final resting point that exists only in analysis. In short, the “distinction between ends and means is temporal and relational.”⁵⁶

If there are no final ends, there can be no *end-in-itself*, only *ends-in-view*. “In fact, ends are ends-in-view or aims. They arise out of natural effects of consequences which in the beginning are hit upon, stumbled upon so far as any purpose is concerned.”⁵⁷ For Dewey, the end-in-view is a “means for directing action – just as a man’s health to be attained . . . is not identical with the end in the sense of actual outcome but is a means for directing action to achieving that end.”⁵⁸ In another metaphor, he suggests that an end-in-view is like the plans for a house, directing the building activities of workers; one can hardly say that the plans are the house itself. “An end-in-view is a means in present action; present action is not a means to a remote end.” When we refer to an end of action, we mean a plan to bring about some change in the present state of affairs; we posit ends-in-view as “directive stimuli to present choice.”⁵⁹ An end-in-view is a node by which the behavior of the actor is directed and coordinated.

Action as process and the beginnings of a non-arbitrary rationality

Action is continuous. Ends flow from means in a single causal process. Dewey argues that “every condition that has to be brought into existence in order to serve as means is, in that connection, . . . an end-in-view, while the end actually reached is a means to future ends as well as a test of valuations previously made.”⁶⁰ Actors choose *lines of action* in which a series of ends-in-view are posited as means to further ends-in-view. The last link in the chain is final only temporally in the actor’s ponderings. Hence, we can assess the adequacy of the particular means chosen, asking if it can *in fact* be expected to cause the ends-in-view, just as one can question whether or not the architect’s drawings are adequate to their role in the successful building of the house (to use Dewey’s earlier metaphor). Nonetheless, this seems a shrinking down

of the same problem, creating a fairly squalid rationality. We still have our end and even if it is not final, it remains arbitrary. An adequate and non-arbitrary rationality requires the evaluation of ends-in-view (in a temporal means-ends relation), a challenge Dewey answers by theorizing their formation.⁶¹

Desires and deliberation

Like others, Dewey considers desires to be the source of potential ends, but he does not treat them as static primary data. They originate first in “vital impulses,” defined to be “organic biological tendencies,” but these are not themselves desires, only a necessary source condition. Desires can be understood only in the context of the life process and in their development. Rather than a simple mapping of vital impulses, they derive as well from culturally transmitted habits. They are not *wishes* but represent only states that might be attainable. What is clearly unattainable is not subject to consideration as ends, as there is no way of conceiving means to their achievement (this follows from the removal of means-ends dualism).⁶² “Impulses” are also analytically distinct. Finally, and most importantly, desires mature and change as we learn from experience. As ends-in-view, they are hypotheses about future conditions that may or may not come about – what is desired is not necessarily achieved – and are subject to revision through deliberation.

Deliberation in Deweyan desire formation delineates clearly his differences with utilitarianism (whose proponents are often accused of making ridiculous demands on the mental power of agents). He wrote that “neither the utilitarians nor anyone else can exaggerate the proper office of reflection, of intelligence in conduct. The mistake lay not here but in a false conception of what constitutes reflection, deliberation.” The actor does not form desires “by way of a calculated estimate of future delights and miseries, but by way of experiencing present ones.”⁶³ Ideas – “anticipated consequences (forecasts) of what will happen when certain operations are executed under and with respect to observed conditions” – are important, but “reasoning as such, can provide means for effecting the change of conditions but by itself cannot effect it.”⁶⁴ Whereas utilitarian deliberation, Gray’s calculator, is introspective, Deweyan deliberation is outlooking, “a tentative trying-out of various courses of action,” in which the actor makes projections about what will satisfy her, constantly adjusting her desires as she receives new information about the *real* consequences of action.⁶⁵

Desires and the situation

In the Deweyan vision – in strong contrast to portfolio theories – desires are not simply “inside” the actor, but depend also on her situation. People do not constantly posit potential end-states and assess them as to their correspondence with present desires like the constantly calculating utilitarian actor. Rather, “it is as plain as anything can be that desires arise only when ‘there is something the matter,’ when there is some trouble in the existing situation.” When life goes smoothly, there is no need to “investigate what it would be better to have happen in the future, and hence no projection of an end-object.”⁶⁶ We go through life as creatures of habit until we encounter an indeterminate situation that presents us with conditions that we experience as a need, a conflict, a deficit, or a lack.⁶⁷ It is then that *inquiry* is required to transform a “problematic situation into a determinate situation,” when “in everyday living, men examine; they turn things over intellectually”; they infer and judge as “naturally as they reap and sow, produce and exchange commodities.”⁶⁸ Only when the life-process is somehow challenged do we survey ourselves for some means of defining and overcoming the problem, hypothesizing possible solution end-states. Creativity becomes a necessary part of the action framework, as actors seek new combinations, new means (and hence new ends and ends-in-view), new responses to vexing situations.⁶⁹

The situation and valuation

Only in “problem situations” are valuations made. “Ends-in-view are appraised or valued as good or bad on the ground of their serviceability in the direction of behavior dealing with states of affairs found to be objectionable because of some lack or conflict in them.”⁷⁰ A man walking thoughtlessly down the street does not ask himself whether it is good to do so, he simply does it. But if it starts to rain, he asks himself whether it is better to seek shelter and wait, to look for a cab and get wet until it arrives, to continue to walk and get wet, or any of myriad other options. In short, he questions what he wants, and assesses the ends-in-view (which in this case is a mode of transport) with respect to their ability to get him where he is going, and as dry as possible. The point of this intentionally banal example is to show that these various ends-in-view are open to assessment. Some are actually better than others at solving the problem. He asks himself what is the best way to achieve a situation in which the problem (getting wet) does

not exist (of course, not all problem situations are so banal). In this example, no complete feasible set of options is posited. The contention is rather that the actor “tries something” given the information that he has, which, in and of itself is not dissimilar to the conventional model of choice (the differences will be clearly drawn in the next section).

By taking ends as formed in reference to situations that signal some deficiency in the life process, Dewey considers himself to have established valuation-propositions. Whether or not a chosen end-in-view is in fact successful at solving the problem is an empirical matter, and we can therefore make valuations about valuations. An end-in-view is a hypothesis allowing the actor to undertake activity. If in her efforts she realizes that what she thought she desired will be insufficient to mitigate the deficient situation, she adjusts the original end-in-view, altering as well the *entire line of action* since means are connected to ends in a single continuous process. Values are subject to constant readjustment in response to problem situations and are not separate from everyday life in an unchanging normative realm, but derive instead from active reflection.⁷¹ They “have their immediate source in biological modes of behavior and owe their concrete content to the influence of cultural conditions.”⁷² Rather than “final causes,” they are steps in the continuous stream of life, means for the next action, and, very importantly, are subject to investigation because they arise only in relation to “problem situations.”

The undertheorized situation

The problem situation is an admittedly undertheorized and vague aspect of the Deweyan formulation, and one that is hard to describe adequately in general, given the pragmatists’ recognition of the explanatory power of contingent and contextual phenomena. Joas cautions that in adopting a non-teleological approach, we risk moving human action from situational contingency to being fully constituted by the situation (the Parsonsian fear).⁷³ To avoid this, he advances “the idea that the teleological and the quasi-dialogical nature of actions operate as reciprocal preconditions of each other.” We retain goals and meanings that depend upon the habits, norms, institutions, conventions, social relations, and culture that make up so much of (but not all of) our personalities, but they are not blindly determinative of our actions. Because technology is constantly evolving, it is a commonplace that we cannot specify all means in advance, but somehow the corollary –

that we also cannot pre-specify all ends of action because new means will always imply new ends – seems to get lost in the shuffle. We readily accept that a change in wants will lead people to choose different means, but forget that changes in the means available allow people to discover wants of which they were previously unaware. Pragmatism rejects the maximizing assumption as dependent on a knowledge of ends that have yet to be discovered, and posits in its place an actor who hypothesizes solutions to the problem, adjusting with experience.

The larger difficulty seems that the extreme contingency and indeterminacy of the world means that everything and nothing could be a problem situation. Fortunately, theorists need not simply sit and wait for the occasional problem-epiphany. Moment-to-moment action in the Deweyan framework consists of the following of habits or established patterns of behavior that have been found to work in the past – what Thorstein Veblen meant by “institutions” and not what Parsons meant by that same term; in more modern terminology, “habits” of this sort are often called “conventions.”⁷⁴ Problems arise when existing conventions fail to keep the life-process running smoothly, meaning that established expectations – themselves conventions – are not met. As Dewey wrote, the “intellectual search for ends is bound to arise when customs fail to give required guidance. And this failure happens when institutions break down; when invasions from without and inventions and innovations radically alter the course of life.”⁷⁵

Given the limitations of speaking generally about a phenomenon that is definitionally contextual, in the final section of the article I return to the construction of the situation in the concrete resolution of cooperation problems. Here, I wish only to recognize that the *situation* has acquired a very heavy explanatory load and if it remains a black box, pragmatist reconstruction is a lateral step at best.

Making explicit the contrast

Unlike rational choice actors, Deweyan actors do not have a fixed preference ordering on outcomes against which they measure all possible end-states. Instead, “we do not know what we are really after until a course of action is mentally worked out” and we hypothesize instead solutions using knowledge gained from past experience.⁷⁶ For Dewey, “the problem of deliberation is not to calculate future happenings but to appraise present proposed actions.”⁷⁷ Without a well-defined

and fixed preference ordering, the actor cannot be thought to be maximizing, because the “end-in-view” chosen by the actor is fundamentally dependent on the situation and the means actually available – ends are continuous with means.

Two key features emerge from the Deweyan formulation: first, the distinction between means and ends is *analytic*, with no hard and fast “final” ends to guide the intermediate ends that are in turn means; second, *desires*, fount of values, are *situational*. The actor does not possess an ordering of all possible states-of-affairs (given information) because the end-states to be ordered cannot be conceived outside their contexts. Actors choose *processes*, so “ends” are meaningless without *means-to-ends*. Ends flow from means as effect from cause, the choice of a different means necessarily implies a different end state (and vice versa).

Like Dewey, Parsons held that logical action follows means-ends schema, and that “such a system will be found to involve a series of interrelated ‘chains’ of means-ends relationships” in which former actions become means for later actions.⁷⁸ In this Parsons’s and Dewey’s writings agree; the disjuncture lies in Parsons’s conclusion that for the means-ends scheme to have causal analytical meaning, “ends must be conceived as an independent and effective factor in action and *of a fundamentally different order from the ‘conditions’ in which action takes place.*”⁷⁹ He held that the means-ends chain requires both “ultimate ends” and “ultimate means” – ends that are not also means and vice versa – and offered sociology as the social science able to provide a causal understanding of ultimate ends. Of the two “key features” of the Deweyan formulation, Parsons had some room for the first but none for the second.

There is a certain historical irony in the recent attention pragmatism is enjoying in social theory. Dewey and Parsons both aimed critical writings at *a priori*/postivist theory in the 1930s and both gave harsh treatment to the parametric treatment of desires and values in the theory of action, but only the Parsonsian critique made it into mainstream sociology. The pragmatist Deweyan critique did have an impact on social science, principally in institutional economics, but its stronger formulation denying the easy balkanization of social scientific disciplines was long (relatively) ignored in sociology.

The rational actor without her portfolio

My initial critique of the portfolio model is similar to Hindess's claim that it is incomplete because it fails to take account of the role of specialized techniques "that are clearly not inherent features of the actors themselves," but there are times in Hindess's analysis where he seems to think the main problem with the portfolio model is its lack of an essential, albeit social, element that could determine the way in which beliefs and desires map into preferences – which implies only an expansion of the portfolio.⁸⁰ He does, however, signal the importance of deliberation in the formulation of beliefs and desires, though elaborating it in a different direction from that of Dewey. This provides a useful entry into the pragmatist displacement of the portfolio model.

For Hindess, actors often deliberate over the best course of action, sometimes even changing beliefs and desires that are "open to challenge through reconsideration by the actor concerned and through discussion, propaganda and persuasion involving others." The sometimes success of such challenges "means that actors' beliefs and desires cannot be regarded as given elements of their consciousnesses until something drastic comes along to change them." Dewey would certainly agree, in principle, with the idea that desires are subject to change in the face of deliberation, but he goes beyond Hindess by arguing that there are no "ultimate beliefs and desires" – *no portfolio*.⁸¹

Again, Dewey's actors do not walk about with an understanding of some "best state" to be used as a basis for comparison (Gray's calculator), but they do make valuations and do desire things that spur them to action. Dewey explicitly states that "valuation involves desiring," cautioning however that we therefore need very thorough investigation of desires, because "practically all the fallacies in the theories that connect valuation with desire result from taking 'desire' at large."⁸² They should be thought to arise only in response to problem situations in which the actor posits an end-in-view, or coordinating hypothesis, as a solution. When desires are situational, it is nonsensical to build theory around actors possessing a complete and well-defined preference ordering of all possible end-states. Instead, actors live their lives "muddling along," following a series of "habits and vital impulses" until a "problem situation" arises, causing a desire to be formed.

Here, the portfolio theorist might argue that Dewey's claim to a distinct position falls: has he not simply posited a culturally constructed desire portfolio, albeit one called upon only when "there is something the matter"? The pragmatist response depends fundamentally on the untenability of means-ends dualism – when a desire is formed, a valuation is made since there is no hard and fast distinction between facts and values. The actor is an experimenter who encounters problem situations, but without a preformed set of values to dictate a desired end-state with its (necessary) means and actions. Instead, the actor hypothesizes activities – *means-to-ends* – that might resolve the problem and makes predictions about their results – the formation of the desire – choosing a best course of action but constantly adjusting it upon receiving new information about the actual effects of means chosen. In this encapsulation, it again seems akin to a dynamic rational choice construal, but differs in one essential dimension: desires arise in and depend on context. They are inseparable from the conditions that render possible the resolution of the problem, rather than chosen from a portfolio of pre-ordered end-states (even one as reflexive as the tinkerers propose). Through action, subjects learn the results of desires that "are subject to frustration" just as "interests are subject to defeat." Dewey wrote that "nothing more contrary to common sense can be imagined than the notion that we are incapable of changing our desires and interests by means of learning what the consequences of acting on them are."⁸³ In portfolio terminology, the actor only discovers her portfolio and preferences *after* acting, but it then seems paradoxical to say that she "really" has such preferences, especially when they can well be expected to change precisely as a result of the process by which they were revealed.

An actor without a portfolio is not reduced to functionalist behaviorism. There is room for purposive behavior and even "rationality" – though a rationality that demands more than the "consistency" of standard models, one that is able to do without "ultimate means" and "ultimate ends" to ground intermediate means-ends choices. Rather, the actor's means-to-ends relationships are guided by ends-in-view that represent predictions of future states of affairs able to mitigate a lack in the current state; inquiry can say something about the objective probability that a chosen course of action will indeed solve the problem. We do not go to an a-rational world – the actor does select a course of action – but the rationality is not arbitrary (like rational choice theory) because we are able to evaluate the end-in-view from an "objective" standpoint: we can make valuations about valuations. Re-

moving the actor's portfolio without rendering the actor an automaton challenges rational choice's paradigmatic privilege, positing a micro-foundational actor capable of purposive action who is not trying to approximate an end-state severed from the means to its attainment.

Restrained claims and theoretical eclecticism

Consistent with Dewey and the pragmatists' advocacy of theoretical and methodological pluralism, my arguments hardly mean that rational choice and game theoretic models should be scrapped. Their heuristic value is often immense, and I certainly neither expect nor want theorists suddenly to stop describing situations as "like a prisoner's dilemma" or using other such shorthand with rational choice roots. My aim is more restrained: denying that rational choice theory can usefully claim "paradigmatic privilege." From a pragmatist perspective, to grant an *a priori* theory the right of "first approximate explanation" abdicates sociology's responsibility to help people to understand and navigate their social worlds. In this, my arguments agree with the Parsonsian Sciulli: rational choice theory – as a portfolio theory – can provide only an apologetic for the existing state of affairs because it pushes social science only to *measure*, and not genuinely investigate, "metaphysical" values. The Parsonsians argue for some analysis of values' provenance, but are unable to say anything substantive about the class of phenomenon they believe to be "ultimate values." The "Tinkerers" introduce the reflexivity necessary for learning and create space for situational reasoning, but ultimately only render more complex the actors' decision rules. Pragmatist action theory develops these two insights, but also goes them one further by rejecting the very notion that it is *useful* to posit some class of phenomena that is always and only an "ends" of action, even if only in general form.

Dewey cautioned that when "social change is great, and a great variety of conflicting aims are suggested, reflection cannot be limited to the selection of one end out of a number which are suggested by conditions. Thinking has to operate creatively to form new ends."⁸⁴ The failure of *a priori* theories to subject ends to inquiry leads to a split between theory and practice that risks undermining creativity, experimentation, and the seeking of new solutions. Pragmatism seeks to change the role of the theory of action, using it to understand how people solve problems, and construes valuation as a means of improving the *practical* situation of human beings. In the final analysis, this is the fundamental turn in Dewey's arguments.

Why a pragmatist reconstruction *matters*

The pragmatist critique dismisses as flawed rational choice models that require a decontextualized actor, but it is legitimate to ask why this *matters*. Can these criticisms be fully accepted in principle, and then dismissed in practice as akin to a sophisticated clarification of the number of angels one might find on a pinhead? If rational choice theory provides good predictions or gives a behavioral norm that allows the isolation and investigation of the irrational as a social phenomenon unto itself, why not give it paradigmatic privilege despite realist shortcomings? Elster provides a hint: “if one is interested in rationality exclusively for the sake of predicting behavior, some of the conundrums would disappear, but others would remain. But I do not think that this is our only reason. We care about rationality because we want to be rational and want to know what rationality requires us to do.”⁸⁵ Social science can do more than simply predict behavior; it can help explain the social world and improve lives. As the institutional economist Clarence Ayres caustically wrote, “is price prediction the business of economics? Is the prediction of eclipses the business of astronomy?”⁸⁶

Still, it remains to be shown how pragmatism aids this weighty task. I could look again to Dewey and his voluminous economic and social writings. However, it seems better to draw instead on the substantive work of others in the (small but growing) “pragmatist revival” to show first, that I am not alone in turning these particular solutions of the past to problems of the present, and second (and more importantly), that my pragmatist reconstruction of action theory might usefully provide an action-theoretic foundation for this revival.⁸⁷ To this end, I next link my arguments to writing by Charles Sabel that turns a pragmatist/social experimentalist approach to contemporary instances of the sorts of cooperation problems and social dilemmas whose resolution is key fodder for much rational choice theory.

Coordination, cooperation, and conventions

Social dilemmas – the prisoner’s dilemma, public-good and collective action problems, and similar phenomena – are defined by Elinor Ostrom to “occur whenever individuals in interdependent situations face choices in which the maximization of short-term self-interest yields outcomes leaving all participants worse off than feasible alter-

natives.” The prisoner’s dilemma is an especially popular abstract description, because, she notes, it applies to “all of us – whenever we consider trusting others to cooperate with us on long-term joint endeavors.”⁸⁸

Prisoner’s (social) dilemma dynamics and their principal-agent brethren have a general place in social theory (to which we return below), but they are perhaps most apt in the study of the economy, where the uncertainty endemic to production and exchange requires actors to coordinate regularly. As noted by Michael Storper and Robert Salais, “all economic theory turns essentially, if implicitly, on the problem of coordinating actors” but in ways that can be more or less cooperative and dynamic, causing wide variation in transactions and coordination costs.⁸⁹ Furthermore, the bases of cooperation and coordination vary dramatically depending on their embedding in the larger social structure and are frequently argued to lie at least partially outside markets of traded goods and services in the realm of such “cultural” factors as trust and goodwill.⁹⁰

The Japanese economy is something of a *cause celebre* in discussions of inter-firm cooperation and the role of culture-specific (normative) factors in contracting largely because it “has grown so fast in the last century while maintaining the continuity of certain of its key economic institutions that it counts as a leading example of both a developing and an advanced economy.”⁹¹ Despite recent difficulties, it remains of unquestionable relevance to current debates, not least because so many elements of the “Japanese” model of production, and especially its coordinating core – customer-supplier relations – have diffused and are diffusing to other advanced economies. Questions remain about the extent and degree to which various parts are borrowed – main bank governance seems an unlikely arrival on U.S. shores – but Japanese managers are clearly not alone in subcontracting work to firms with whom they seek collaborative relations, or in implementing just-in-time inventory management and value-added engineering.⁹²

Most accounts of the Japanese model agree that due to the frequent externalization of productive phases, *trust* between the parties to contracts is increasingly important. The willingness of both sides to forgo the short term advantages available to opportunists (“hold-up”) leads to a freer flow of information, stimulating innovation and aiding the spread of new and more efficient productive techniques throughout the economy. It is uncontroversial to claim that an economy with wide-

spread goodwill and a lack of beggar-thy-neighbor behavior can be more efficient than one full of simple-minded short-term maximizers, but there remain numerous questions around the internal aspects of subcontracting relationships and the ways in which trust (or a reasonable facsimile) originates. The empirical existence of cooperation between contracting parties with interests defined as antagonistic implies that an apparent prisoner's dilemma (which has no cooperative solution) is no longer such – somehow, the payoffs have changed (usually to those of a coordination game). Explanations fall into two camps: a norm-based cultural account versus a game-theoretic rational choice account.

The cultural explanation finds in Japanese society historically-rooted and deep-seated norms of trust, in which, Sabel writes, “the fate of each is so entwined with the others that no one would think of exploiting the opportunities created by innovation to hold up a partner or hoodwink a principal,” akin to the Parsonsian claim that values derive from a society's normative structure.⁹³ Notably, we have a “portfolio” actor who chooses not to “hoodwink his principal” because he has been inculcated with the belief that such a choice is not what he “really” wants. If people have the right values, cooperation can be achieved, but it is difficult to understand how trust could either break down where it now exists or be newly established where it does not – some areas are *destined* to be dominated by cooperation, others by defection.⁹⁴ In a Parsonsian Japan, the game *never was a prisoner's dilemma*; the payoffs were misspecified.

Game-theoretic rational choice explanations argue that a functional “trust” is established by actors calculating that short-term defection harms long-term interests.⁹⁵ Standard game theory tools (subgame perfection, Nash equilibrium) show an infinitely repeated prisoner's dilemma (to which long-term principal-agent situations can be likened) to have cooperative solutions if both parties sufficiently value future income.⁹⁶ The appearance of trust is merely a self-interested decision by each to give the other the benefit of the doubt on the first interaction. Both parties then continue to cooperate since neither party ever has an incentive to renounce the deal, though both would given changes in future discounting, payoffs, or a defection by the other party. This differs from “cultural” explanations in allowing for cooperation to arise where previously absent (given uncertainty, the potential for new long-term partnerships crops up regularly), but it is inherently fragile. An actor will quickly exit whenever her short-term needs begin

to outweigh the expected (personal) gains from future cooperation, pushing the other to exit as well, possibly leading to global sub-optimality (using game-theoretic terminology). This (obviously) completely agrees with a portfolio conception: actors maximize well-defined interests subject to the world at large. Cooperation occurs when there are sufficiently large (time discounted) long-term gains to be had, without even a norm of trust (unless we define cooperation on the first interaction as a “trust norm”).

Sabel disputes the adequacy of both conventional explanations in the explanation of a Japanese production model that “has much more to do with the joint formulation of goals as between suppliers and customers in collaborative subcontracting systems than the common picture of prescient bureaucratic direction of economic actors suggests.”⁹⁷ The bureaucratic direction of actors feeling bound to negotiate (norms of trust) is generally a claim that interests can be harmonized into a solution with a mutually advantageous division of benefits. However, if the interests of each party are ill-defined prior to the negotiation and are formed through the interaction itself, there are problems with the claim that the Japanese system is about a willingness of agents (suppliers) to follow the dictates of their principals (customer firms). Game theoretic and cultural explanations both assume that failures of cooperation result when one party defects because short-term benefits suddenly outweigh the benefits of interaction (indeed, they define it so); defections *had to happen*, either as a mandate of the high (or low) payoffs or the inability of weak norms to transform payoffs. From a pragmatist view, the “best” state (and hence the payoffs) is not given, so failures of cooperation are more likely to be caused by an inability of the parties to pose the problem adequately – *failure as inability*. In both conventional explanations, Sabel explains, “agreements fail because of earthly self-regarding motives, not haplessness in the face of higher powers.”⁹⁸ They do not recognize that identities are constantly redefined through interaction, persuasion, and exploration. Given the *ex post* results, non-cooperation can be redescribed in terms of payoffs or the failure of norms to restrain opportunism, but such an explanation is tautological; a useful account requires showing how people interact in real situations to overcome uncertainty (or fail to).

Pragmatic cooperation is apparently similar to the game-theoretic variety – “trust” results from interaction between the parties – but it is not nearly so fragile and does not depend on the fortuitous coincidence of mutually compatible interests, since these do not exist in a

well-defined state prior to interaction. Likewise, it is not plagued by the presumption of stability and assuming away of cooperation failures endemic to a normative explanation dependent on “oversocialized man,” trustworthy in spite of his interests. Both conventional explanations disappoint because they “assume that cooperation is the result of anterior conditions: the alignment of the actors’ self-interests in the one case and the normative characteristics of a group or habits of reciprocity in the other” and do not “contemplate the specific possibility that the inner workings of cooperation might transform the actors’ understandings of one another in relation to the commonly defined world in which their interests are rooted.”⁹⁹ Sabel argues that an adequate conceptualization of the Japanese model of production must understand cooperation to be rooted in an institutional structure that encourages sufficient interaction between the parties in such a way that they are able mutually to reshape their interests to solve emergent problems (“learning by monitoring”).¹⁰⁰

Sabel contends that the importance of joint formulation of goals in the construction of cooperation has not been lost on American firms utilizing elements of the Japanese model to build “pragmatist” firms cognizant of the “pervasive ambiguity of purpose and capacities,” with “organizations that allow for the clarification of ambiguous ends through the exploration of means, and vice versa.”¹⁰¹ As these firms decentralize production, they are deeply dependent on the “continuous, disciplined exchange of information among all those collaborating in production, not the contractual relations among the autonomous agents, each presumed to know by itself what needs to be done to meet its obligations to the others, which is, of course, the neo-classical view.”¹⁰²

The inadequacies of an institutional structure derived from principal-agent assumptions are not limited to the coordination of economic activity. In reform movements in environments as diverse as the governance of the Chicago public school system and the clean-up of the Chesapeake Bay watershed, Sabel finds evidence of an emerging “democratic experimentalism” that blurs “the distinction between bureaucratic formality and networked informality [to] allow for co-ordination in the changes of parts and wholes unattainable by conventional means.”¹⁰³ Space constraints preclude a more detailed exposition of these cases, but I do wish to emphasize the great potential for a pragmatist re-interpretation of emergent cooperation, both in its explanation when it occurs (e.g., Japan) and as a tool to construct institutions that

make its occurrence more likely (e.g., creating democratic oversight in the Chicago schools).

Back to the "situation"

In the pragmatist construal, desires/interests form only in reference to specific problem situations, which must be explained lest the theory fall on a horn of the utilitarian dilemma (randomness of action). General statements here are necessarily qualified, but drawing on Sabel's examples of pragmatic cooperation, we can discern the contingency and the construction of the problem situation – *contingency* because problems are often unanticipated results of action in an uncertain world and *construction* because configurations of institutions and conventions help dictate what is defined a "problem." Both economic sociology and evolutionary economics have argued that in uncertain environments, actors rely on "rules of thumb" and other social devices to structure the situation.¹⁰⁴ That is, we require "conventions," defined by Storper and Salais as "a system of mutual expectations with respect to the competences and behaviors of others."¹⁰⁵ Conventions differ from norms, as they are by no means binding, or even explicitly constraining in James Coleman's rational choice sense; "defining" better captures the concept.¹⁰⁶ They are established ways of doing things that allow people to coordinate anticipations. Importantly (for us), conventions allow theorists to get some purchase on the problem situation without fully defining it *a priori*. When practices are unsuccessful (on their own terms) in meeting the demands of an uncertain world, actors hypothesize new ways of constructing coordination.

In the Japanese case discussed above, Sabel contends that a set of conventions of which actors are well aware obliges "the parties to redefine their projects and obligations as their joint experience outpaces their initial understanding. It is the constant re-elaboration of intent that can produce the fundamental alignment of interests that sociological account assumes as the precondition of cooperation and economic account excludes even as a consequence."¹⁰⁷ This system does not *presuppose* long-term relations, but instead *produces* them as parties interact to set targets and provide each other enough information to assess whether or not conventions, as proposed solutions to past problems, are up to their agreed upon tasks.

The inadequacy of established conventions also spurred the reform of governance in the Chicago schools. Sabel writes that:

after decades of skirmishing, inveterate antagonists (in the case of education: school administrators, teachers and parents) exhaust confidence in their respective strategies and relax doctrinal commitments.... Facing urgent problems (crumbling schools and disastrous drop-out rates) the actors agree to explore new solutions, without agreeing to put aside differences in values that originally divided them (whether government is in principle good or bad).¹⁰⁸

In general, experimentalist programs “emerge where actors, having lost confidence in long-standing, broad-gauge strategies (more market, more state), and without agreeing on deep values (the primacy of the individual as against the group, or vice versa) are nonetheless convinced of the need to respond to urgent problems.”

The lesson

These examples show that a pragmatist theory of action can settle paradoxes made seemingly inevitable by the portfolio model of the actor, and that it is of particular application to the many collective action problems analytically similar to prisoner’s dilemmas. A prisoner’s dilemma is (definitionally) unresolvable as posed, so observed instances of cooperation force the cultural explanation to posit payoff-changing norms that cause people to act against their “true” individual interest – an apparently oxymoronic claim drawn from a hypothesized sense of attachment to the larger collectivity. Rational choice explanations embed apparently isolated prisoner’s dilemmas in larger games where players can induce partners to toe the line (for now) by threatening future returns, an explanation that ought to lead to far less cooperation than is empirically observed but that at least does not depend on murky and ill-defined “external forces.” If we discard the very notion of the portfolio, we find answers to coordination problems in the actors’ formation of common interests through mutual interaction rather than by fortuitous coincidence. Between the hard-wired interests of the rational choice theorists and the over-riding of those interests by the sociologists’ norms, Sabel writes, “it is impossible to predict what persons or groups will do by looking at their interests, values, or institutions because the limits of these can always become the starting point for their redefinition.”¹⁰⁹

This may raise fears of indeterminacy, but the pragmatist position hardly means that nothing can be said about the social world, only that we cannot assume solutions to problems without reference to the actual experience of the parties involved – we must instead make room for novelty. The “situation” has indeed acquired a heavy explanatory load, but this is an opportunity, not a threat. A pragmatic action schema encourages problem-driven theorizing able to cope with historical contingency and uncertainty even as it focuses attention on likely breakdowns of conventions. Disposing of the positive-normative dualism pushes social science to question established practices, to aid in the construction of new conventions (ends-in-view hypothesized to solve a problem) likely to create new, different problem situations. Through the deliberation over solutions to novel problems, we will formulate new knowledge and better solutions to old problems; a good pragmatist theory aspires to both description and prescription.

John Dewey wrote that “the acceptance of fixed ends in themselves is an aspect of man’s devotion to the ideal of certainty.”¹¹⁰ If certainty is what one asks of social science, the removal of the actor’s portfolio is troubling. However, if we accept that our inability to know everything does not mean we cannot know anything at all, if, as Margaret Somers (following Thomas Kuhn) remarks, we allow theory to “advance as movement *from* present knowledge, rather than *toward* absolute truth,” social science can be a problem solving enterprise.¹¹¹ It can recommend, for example, that cooperation between economic actors is best brought about by creating institutions (“establishing practices”) that push actors to experiment jointly with new solutions instead of assuming either that cooperation is impossible without a sufficient endowment of norms or that constant monitoring is required to circumvent defection by rational actors whose antagonism lurks ready to emerge at the slightest provocation. High-minded as this sounds, Sabel has documented that just such institutions are being created in settings as diverse as reorganizing firms and the reconstruction of local government.

Conclusion

Most conventional attacks on rational choice theory – *even when their main points are accepted* – leave unchallenged its paradigmatic privilege because they implicitly accept a portfolio model of the actor. Parsonsian challenges accurately chastise rational choice theorists for

“assuming” actors” goals but really require only an adequate description of the value system, a sort of index to be consulted by rational choice theorists as needed. This implies that the social sciences should divide across the elements of the means-ends action schema, so that we are left with deeply balkanized social sciences at best and perhaps with a sociology reduced to the description of people’s values. Tinkering critiques suggest a reflexive and situated actor, but again do not go far enough. The acceptance of the core intimation of rational choice theory – that actors “have” beliefs and desires that are at some level independent of the conditions of action – demands only a sufficiently complex decision rule in those cases where the simpler rule proves inadequate.

In this article, I have argued that while rational choice and other portfolio theories do have their place in the social scientist’s theoretical toolbox, to premise a paradigmatically privileged theory of action upon fixed ends is to limit social scientists in their selection of means, and so also in their selection of ends-in-view. This artificially limits our ability to speak usefully to the problems of the day.

I have also tried to make this a positive critique, doing my part to build a social science able both to describe and to prescribe human action in a world of uncertainty, by giving the general contours of the theory of action required by a sociology of conventions. Removing the portfolio but retaining desires as causes of action places the situation – though not abstracted from the actor – at the center of investigation, with conventions, institutions, habits, and the like providing a systematic entry to its theorization. The trick is to recognize that the situation is *not* constitutive of action but is rather the occasion for the formation of an end-in-view to solve a problem. There is no good reason to assume that actors choose ends-in-view by maximizing relative to stable preferences, as this leaves no room for novelty and suggests that similar situations always call for similar actions. It fails to recognize that problem-situations are occasioned precisely by the inability of established practices to meet established expectations. By assuming that the actor must either follow norms or blindly adhere to his fixed interests, the task of searching for new solutions is obscured. Social science can be a problem-solving enterprise, focused first on theorizing the situation, and then turning to the all important task of valuation – providing people with a means to the formation of ends-in-view to direct action fruitfully.

Acknowledgments

I thank Hans Joas for introducing me to Pragmatism, Charles Camic for first shepherding these scattered thoughts into a coherent argument, and Jonathan Zeitlin, Neil Gross, and Pablo Mitnik for their useful commentary and conversation. Additionally, I want to acknowledge the *Theory and Society* reviewers for their (justified) request that I “tone down” some of my claims. An anonymous reviewer of a past version of this article also provided some very helpful suggestions on the Dewey section.

Notes

1. Michael Hechter and Satoshi Kanazawa, “Sociological Rational Choice Theory,” *Annual Review of Sociology* 23 (1997).
2. Dennis W. Wrong, “Is Rational Choice Humanity’s Most Distinctive Trait?,” *The American Sociologist* 28/2 (1997): 77.
3. The list of contributors to these two symposia reads like an extraction from a *Who’s Who* of influential sociologists: Peter Blau, Raymond Boudon, William Goode, Jack Goldstone, Douglas Heckathorn, Joan Huber, Michal Hechter, and Edgar Kiser, James Short Jr., Margaret Somers, Charles Tilly, and Dennis Wrong (among others).
4. On paradigmatic privilege, see Peter Abell, “Is Rational Choice Theory a Rational Choice of Theory,” in *Rational Choice Theory: Advocacy and Critique*, ed. J. Coleman and T. Fararo (London: Sage, 1992); on the portfolio model, see Barry Hindess, *Choice, Rationality, and Social Theory* (Boston: Unwin Hyman, 1988).
5. Hindess, *Choice, Rationality, and Social Theory*, 39
6. William J. Goode, “Rational Choice Theory,” *The American Sociologist* 28/2 (1997): 24; see also Douglas D. Heckathorn, “Overview: The Paradoxical Relationship between Sociology and Rational Choice,” *The American Sociologist* 28, no. 2 (1997); Joan Huber, “Rational Choice Models in Sociology,” *The American Sociologist* 28/2 (1997); James F. Short Jr., “The Place of Rational Choice in Criminology and Risk Analysis,” *The American Sociologist* 28/2 (1997). They all make the similar claim that many sociologists use rational choice theory quite regularly, though without explicit acknowledgment or recognition.
7. The line of critique I am developing in this article has its roots in writings of quite some years ago but has gone largely, though not entirely, undeveloped until recently, at least in direct response to rational choice theory – see especially Hans Joas, *Pragmatism and Social Theory* (Chicago: Univ. of Chicago Press, 1993); Hans Joas, *The Creativity of Action* (Chicago: University of Chicago Press, 1996). In social science, pragmatism always found its fullest expression in the “old” institutional economics, particularly in the branch that traces its lineage to Thorstein Veblen and Clarence Ayres. To the extent that institutionalist critique is outside the mainstream literature in economics, its pragmatist roots do not find their way into the rational choice literature.
8. An elegant justification of this position is provided by Margaret Somers in her

- response to the use of rational choice theory in historical sociology. She argues that theories should not be “constructed and judged exclusively by theory-driven standards” but should be “problem-driven and judged by grappling with the difficult question of what – beyond the elegance of the theory itself – makes an explanation convincing.” See Margaret R. Somers, “‘We’re No Angels’: Realism, Rational Choice, and Relationality in Social Science,” *American Journal of Sociology* 104/3 (1998): 724.
9. James March, “Theories of Choice and Making Decisions,” *Society* 20 (1982). I also use Andreu Mas-Colell, Michael Whinston, and Jerry Green, *Microeconomic Theory* (Oxford: Oxford University Press, 1995), a standard graduate microeconomics text, for game-theoretic terminology.
 10. Gary Becker, *The Economic Approach to Human Behavior* (Chicago: Chicago University Press, 1976); James Coleman, “A Rational Choice Perspective on Economic Sociology,” in *The Handbook of Economic Sociology*, ed. N. Smelser and R. Swedberg (Princeton: Princeton University Press, 1994).
 11. Heckathorn, “Overview: The Paradoxical Relationship between Sociology and Rational Choice.” He writes that maximization per se does “not constitute a point of essential differentiation between traditional and rational-choice theory.”
 12. Hindess, *Choice, Rationality, and Social Theory*.
 13. To predict or explain behavior, it is sufficient that the actor’s expectations be changed. Nevertheless, this often does reflect “real” changes, in the sense that something different really will happen.
 14. Michael Hechter, “The Role of Values in Rational Choice Theory,” *Rationality and Society* 6/3 (1994).
 15. John Gray, “The Economic Approach to Human Behavior: Its Prospects and Limitations,” in *Economic Imperialism: The Economic Approach Applied Outside the Field of Economics*, ed. G. Radnitzky and P. Bernholz (New York: Paragon House Publishers, 1987).
 16. Michael Hechter and Satoshi Kanazawa, “Sociological Rational Choice Theory,” *Annual Review of Sociology* 23 (1997).
 17. Peter M. Blau, “On Limitations of Rational Choice Theory for Sociology,” *The American Sociologist* 28/2 (1997).
 18. Abell, “Is Rational Choice Theory a Rational Choice of Theory?” Abell says paradigmatic privilege means that “if the predictions of our theory fail, then we should at least initially assume that we have modeled the preferences incorrectly rather than assume a suboptimal choice.” See also Edgar Kiser and Michael Hechter, “The Debate on Historical Sociology: Rational Choice Theory and Its Critics,” *American Journal of Sociology* 104/3 (1998): 809. They write that in the face of anomalous findings, “modification of the explanation should be made first in the least central aspects of the theory, with consideration of successively more central elements if that tack fails. Thus, if a given model comes up short, first change the model of social structural constraints.”
 19. Charles Camic, “The Making of a Method,” *American Sociological Review* 52 (1987); Talcott Parsons, *The Structure of Social Action* (New York: The Free Press, [1937] 1968); Talcott Parsons, “Sociological Elements in Economic Thought,” in *Talcott Parsons: The Early Essays*, ed. C. Camic (Chicago: University of Chicago Press, [1935] 1991); Talcott Parsons, “The Place of Ultimate Values in Sociological Theory,” in *Talcott Parsons: The Early Essays*, ed. C. Camic (Chicago: University of Chicago Press, [1935] 1991).
 20. Talcott Parsons, “Pareto’s Central Analytical Scheme,” in *Talcott Parsons: The*

- Early Essays*, ed. C. Camic (Chicago: University of Chicago Press, [1936] 1991), 141.
21. Talcott Parsons, "Some Reflections on 'the Nature and Significance of Economics,'" in *Talcott Parsons: The Early Essays*, ed. C. Camic (Chicago: University of Chicago Press, [1934] 1991), 155–156.
 22. *Ibid.*, 159.
 23. Parsons, *The Structure of Social Action*, 64.
 24. *Ibid.*, 46; italics in original.
 25. *Ibid.*, 81–82.
 26. Parsons, "Sociological Elements in Economic Thought," 225.
 27. Parsons, "The Place of Ultimate Values in Sociological Theory," 255; Parsons, "Sociological Elements in Economic Thought," 215.
 28. The rest of the division of labor centers on the formation of the objective feasible set; the investigation of "ultimate means" is left to other sciences (i.e., biology and perhaps psychology) to tell us what actions could *possibly* be chosen.
 29. Frank Lechner, "The New Utilitarianism," *Current Perspectives in Social Theory* 10 (1990): 96.
 30. James Bohman, "The Limits of Rational Choice Explanation," in *Rational Choice Theory: Advocacy and Critique*, ed. J. Coleman and T. Fararo (London: Sage, 1992), 225.
 31. David Sciulli, "Weaknesses in Rational Choice Theory's Contribution to Comparative Research," in *Rational Choice Theory: Advocacy and Critique*, ed. J. Coleman and T. Fararo (London: Sage, 1992), 162. Sciulli argues as well that rational choice theory is inherently conservative, writing that "their conceptual framework eliminates the possibility of balanced critique. It encourages instead one-sided or unreflective apologetics for existing social arrangements." I am not trying conveniently to ignore this criticism because it does not fall into my typology. I leave it out because he extrapolates it from his underlying claim that it is the randomness of preferences that implies that all is "rational" *ex post*.
 32. Richard Munch, "Rational Choice Theory: A Critical Assessment of Its Explanatory Power," in *Rational Choice Theory: Advocacy and Critique*, ed. J. Coleman and T. Fararo (London: Sage, 1992), 160.
 33. Marc Gould, "Book Review of *Nuts and Bolts for the Social Sciences* by Jon Elster," *American Journal of Sociology* 96/6 (1991): 1548; see also Marc Gould, "Parsons' Economic Sociology: A Failure of Will," *Sociological Inquiry* 61/1 (1991).
 34. Which is not to say that they agree that all action is rational. Certainly it is a key Parsonsian claim that there are other types of action (which is not denied by rational choice theorists), but the attempts to deny rational action paradigmatic status as the "primary" type of action rest on the claim that it is an arbitrary and not terribly useful stopping point in the explanation of human behavior.
 35. Debra Friedman and Michael Hechter, "The Contribution of Rational Choice Theory to Macrosociological Research," *Sociological Theory* 6 (1988): 202; see also Hechter, "The Role of Values in Rational Choice Theory": 318.
 36. Hechter and Kanazawa, "Sociological Rational Choice Theory": 193.
 37. Hechter, "The Role of Values in Rational Choice Theory": 318–319.
 38. Cited in Gray, "The Economic Approach to Human Behavior: Its Prospects and Limitations."
 39. Goode, "Rational Choice Theory": 39; see also Huber, "Rational Choice Models in Sociology": 51. She agrees that "rational choice theories, if they are to succeed in sociology, need to be anchored in institutions."

40. Amartya Sen, "Rational Fools: A Critique of the Behavioral Assumptions of Economic Theory," *Philosophy and Public Affairs* 4 (1977); Albert Hirschman, "Against Parsimony: Three Easy Ways of Complicating Some Categories of Economic Discourse," *Economics and Philosophy* 1 (1985); Amitai Etzioni, *The Moral Dimension: Toward a New Economics* (New York: The Free Press, 1988); Herbert Simon, *Administrative Behavior: A Study of Decision-Making Processes in Administrative Organization* (New York: The Free Press, 1976).
41. Abell, "Is Rational Choice Theory a Rational Choice of Theory," 197.
42. Mark Granovetter, "Economic Action and Social Structure: The Problem of Embeddedness," *American Journal of Sociology* 91, no. 3 (1985): 504.
43. *Ibid.*: 506.
44. Hirschman, "Against Parsimony: Three Easy Ways of Complicating Some Categories of Economic Discourse": 19.
45. Etzioni, *The Moral Dimension: Toward a New Economics*.
46. Hindess, *Choice, Rationality, and Social Theory*, 39; 59. Hindess has his own critique of the rational actor model that he claims transcends the portfolio model by incorporating deliberation and styles of reasoning. I do not agree that he in fact goes beyond the portfolio model but that is neither here nor there for this article, as I present a critique that transcends it in a different way.
47. In using Dewey's writings to bolster my case, I do not wish to imply that he is or was the only theorist to question the fixity of ends; pragmatism was (and is) a movement of many, not one. That said, his detailed analysis of the means-ends relationship – particularly in his writings on valuation – can usefully do much of the work required to deny paradigmatic privilege to rational choice theory.
48. Joas, *The Creativity of Action*. I do not intend to imply either that Joas fails to recognize the importance of the means-ends relationship (he does), or that his is a "portfolio" conception of the actor (it is not). Given space constraints and because a central theme here is that conventional critique of rational choice theory is "doomed" to inadequacy, I prefer to avoid confusing things by discussing the relatively few other unconventional critiques except where they are helpful in bolstering my own case. I offer an argument that can complement other efforts at reconstruction in a pragmatist vein rather than picking at subtleties within them.
49. Although I am applying this to rational choice theory, only one of the "*a priori*" theories out there, in presenting Dewey's own work I write of *a priori* theory generally so as not to corrupt his original meaning. I do hold that one could simply substitute "rational choice" for every instance of *a priori* without distorting (only narrowing) the meaning. Also, note that even rational choice theorists who advocate investigation of the value element think that it needs only to be adequately determined so that it can be treated as a parameter of theorizing. In this sense, all of these theories can be treated as "*a priori*" in that they take values as an element fundamentally to be noted but do not require that science say anything about those valuations.
50. John Dewey, *Theory of Valuation* (Chicago: University of Chicago Press, 1939), 32. I rely heavily on this text and on John Dewey, *Human Nature and Conduct* (New York: The Modern Library, [1922] 1957). Though not written expressly in response to "economic thinking," these works provide his most detailed treatment of the means-ends continuum.
51. The Deweyan position accepts "values" as essential to a theory of action but disputes that they are either exogenous or reducible to the "conditions of action."

Importantly, Dewey also rejected as untenable the positive-normative dualism, and held that we can verify empirically statements usually construed as purely normative. See especially Dewey, *Theory of Valuation*.

52. *Ibid.*, 39.
53. This does not mean that one cannot easily make the analytic distinction between the two. I mean quite precisely that upon inspection, it is clear that the categories of means and ends are not a *dualism*; there is no end that is always and only an end, but never a means.
54. Dewey, *Theory of Valuation*, 43.
55. Dewey, *Human Nature and Conduct*, 232, 36, 34.
56. Dewey, *Theory of Valuation*, 43.
57. Dewey, *Human Nature and Conduct*, 225.
58. John Dewey, "Means and Ends," in *Their Morals and Ours: Marxist Versus Liberal Views on Morality*, ed. G. Novack (New York: Merit Publishers, [1939] 1969), 53.
59. Dewey, *Human Nature and Conduct*, 226, 227.
60. Dewey, *Theory of Valuation*, 43.
61. Henceforth, I often write only "ends" though I in fact mean "ends-in-view." This is simply a matter of convenience, as it is a bit awkward to continue to use "ends-in-view" when I have already said that they are the only sort found in the decision process. I will still at times use the full "end-in-view" when I think it lends clarity.
62. Note the contrast with a rational choice theory in which actors have preferences over all theoretically possible states of the world (assumption of completeness), regardless of beliefs about the possibility of bringing such states into being.
63. Dewey, *Human Nature and Conduct*, 222, 200.
64. John Dewey, *Logic: The Theory of Inquiry* (New York: Henry Holt and Co., 1938), 109.
65. Dewey, *Human Nature and Conduct*, 202.
66. Dewey, *Theory of Valuation*, 33.
67. A full discussion of Dewey's understanding of habit would lead the argumentation afield. However, it is important to recognize that he did *not* mean simply a "tendency to repeated outer action," and held that the "conception of habit ... needs to be deepened and extended." It "reaches ... down into the very structure of the self" and "signifies a building up and solidifying of certain desires.... Habit covers in other words the very make-up of desire, intent, choice disposition which gives an act its voluntary quality." In giving way to a momentary impulse, a person "commits himself not just to that isolated act but to a *course* of action, to a *line* of behavior." See John Dewey and James Tufts, *Ethics* (New York: Henry Holt and Co., 1932), 181–182.
68. Dewey, *Logic: The Theory of Inquiry*, 117, 102.
69. For a fuller discussion of Dewey's ideas on the problem situation in individual action, see especially chapter 6 of Dewey's *Logic: The Theory of Inquiry*. For a good and more recent development of the importance of creativity, see Joas, *The Creativity of Action*.
70. Dewey, *Theory of Valuation*, 43.
71. Contrast this to Hechter's claim that "values" are precisely the stable elements of the actor that underlie preferences.
72. Dewey, *Theory of Valuation*, 64.
73. Joas, *The Creativity of Action*, 161.
74. Charles Camic, "An Historical Prologue," *American Sociological Review* 55 (1990); Michael Storper and Robert Salais, *Worlds of Production: The Action Frameworks of the Economy* (Cambridge: Harvard University Press, 1997).

75. Dewey and Tufts, *Ethics*, 197.
76. Dewey, *Human Nature and Conduct*, 36. This is a relatively subtle point and could be confused with “satisficing” behavior in which the actor picks the first option that presents itself that is “good enough.” Satisficing still suggests that there is a “best” action in terms of the actor’s preferences, complicated only by the high information gathering and processing costs that render it unfeasible or impossible to determine the maximizing option. In the Deweyan construal, the desire is formulated precisely in response to the specific situation and its status as best/worst depends upon actual experience.
77. *Ibid.*, 206.
78. Parsons, “Pareto’s Central Analytical Scheme,” 141.
79. Parsons, “Some Reflections on ‘the Nature and Significance of Economics,’” 162; italics added.
80. Hindess, *Choice, Rationality, and Social Theory*, 90; 87. For example, he writes that “to say that actors may employ specialized techniques in their deliberations is to say that action does not always result directly from belief and desire. Instead it results from belief, desire and whatever specialized techniques actors employ in their deliberations.”
81. On my reading, Hindess arguments largely reduce to the claim that the portfolio is fundamentally structured by society and jointly held, making it wrong to say that it “belongs” to the actor (because the elements of the portfolio change and there are some social elements that are held across portfolios, denying their strict separability). He might well disagree with that reading, but since my primary disputes here are certainly not with Hindess, there is no need to develop this further.
82. Dewey, *Theory of Valuation*, 15, 18.
83. *Ibid.*, 29, 31.
84. Dewey and Tufts, *Ethics*, 198, 493.
85. Jon Elster, “Some Unresolved Problems in the Theory of Rational Behavior,” *Acta Sociologica* 36 (1993).
86. Clarence Ayres, *The Theory of Economic Progress* (New York: Schocken Books, [1944] 1962).
87. For other attempts to walk the line between the fixed instrumental interests of *homo economicus* and the hard-wired norms of oversocialized man, see especially Storper and Salais, *Worlds of Production: The Action Frameworks of the Economy* and Jens Beckert, “What Is Sociological About Economic Sociology: Uncertainty and the Embeddedness of Economic Action,” *Theory and Society* 25/6 (1996). Interestingly, even the rational choice theorist Michael Macy advocates the construction of an “emergent” rationality using “the explanatory power of the *unintended* consequences of action” based in rules “embedded in heuristic conventions and habits, symbolic and ceremonial rituals, moral codes, social customs and protocols, and institutional norms and routines.” Such a rationality is “grounded in action, not calculation.” However, because he fails to move beyond the portfolio model to recognize the possibilities of deliberation, Macy argues that his emergent rationality is “incompatible with assumptions of purposive action and is strictly limited” in its application. Despite these shortcomings, he provides a testament to the obvious potential of this line of theorizing. See Michael W. Macy, “Identity, Interest and Emergent Rationality: An Evolutionary Synthesis,” *Rationality and Society* 9/4 (1997): 435–436.
88. Elinor Ostrom, “A Behavioral Approach to the Rational Choice Theory of Collective Action: Presidential Address, American Political Science Association, 1997,” *American Political Science Review* 92, no. 1 (1998): 1, 2.

89. Storper and Salais, *Worlds of Production: The Action Frameworks of the Economy*, 27; Ronald Dore, *Flexible Rigidities: Industrial Policy and the Structural Adjustment in the Japanese Economy* (Stanford: Stanford University Press, 1986); Michael Piore and Charles Sabel, *The Second Industrial Divide: Possibilities for Prosperity* (New York: Basic Books, 1984); Charles Sabel, "Flexible Specialization and the Re-Emergence of Regional Economies," in *Reversing Industrial Decline?: Industrial Structure and Policy Britain and Her Competitors*, ed. P. Hirst and J. Zeitlin (Oxford: Berg, 1989); Paul Hirst and Jonathan Zeitlin, "Flexible Specialization Versus Post-Fordism: Theory, Evidence and Policy Implications," *Economy and Society* 20/1 (1991).
90. Richard Swedberg, "Markets as Social Structures," in *The Handbook of Economic Sociology*, ed. N. Smelser and R. Swedberg (Princeton: Princeton University Press, 1994). Note also that contracting relationships between firms are easily described in the lexicon of the prisoner's dilemma: given adequate cooperation, both parties are better off, but there are always issues of distribution of benefits to be resolved that can lead to opportunism and defection.
91. Charles Sabel, "Learning by Monitoring: The Institutions of Economic Development," in *The Handbook of Economic Sociology*, ed. N. Smelser and R. Swedberg (Princeton: Princeton University Press, 1994), 139.
92. *Ibid.*; Charles Sabel, "An American View of the Novel Universalism of Japanese Production Methods and Their Awkward Fit with Current Forms of Corporate Governance," (Tokyo: Conference on Socio-Economic Systems of the Twenty-first Century, 1996); James P. Womack, Daniel T. Jones, and Daniel Roos, *The Machine That Changed the World : The Story of Lean Production* (New York, NY: Harper-Perennial, 1991); Susan Helper, John Paul MacDuffie, and Charles Sabel, "Pragmatic Collaborations: Advancing Knowledge While Controlling Opportunism," *Industrial and Corporate Change* 9/3 (2000).
93. Sabel, "Learning by Monitoring: The Institutions of Economic Development," 138.
94. For a good example of such argumentation, see Ronald Dore, "Goodwill and the Spirit of Market Capitalism," *The British Journal of Sociology* 34 (1983). For similar claims about regions in Italy (i.e., Emilia-Romagna) see Ash Amin and Nigel Thrift, "Living in the Global," in *Globalization, Institutions, and Regional Development in Europe*, ed. Amin and Thrift (New York: Oxford Univ press, 1994); or for an extreme view, see Robert Putnam, *Making Democracy Work: Civic Traditions in Modern Italy* (Princeton: Princeton University Press, 1993).
95. It is possible to give only a bare-bones outline of this (and the other) position here, but the essential point to be gleaned is that trust is not required in a world of actors with well-defined interests, adequate returns from cooperation, and a sufficiently low discounting of future gains. A fuller explanation would make clearer the fragility of such "trust."
96. This is by the folk theorem. See, for example, Mas-Colell, Whinston, and Green, *Microeconomic Theory*, 404.
97. Sabel, "Learning by Monitoring: The Institutions of Economic Development," 139.
98. *Ibid.*, 146.
99. *Ibid.*, 155.
100. *Ibid.*; Sabel, "An American View of the Novel Universalism of Japanese Production Methods and Their Awkward Fit with Current Forms of Corporate Governance."

101. Charles Sabel, "A Quiet Revolution of Democratic Governance: Towards Democratic Experimentalism," (Hannover: Conference on 21st Century Governance: Power in the Global Knowledge Economy and Society, 2000): 13.
102. Sabel, "An American View of the Novel Universalism of Japanese Production Methods and Their Awkward Fit with Current Forms of Corporate Governance": 3.
103. Charles Sabel, "After Backyard Environmentalism: Toward a Performance-Based Regime of Environmental Regulation," (New York: Columbia University, 1999); Sabel, "A Quiet Revolution of Democratic Governance: Towards Democratic Experimentalism": 13.
104. Beckert, "What Is Sociological About Economic Sociology: Uncertainty and the Embeddedness of Economic Action."
105. Storper and Salais, *Worlds of Production: The Action Frameworks of the Economy*, 42.
106. James Coleman, "Norms as Social Capital," in *Economic Imperialism: The Economic Approach Applied Outside the Field of Economics*, ed. G. Radnitzky and P. Bernholz (New York: Paragon House Publishers, 1987).
107. Sabel, "Learning by Monitoring: The Institutions of Economic Development," 155.
108. Sabel, "A Quiet Revolution of Democratic Governance: Towards Democratic Experimentalism": 16–17, 25.
109. Sabel, "Learning by Monitoring: The Institutions of Economic Development," 158.
110. Dewey, *Human Nature and Conduct*, 236.
111. Somers, "'We're No Angels': Realism, Rational Choice, and Relationality in Social Science": 724. My critique differs significantly from Somers's attacks on rational choice theory in historical sociology, but the implications are similar: I ultimately concur that we should generate "problem-driven, pragmatic [and] relational" causal theories.