

# Realism and comprehension in economics: A footnote to an exchange between Oliver E. Williamson and Herbert A. Simon<sup>☆</sup>

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## Abstract

The correspondence between Herbert Simon and Oliver Williamson reveals a history of disagreement ultimately resolved by a reinstatement of mutual respect and agreement. On the surface, the disagreements concern questions about the appropriate trade-offs between realism and comprehension in economic theory, on the extent to which the theory should be based on realistic behavioral assumptions. At another level, however, the disagreements expose a different issue: Whether the sacrifices of realism involved in seeking comprehensible theory are to be experienced as unfortunate but necessary costs or as agonizing falls from grace that may be forgiven but only if accompanied with pain and contrition.

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In one of his last published writings, [Simon \(1997\)](#) criticized the lack of behavioral realism in the work of Oliver E. Williamson, a criticism that echoed his earlier comments on the “new institutional economics” to which [Williamson \(1991\)](#) had made substantial contributions. Simon

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saw Williamson as “pouring the new bounded rationality wine into the old maximizing bottles”.<sup>2</sup> Williamson, he thought, was not really faithful to the behavioral economics program that typified the work of his teachers (Simon being one of them) at the Carnegie Institute of Technology in the 1950s and early 1960s.

Williamson (1996a, p. 350) responded with a strong defense of his efforts to introduce behaviorally realistic assumptions to economic theory and of his link to the spirit of the efforts by Simon and others to develop a behavioral theory of the firm at Carnegie Tech during the 1950s and early 1960s. He wrote, “I trust you can see that Carnegie had a major influence on my project”.<sup>3</sup> As he said elsewhere, “[being at Carnegie was] by far the most important event in my intellectual development”.

Simon relented. A short time before his death in his last correspondence with Williamson, he expressed his “contrition at not having understood you as well as I should and at not having appreciated the amount of aid and comfort that your work gives to the cause of bounded rationality and, more important, of returning economics to reality”.<sup>4</sup>

The exchange can be read as a poignant reaffirmation of fondness and respect between two colleagues, originally linked by a teacher–student relationship, subsequently two major figures in modern social science. It is touching in the thoughtfulness and mutual affection that it reflects.

On a different level, the exchange can also be read as a précis of one of the more difficult choices of economics and as a critique of standard economic thinking about such choices. In describing and shaping the economic life of human societies, economists confront conflicting desires to be realistic, on the one hand, and to be comprehensible, on the other. Like other economists, but perhaps more consciously than most, Williamson faced such choices. Economic conceptions picture the process of making choices involving conflict among values as a process of calculating trade-offs and maximizing overall value. In his notes, Simon both objected to Williamson’s specific resolution of the conflict between realism and comprehension and also implicitly challenged the economic conception of the appropriate choice process.

## 1. Realism and comprehension

Any understandable representation of social reality is incomplete. As social scientists seek to understand individuals and institutions embedded and interacting in complex social contexts evolving over time, they discover that their interpretations of the world are several orders of magnitude simpler than the world. Confidence in the decomposability of social systems is both implicit in the theories and usually shaken by observations.

This failure is partly due to the inadequacies and paucity of research in the social and behavioral sciences. The personnel and economic resources devoted to research on human behavior and institutions are far short of what would be required to make a serious demonstration of what might be possible.

<sup>2</sup> E-mail message from Herbert Simon to Oliver Williamson, 27 March 2000.

<sup>3</sup> Letter from Oliver E. Williamson to Herbert A. Simon, 4 March 1992. There are many other examples of such messages in Williamson’s writing, both published and in correspondence. For instance, “It was my great privilege to have been in the Ph.D. program at GSIA from 1960–1963. I was aware then and have come to appreciate even more since that this was an educational experience without equal. . . . GSIA is an interdisciplinary success story in which brilliant ideas and an unrelenting commitment to excellence carried the day” (letter from Oliver E. Williamson to Herbert A. Simon, 11 March 1999).

<sup>4</sup> E-mail message from Herbert A. Simon to Oliver E. Williamson, 27 March 2000.

The dilemma, however, is deeper than that. It appears to be true that human beings are capable of generating more complexity than they are capable of comprehending. Scholars can identify the properties of particular behavioral mechanisms (e.g., learning from experience) and recognize variations in rules of behavior (e.g., among cultures). They can create interpretive schemes that allow them to picture history as having order (e.g., functionalism), to talk about an imaginable basis for observed events (e.g., Freudian psychology), or to account for variations in large number statistical tendencies (e.g., rational models). They can identify variables that co-vary greater than would be expected by chance (e.g., regression models).

These interpretations are useful. They allow humans to operate more effectively in their environments. They give comfort to a human conceit of uniqueness connected to knowledge and its pursuit. They provide a starting point for the beauties of intelligent discourse. They are, however, inescapably incomplete. Marshall (1890, xvi) proclaimed that “nature’s action is complex; and nothing is gained in the long run pretending that it is simple, and trying to describe it in a series of elementary propositions”. Even the most elementary components of social behavior elude representation. Although we know a good deal about the actuarial characteristics of life (e.g., marriage, success, war, tastes, social stability), we are less able to predict the fine detail than we are to predict the weather.

The arguments about realism are related to, but distinct from, arguments about empirical verification. In modern parlance, empirical verification is associated with establishing that a particular hypothesis about the co-variation of two variables is supported in the sense that an opposing hypothesis specifying only chance co-variation can be rejected. Many verifiable hypotheses are less than realistic in the sense that they do not purport to describe the precise behavioral processes involved in the relationship. Such micro-processes are neither specified nor observed.

As a result, one of the enduring tensions in social science, even among scholars who share a commitment to empirical verification, is **the tension between making interpretations comprehensible and thereby unrealistic, or making interpretations realistic and thereby incomprehensible**. The tension is manifest in disagreements between disciplines (e.g., economics vs. anthropology), as well as in disagreements within disciplines (e.g., mathematical economics vs. institutional economics). It is memorialized in hackneyed arguments about making speculations “simple” or making them “realistic”.

With only rare exceptions, the arguments reflect differences in emphasis more than differences in hopes. Almost everyone agrees that ideas should be both comprehensible and realistic insofar as is possible. Moreover, almost everyone agrees that many of the attributes that make an idea more comprehensible (e.g., simplicity, conventionality) often make it less realistic, and many of the things that make it more realistic (e.g., complex detail, unconventionality) often make it less comprehensible.

The dilemma between realism and comprehension can be illustrated by comparing two major contributions to social science thinking in the 20th century. **The first is a book entitled *Politics, Economics, and Welfare*, published in 1953, and written by Dahl and Lindblom (1953)**. The second is a book entitled ***Markets and Hierarchies; Analysis and Antitrust Implications*, published in 1975, and written by Williamson (1975)**. These are important books. All three authors have subsequently been elected to the National Academy of Sciences in the United States, and each of the books has received a good deal of attention from scholars.

Although they were published 22 years apart and approach the topic in different ways and with different results, *Politics, Economics, and Welfare* and *Markets and Hierarchies* have a core similarity in their focus on alternative governance structures for organizing collective action. They

are both dedicated to identifying the ways in which alternative governance structures function, particularly differences in their effectiveness. As Dahl and Lindblom (p. 6) put it,

In economic life the possibilities for rational social action, for planning, for reform – in short, for solving problems – depend not upon our choice among mythical grand alternatives but largely upon choice among particular social techniques.

Or, as Williamson (p. 9) wrote,

The markets and hierarchies approach attempts to identify a set of environmental factors which together with a set of human factors explain the circumstances under which . . . the firm may decide to bypass the market and resort to hierarchical modes of organization.

Despite this generic similarity, the two books are dramatically different in their resolution of the realism/comprehensibility choice. Dahl and Lindblom range over issues stretching from union politics to political philosophy and draw from an extended social science literature on politics, economics, and social systems. They provide a large collection of insights into the operation of different governance structures organized by a category system that locates them but does not reconcile them very much. **In that sense, their discussion is richly realistic but less characterized by comprehensible simplifications.**

Williamson is also broadly attentive to key aspects of human behavior. **However, his interdisciplinary forays are narrower and more selective. In this work, as in others, Williamson has consistently sought to make behavioral ideas useful to economists by focusing on a few phenomena and embedding them in a familiar, comprehensible framework.** Without denying their reality, he has simplified the rich complexities reflected in the Dahl and Lindblom approach to the “markets and hierarchies” issue and has been selective in drawing from the ideas of behavioral economists.

**The two books are different in their approaches and have had different subsequent histories.** Both lay claim to being interdisciplinary, but their impacts are strongly discipline-specific and related to the ways in which different disciplines deal with the comprehension/realism dilemma. The Dahl and Lindblom book was very well received in political science, but had little observable impact on economics. The Williamson book was well received in economics, spawning a new subfield of economics, transaction cost economics; and it has had a substantial impact on the study of organizations and the law; however its influence on discussions of governance issues in political science or elsewhere in social science has been modest.

## **2. The Williamson agenda**

The dilemma between realism and comprehension is illustrated by the Williamson agenda. In a career that has included education at MIT, Stanford, and Carnegie Tech and academic appointments at Pennsylvania, Yale, and Berkeley, Oliver Williamson has become a major figure in contemporary economic thought with substantial additional influence in studies of the law and of organizations. The specific focus of his research agenda has changed over time, but the core concern has been with **the implications of incomplete contracts for the comparative efficiency (and therefore viability) of alternative economic systems.** The fundamental strategy has been to use the tools of neoclassical economics to identify conditions that favor the choice and survival of different governance systems in economic organizations. Those analyses have been used both to formulate recommendations for the design and management of economic organizations and to interpret observed variations in existing systems.

Such a description, however, conceals another continuing feature of the agenda: the effort to introduce key behavioral assumptions into this corner of economic theory while retaining many key aspects of neoclassical economics. Williamson's dissertation (1964) formulated a managerial objective function in which both slack and profits appeared in a neoclassical framework of constrained utility maximization. Whereas he later featured the idea of bounded rationality more prominently, Williamson wrote in this early work about "rational managerial behavior", defending the idea of maximization (of utility functions that include other things in addition to profits) through the assumption of managerial self-interest.

In his subsequent work, he turned to issues of organizational structure, linking ideas of limited rationality and managerial self-interest with the idea (from Commons, Arrow, and Coase) that transaction cost economizing was the way in which many organizational forms and practices should be understood (1975 and 2000). In *Corporate Control and Business Behavior* (1970), Williamson combined insights from his model of discretionary behavior with a focus on efficiency gains, particularly the extent to which different forms of organization mitigate problems of discretionary behavior. Rather than examine the firm as a production function, Williamson began to treat it as a governance structure to be compared with markets for managing transactions. This led naturally in subsequent books (*Markets and Hierarchies* 1975, *The Economic Institutions of Capitalism*, 1985, *The Mechanisms of Governance*, 1996a) to an examination of critical questions of comparative statics in which the conditions for efficiency advantage for different forms of corporate organization determine the appearance and endurance of the forms. The publication of the 1985 book, and by implication the whole project, was described by Baumol (1986, p. 286) as "a major event in the annals of industrial organization".

In recent years, the Williamson (1988) agenda has expanded in (at least) two major directions. On the one hand, the original use of transaction cost analysis as an instrument for antitrust regulation has been extended to a broad range of issues in managerial strategy and public policy with implications for contract law, mergers and acquisitions, and organizational design. At the same time, the relatively strict comparative statics/efficiency (optimization) emphasis has been muted by increased attention to elements of process (e.g., through "the Fundamental Transformation"). Williamson and his colleagues have been searching for a **more dynamic story**.

### 3. **The Simon complaint**

Simon was one of Williamson's teachers and considered him to be an important figure in modern economics. In 1986, he wrote to Albert Fishlow, "**I regard Olly as my student, but not my disciple. While I have urged a revolution in economics, he has urged peaceful reform**—with substantially more impact on the profession that I have had. . . His analyses of the institutional constraints on rationality have been most ingenious, and have carried a considerable distance our ability to understand institutional structures and processes in economic terms".<sup>5</sup> Simon also regarded Williamson as a friend, writing in 1999, "You and I argue about how to do economics in general and the theory of the firm in particular, but such intellectual debate has nothing to do with friendship".<sup>6</sup>

Nevertheless, the Simon complaint about Williamson's work was persistent. In 1991 he wrote to Williamson, "We both agree on the importance of organizational and institutional factors for

<sup>5</sup> Letter from Herbert A. Simon to Albert Fishlow, 2 December 1986.

<sup>6</sup> E-mail message from Herbert A. Simon to Oliver E. Williamson, 18 March 1999.

the understanding of the economy . . . Where we part company, if we do, is, first, your urge to legitimize your models by encapsulating them in a neoclassical framework of rationality, and second, my insistence that this (your work and mine) is all highly speculative **until we carry out much more extensive empirical work, most of it not of an econometric sort but involving direct observation within institutions and organization**".<sup>7</sup>

Williamson tried to balance behavioral views with more orthodox ones by emphasizing behavioral factors that could be introduced into more conventional models.<sup>8</sup> For example, he included one aspect of limited rationality as a central assumption of transaction cost economics, but he embedded that assumption in a framework that pictured an organization as a collection of strategic, rational actors. Simon summarized their disagreements as relating to "the issue of whether one can build a realistic theory of the firm while remaining a member in good standing of the economics profession (at least, of its neoclassical wing)".<sup>9</sup>

Williamson agreed with the reality of the issue, though he may perhaps have had a different picture of the situation. "Let me begin," he wrote Simon in 1993, "with my standing in the 'the neoclassical wing'. Of course orthodoxy comes in a variety of flavors, but a deep skepticism for interdisciplinary work is common to much of that wing. Much of the Chicago School. . . has been reluctant to buy into my stuff. . . [hence] my credentials as a neoclassical economist . . . are more problematic than you imagine them. . . . I have grave reservations about the neoclassical program and do not want to disguise them – but it comes at a cost".<sup>10</sup>

It is natural that Williamson would be seen by many economists as excessively behavioral and by other social scientists as excessively simple-minded (i.e., too much linked to economic theory). In the exchange between Simon and Williamson, that disciplinary predilection is accentuated by their earlier relation as teacher and student and by Simon's own love/hate relation with economics.<sup>11</sup> It is made more poignant by their shared commitment to the importance of empirical validation. The *prima facie* issue between them is whether Williamson in his transaction cost analysis has resolved the trade-off between comprehension and realism (here labeled "behavioral") in a correct way. Simon initially says "no"; Williamson argues "yes".

The issue is not whether the judicious introduction of more "behavioral" considerations into economic theories would be beneficial. They both agree that it would be. Nor is it whether empirical validation is important. They are both spirited champions of empirical work. At the same time, both accept the practical necessity of some sacrifice of realism in order to achieve some level of comprehension. At least on the surface, the argument is not about the virtues of realism and comprehensibility, but about the proper trade-off between the two.

The question of the optimal resolution of the trade-off between comprehension and realism is not one that can be resolved with any universal confidence, and neither Simon nor Williamson can make any particular claim to having resolved it. Nevertheless, their differences are reconciled. Simon changes his mind and agrees that Williamson has a legitimate claim to being "behavioral". The result is itself remarkable.<sup>12</sup> Simon was not especially noted for changing his mind, and his

<sup>7</sup> Letter from Herbert A. Simon to Oliver E. Williamson, 6 February 1991.

<sup>8</sup> See, for instance, Williamson (1970, p. xiii): "Some will regard as paradoxical the fact that support for the neoclassical hypothesis should result from a study that has managerialist origins".

<sup>9</sup> Letter from Herbert A. Simon to Oliver E. Williamson, 29 September 1993.

<sup>10</sup> Letter from Oliver E. Williamson to Herbert A. Simon, 19 October 1993.

<sup>11</sup> Samuelson (2004, p. 155) refers to Simon's "lover's quarrel" with economists.

<sup>12</sup> As an old friend of his wrote to him after his death, "I can't recall winning an argument with you, not one that mattered, even when I was right!" (Miller, 2004, p. 481).

acquiescence in this case alone might suggest that the *prima facie* issue is not the issue that is really before the two scholars.

In fact, beyond some *pro forma* recitations of the obvious costs involved, their discussion does not involve extensive argument with respect to the trade-offs. Most of the discussion explores a related, but somewhat different, question. It hinges on whether Williamson cares about the behavioral agenda that Simon has long espoused, whether he can properly be described as a behavioral economist, whether his use of econometric methodology for verifying broad empirical predictions indicates adequate commitment to a behavioral perspective.

Simon's complaint about Williamson recalls Isaiah Berlin's (1953) renowned critique of Tolstoy, contrasting the fox who "knows many things" and the hedgehog who "knows one big thing":

... there exists a great chasm between those, on one side, who relate everything to a single central vision, one system less or more coherent or articulate, in terms of which they understand, think and feel—a single, universal, organizing principle in terms of which alone all that they are and say has significance—and, on the other side, those who pursue many ends, often unrelated and even contradictory, connected, if at all, only in some *de facto* way, ... (p. 1)

... The hypothesis I wish to offer is that Tolstoy was by nature a fox, but believed in being a hedgehog; that his gifts and achievement are one thing, and his beliefs, and consequently his interpretation of his own achievement, another; and that consequently his ideals have led him, and those whom his genius for persuasion has taken in, into a systematic misinterpretation of what he and others were doing or should be doing. (p. 2)

Berlin labels Tolstoy as a fox trying to claim he is a hedgehog. Simon, in effect, labels Williamson as a hedgehog trying to claim he is a fox. In fact, Tolstoy and Williamson rather clearly aspire to be both foxes and hedgehogs. The transformation of the fuzzy boundaries of reality into the comprehensibly discrete categories of interpretation does violence. Neither label captures what Berlin called ambivalence but what might better be described as complexity. By trying to assign Tolstoy to one of two simple categories, or to ambivalence about them, Berlin comes close to being a hedgehog of categorical purity. By trying to categorize Williamson, Simon does the same.

Although he himself had a more nuanced view, Berlin's metaphor encourages the idea that the essential Tolstoy must be classified unambiguously as either a fox or a hedgehog. He is both. In a similar way, Simon's critique encourages the idea that the essential Williamson must be classified unambiguously as either a behavioral economist or as a mainstream economist. He is both. In a world of categories, however, multiple labels are not allowed. In a categorical world of foxes and hedgehogs or of mainstream economists and behavioral economists, one cannot be both. Comprehension trumps reality. Moreover, in a world in which categories are entangled with identity, belonging, and social movements, you will be pressed to choose. Are you one of us? Or are you one of them?

#### 4. The calculation of trade-offs and the agony of sins

For an outsider to interpret the brief exchange between Simon and Williamson is pretentious. It is also unfair to interpret the one who has died and dangerous to interpret the one who lives. Nevertheless, it can be argued that that exchange is only incidentally about whether Williamson has

made the right trade-off between reality and comprehension. It turns more on whether Williamson is *essentially* a behavioral economist and thus deeply committed to reality, or *essentially* a mainstream economist and thus not deeply committed to reality. To be certified as the former by Simon, Williamson must accept the basic catechism that the postulates of economics are wrong, thus that the sacrifice of reality that they involve is, however necessary to achieve comprehension, a painful fall from grace.

During the 1980s and 1990s, Simon remained a relentless critic of modern microeconomics despite the manifest ways in which that theory had changed in response to earlier behavioral comment (see, for instance, Simon, 1991, 1997). In the 1950s and 1960s, Simon and others identified two major behavioral unrealities in theories of the firm. The first was that the theories endowed firms with superhuman cognitive capabilities; the second was that the theories ignored internal conflict of interest within firms. **Forty years later, much of the theory of the firm was a theory of limited rationality and conflict,** to an important degree thanks to Oliver Williamson's work. These changes were accomplished, however, without any sacrifice of the fundamental postulates of economics. The holy scriptures were retained, but their meaning was transformed (March, 1992). For Simon, this new wine in old bottles with the same labels was mendacious. Even worse, it involved a failure to admit wrongdoing.

Simon's complaint was that economists have not properly experienced or confessed their sins, and he associated Williamson with those sinners. Simon and Williamson became reconciled, not by agreeing on the proper trade-off between comprehensibility and realism but by agreeing that realism is a vital virtue and loss of behavioral realism, even though it might sometimes be necessary, is nonetheless a terrible thing. It is a failure that can be forgiven, but only when it is acknowledged. Confession is essential because confession confirms the sanctity of the pursuit of realism and recognizes the evil of abandoning it.

The encounter between Williamson and Simon evokes two different visions of how to reconcile the demands of conflicting values. One vision is that of modern decision theory, a vision that emphasizes calculating the relative importance of different values and making a choice that maximizes expected value. The values foregone are costs that are accepted in the name of the greater benefits achieved. The procedure is analytical and seeks to determine the trade-offs among things that are valued. The fundamental idea of this first vision is the idea of making judicious trade-offs among contending values. It invites satisfaction with a choice appropriately made. It leads to a rational defense of the intelligence of the choice and therefore of the sacrifice of important values. The essential notion is that virtue consists in choosing the best available alternative and necessarily involves giving up some goods in order to achieve others. Doing damage to important values is justified by being part of a package of actions that has, overall, greater utility than other available packages. Since the sacrifice of important values is an inherent aspect of any choice under scarce resources, it requires no particular sense of guilt or remorse.

A second vision is a vision of continuous struggle in which the surrender of important values is a source of pain unrelieved even by consciousness of its necessity. A decision maker wrestles with value inconsistency, tortured by the conflict, seeing any failure to satisfy all of them as an outrage and a personal failure. This second vision invites anguish at the costs incurred, even those that are necessary. It leads to regret, a consciousness of weakness and a sense of culpability for the failure, even when the choice is right. When precious values are sacrificed, that sacrifice is felt deeply as an awful torture. It is not simply accepted as a necessary cost; it is experienced as an evil and confessed as a sin.

The difference between the two visions has recently been highlighted by Tetlock (2002) in his exploration of alternative frameworks for examining judgment and choice. Tetlock contrasts

cognitive theories based on, though critical of, decision theory conceptions of choice with alternative frameworks, including what he calls “intuitive theologians”. Tetlock’s intuitive theologian rejects compromise when dealing with fundamental values. When fundamental values conflict, the intuitive theologian enters into various forms of actions by which one can be simultaneously unwavering in commitment to conflicting values, violate one or more of the values, and either ignore the inconsistency or engage in a formal purging of the sins through confession.

Words like “evil”, “sin”, “guilt”, and “confession” seem profoundly out of place in a discussion of research and research strategy. However, as Camus (1956) and others have reminded us, the calculation of trade-offs among deeply held values introduces dangers. There are three vital behavioral weaknesses of calculated trade-offs as a guide to action. The first is the fact that some values convert more easily than others to a common currency of comparison; values that are not easily converted are likely to be slighted. The second weakness is that the rationalization and routinization of the sacrifice of things of value in order to achieve a greater good leads a decision maker to abandon the search for alternatives too soon. The third weakness is that values that are not easily compared with others or that are habitually sacrificed tend to disappear not only from the day-to-day practice of life but also from the portfolio of values. Their insignificance in practice transforms into insignificance in principle.

Thus, anyone who believes strongly in each of two conflicting values faces both short run and long run threats. In the short run, one value may be favored by the method of choice independent of the intensity of the commitment. The errors of calculated rationality with respect to the trade-off between comprehension and realism are not random but systematic. In conversations about life among humans, comprehension is necessary; realism is not, and comprehension is more easily measured and achieved than is realism. As a result, it is not surprising that the history of theoretical ideas in the social sciences is a history of ideas that have been, for the most part, more comprehensible than descriptive of reality. Simplicity and conformity to conventional beliefs are attributes of tautologies and of ideas that are found in airport book stores, frequently cited classics, introductory courses, and Nobel prizes.

In effect, Simon recognized that the behavioral biases of calculated choice favor simplification and comprehension. He looked for ways those biases could be counterbalanced, some ways in which a commitment to realism could be maintained within a world that is biased toward comprehension. His solution was partly the obvious one of arguing the merit of realism, trying to shift somewhat the exchange rate between realism and comprehension. It was also partly an attempt to increase the weight given to realism by making identification with realism more personal and sacrifices of realism more painful.

In the longer run, the effect of a commitment to trade-offs is even more pernicious from this point of view. Reasonable people, including people such as Williamson, can come to see deeply held commitments, such as beliefs in realism and comprehension, as exchangeable goods, nice to have insofar as you can afford them but not closely linked to an inviolate sense of self. Loss of realism becomes an affordable cost rather than a personal failure. The alternative outlook, reflected both in Simon’s complaint and in Williamson’s response, and thus ultimately shared by them, is that research virtue is not simply a question of weighing the costs and benefits of realism against those of comprehension; it is also a question of personal identity and of weeping over the atrocities of simplification, however unavoidable. Simon wants Williamson to experience the abandonment of behavioral reality as a pain and to have him display his sorrow at the sacrifice. Williamson agrees.

The story of the exchange between Simon and Williamson carries both a normative and a behavioral moral. From a normative perspective, trade-offs between values as fundamental as

realism and comprehension involve painful sacrifices of virtue that must be acknowledged in order to sustain commitment to the basic values involved. Important values foregone are not just costs but also deep, enduring sorrows and personal failures. Their sacrifice is a sin. Berlin may be right, therefore, in trying to induce Tolstoy to recognize, acknowledge, and glory in his attention to realism and to confess that any failure to tell the whole real story in all its complexity (even if necessary to make the story acceptable) represents a fall from grace. And Simon may be right in inducing Williamson to recognize, acknowledge, and glory in his attention to the behavioral tradition, to confess that any failure (even if justifiable) to tell the whole behavioral story in all its complexity also represents a fall from grace.

Demonstrating the normative validity or lack of validity of that approach is, however, considerably more difficult than is simply asserting it. The normative claim is twofold. In the first instance, it is a claim that making research strategy choices through standard decision procedures involving the calculation of trade-offs introduces systematic biases against realism. In the second instance, it is a claim that the long-term routinization of choice in this way corrupts vital values that would otherwise be preserved, and ought to be preserved, especially the values associated with reflecting reality in all its complexity. Asserting those claims is an implicit contribution of Simon's complaint and Williamson's response to it. Exploring their validity is an enduring responsibility of historians of thought.

There is also a behavioral moral to be read in this episode in intellectual history. One of the enduring puzzles of economics is the context dependence of critical trade-offs (Schelling, 1968; Blomquist, 2001). This variation is usually interpreted either as some inexplicable aberration of human character or as a correctable fault. Alternatively, however, it may be a fundamental misspecification of the theory of human decision making. In effect, the story of Williamson and Simon challenges the instincts of economists and other social scientists when faced with theoretically anomalous behavior to question the behavior rather than the theory. Perhaps conventional decision theory models of choice behavior provide a misleading framework for the analysis of decision making by individuals or organizations.

Economics has become more or less reconciled to the possibility that human actors make trade-offs by using various forms of heuristics and other instruments of limited rationality. However, the present challenge is different and more disturbing. Rather than identifying the human assessment of trade-offs as biased or simple-minded, the assertion is that economic theory has the wrong fundamental framework for thinking about choice. That assertion does not become true simply by virtue of being suggested by even such distinguished economists as Herbert Simon and Oliver Williamson, but its implications are profound enough to warrant some pause.

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