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Dear Prudence

Steven Shapin

- *Return to Reason* by Stephen Toulmin

Every now and then philosophers discover the virtues of common sense. This surprises their friends and delights their enemies. The surprise arises from philosophy's traditional commitment to identifying and repairing the cognitive errors of the vulgar: common-sense language in need of clarification; common-sense reason requiring rigorous replacement; common-sense judgments marked down for their superficiality, incoherence and unstable foundations. Yet no academic tradition is without its subversives, and sporadic philosophical celebrations of ordinary cognition and judgments give occasion for Schadenfreude. If you are already disposed to think that academic philosophy isn't much use in life-as-it's-commonly-lived, you can now cite a few philosophical texts to support your case: philosophy, after all, adds nothing to what everybody already knows, nor can it improve on how everybody already reasons. If the Man on the Clapham Omnibus, or your granny in the kitchen, reason pretty well just as they are, then they really don't need a philosophical weatherman to tell which way the wind's blowing. The common fly already knows its way, in and out of the fly-bottle, and anywhere else it wants to go.

So those odd philosophers drawn to a charitable assessment of uninstructed reason find themselves in an awkward position. What's left to say? How to say it? Who's meant to pay attention, and to what purpose? Wittgenstein announced that philosophy left everything just as it was, but *Philosophical Investigations* isn't popular reading on South London public transport. Most commuters probably don't feel that their lives are much affected by philosophical texts. They don't need reminding that philosophy should leave them alone, nor,

again, are they likely to feel greatly flattered by a deviant philosopher's judgment that, on the whole, they're quite competent reasoners.

If you're a philosophical defender of ordinary reasoning, the only people whose conceptions actually need to be clarified and repaired, and who actually care about what you say, are other academic philosophers who have bewitched themselves into a sense of a civilising mission. For Richard Rorty, philosophers' obsession with such merely mood-enhancing words as Reason, Reality, Truth, Objectivity and Method is little more than the fetishism of an increasingly parochial discipline. If you really want to understand how knowledge is made and judgments are justified, then get out of your endowed armchair and take a close look at how people in their various activities actually do such things, quite efficiently and to their general satisfaction. You'll probably find that commuters, cooks and chemists aren't greatly concerned with conceptions of Reason, Reality and Truth. Valued social and cultural practices don't depend on metaphysical presuppositions or rational justifications: 'There are lots of things you can't justify that are important. Your mother, for example.' By Rorty's implication, at least, philosophers should either shut up shop or take themselves off to the humbler departments of sociology, history and psychology: 'Philosophy does not make much difference to our practices, and should not be allowed to do so . . . For most purposes, whether we have any philosophers around or not doesn't greatly matter.' Just as philosophers should not be bewitched by talk of foundations and metaphysical presuppositions, so ordinary folk have no reason to be bewitched by philosophers, whether the philosophers themselves are bewitched or not. Rorty does have a message for the laity – 'relax' – but he doesn't leave a philosophical idiom in saying so. Like philosophy, anti-philosophy is for the philosophers.

Stephen Toulmin's work over the past half-century shares sensibilities and rhetorical styles with the later Wittgenstein and (more recently) with Rorty: there's something wrong with modern academic philosophy (especially the philosophy of morals and of science) that flows, in Toulmin's view, from its disciplinary

narrowness, its arrogance and its self-referential hyper-professionalism. It's a position Toulmin came to quite naturally. Having trained in physics, and worked on radar in the RAF during the Second World War, he went up to Cambridge in 1946 to read philosophy. Richard Braithwaite was his *Doktorvater*, but Wittgenstein, then in his last years of teaching, was his greatest influence. *Reason in Ethics* (1950), Toulmin's doctoral thesis, was the beginning of a lifelong campaign to show the power of case-based moral reasoning. Philosophers' axiomatic approach to ethics 'had nothing to offer Everyman but confusion', and no current philosophical theories offered 'any adequate account of the nature of ethical reasoning' as a naturally occurring phenomenon. In 1953, his short introduction to *The Philosophy of Science* expressed scepticism about philosophical efforts to render science as a formal, axiomatic system of propositions. And in 1958, *The Uses of Argument* blurred the much insisted-on distinction between rhetoric and logical argument. Reasoning, Toulmin argued, was an argumentative and persuasive activity, embedded in concrete human predicaments. In a judgment that evidently still wounds, colleagues dismissed this as 'Toulmin's anti-logic book'. The philosophers hated it, but for the rhetoricians, particularly in America, *The Uses of Argument* became, and remains, a canonical text.

Happily growing up in a family 'where history was a matter for dinner table conversation', the young Toulmin was distressed by the ahistorical character of academic philosophical writing, and by the late 1950s and early 1960s he was turning his hand to the history of science and philosophy. With his then-wife June Goodfield, he produced three synthetic books, *The Fabric of the Heavens* (1961), *The Architecture of Matter* (1962) and *The Discovery of Time* (1965), all of which won a wide readership and all of which remain in print. From that point on, Toulmin's output became a patchwork whose pieces mainly comprised metascientific and epistemological commentary, historical studies of scientific concepts, and contributions to ethics and cultural criticism. The only disappointment was his single go at Big Book systematicity – the 1972 *Human Understanding: Volume I* (the promised volumes II and III never happened) – an attempt at an evolutionary scheme for

interpreting disciplinary rationalities. In the tradition of Montaigne, Bacon, Hume and Berlin, a great deal of Toulmin's best, most resonant and most humane writing is in the looser and more fragmentary essay form. But his most consequential work since the 1970s has included *The Abuse of Casuistry* (1988, with Albert Jonsen) and, especially, *Cosmopolis: The Hidden Agenda of Modernity* (1990), an effort at historicising the early modern quest for methodical certainty in science and philosophy.

Much of what Toulmin has been up to recently reads as if it were a gloss on an exchange between Salviati and the naive Aristotelian, Simplicio, in Galileo's *Dialogue*. Salviati – His Master's Voice – expounds the value of mathematics in the treatment of physical problems. Salviati knows that Simplicio is going to object on the grounds of illegitimate idealisation: 'These mathematical subtleties do very well in the abstract, but they do not work out when applied to sensible and physical matters.' Salviati isn't fazed: he can paint a picture of an abstract physical world in which his mathematical principles apply universally, and that is the source of their power and authority. To this construction Simplicio has no answer, since Galileo doesn't give him one. But Simplicio could have pressed his case.

Suppose Simplicio refuses to be either satisfied or impressed by the coherence, the timelessness and the universal scope of the Galilean ideal realm. Suppose he demands an account of the physical behaviour of medium-sized objects as they actually exist in his visible world, and as they interact with all sorts of other objects. Suppose he requires of a philosophical system that it effectively guides practice in such a concrete, contingent and complex world. Salviati can approximate such a world, but he can't fit it exactly, partly because he hasn't got the tools, partly because he's not interested in doing so. Salviati isn't bothered, since his idealisations do indeed encompass everything under the Sun, and the Sun itself; Simplicio could be bothered, because the idealisations don't give an adequate account of what he happens to be interested in, nor do they adequately instruct him how to sail this particular boat, fire this particular cannon, or roast this particular chicken. In order for any such dispute to conclude, there has got to be a resolution of a contest between those

who speak for the neatly ideal and those who speak for the messily real. One side or the other has to be rendered culturally mute, cowed into submission or convinced that their world is a 'dummy' version of the other. In the academic practice of moral philosophy and the philosophy of science, Simplicio's voice has been hard to hear, but Toulmin wants to amplify it and insist on its pertinence. That's what *Return to Reason* is about.

Return to Reason repeats the historical sketch in *Cosmopolis* of how canons of Rationality came to dominate the criteria of reasonableness, how talk of the Universal and the Eternal subjugated the local and the timely, how the Dreams of Certainty and Method confidently promised permanent practical solutions to doubt, ambiguity and the plurality of belief. It's a history painted here with the broadest of brushes and the crudest of colours, likely to sour the stomachs of most specialist historians, but in general terms it carries plausibility, and the work of such historians as Rudolph Meyer, Richard Popkin, Margaret Jacob and Simon Schaffer tends broadly to support it: the bloody wars of religion in the 16th and 17th centuries appeared as a crisis in the authority and unity of knowledge; the thinking classes reckoned that peace could be secured and guaranteed only when means were found to cure scepticism and ensure uniform belief. Descartes offered such methodical solutions to the crisis in knowledge, and so, in their different ways, did Hobbes, Spinoza and Leibniz. European high culture was seduced by these Dreams of Certainty because the apparent alternatives were so appalling and because the philosophers did such an effective job of marketing their product as medicine for the ills of culture and society. The 17th-century Quest for Certainty (in Dewey's phrase) turned into a long-lasting tyranny and a 'perennial disease of modern thought'. If ordinary life involved judgment under uncertainty, then this was proof that ordinary life needed repair by Rational Method. Uncertainty had to be cured and it could be cured by the right philosophy or, later, by 'legislative' social science. From the 19th century, economists sought to become 'the Newtons of the human sciences', elaborating neoclassical equilibrium analysis in supposed imitation of the *Principia Mathematica's* rationally intelligible and

completely predictive model of the solar system. But, to Toulmin, this act of homage proceeded from a delusion. C. Wright Mills once said that the problem with much sociology was that it had bought the wrong philosophy of science, and Toulmin says similarly that the problem with neoclassical economics is that it imitated 'the Physics that Never Was'. In the 1880s, Henri Poincaré's monograph on the Three-Body Problem showed that complete predictability is impossible in systems vastly less complex than the economic order. Toulmin denounces development economists for insensitivity to cultural variables and to 'the practical situation in question', but it is just as pertinent to note how economics, and indeed other human sciences, have the capacity – like it or not – to create modern social realities shaped at least partly after their own image. If your models don't fit the world, then try to reshape the world to fit your models: in the modern scheme of things, you can sometimes succeed, or at least succeed in making a 'real' mess. (Think of the Western economists' role in the former Soviet Union.) So if you want to say, as Toulmin does, that strands of these sciences are inappropriate in practical application, it's not just because they're insensitive to concrete social realities but because you think the new realities they help bring into being are lacking in justice and morality. Criticising a faulty epistemology won't completely let you off the hook of stating your moral and political preferences, justifying them as best you can, and then acting on them.

The Quest for Certainty travels along the channels historically carved out by the specialist disciplines, and Toulmin doesn't much like the disciplines either. The condition of their success is a narrowing of perception, and it's this narrowing that helps keep disciplinary specialists from noticing the mismatch between the real world and their idealised constructions. In a world of disciplinary departments, the world is nobody's department. The disciplines arose, Toulmin says, from the 18th century largely as a way of ensuring intellectual peace through boundary-maintenance: we won't look at your thing if you don't look at ours. Much good has come of the specialisation they foster – Toulmin acknowledges that interdisciplinary vigour and breadth (which he approves) are dependent on a prior narrowing of perceptions – but in his view we are now in bondage to the

disciplines and our society is paying a practical price for rampant specialisation. When this is combined with the tyranny of abstraction, and when elegance trumps pertinence, then things have got out of control. Toulmin hands out some serious stick to rational-choice theorists, to behaviourist psychologists, to industrial sociologists, to neoclassical economists (again, the worst of the lot), and even to biologists in their reductionist modes. His preferred alternatives include Santa Fe Institute complexity and chaos theory, the economics of Amartya Sen and Brian Arthur's 'path-dependency', social-science-as-if-people-mattered, holistic biology and an implausibly rosy picture of contemporary bioethics and its role in American clinical medicine. Fair enough, even if Toulmin oscillates between applauding the recent rise of Postmodern academic practices and lamenting their marginality, and even if there's the whiff of the joss-stick and the sound of the sitar about his presentation of these alternative practices.

Toulmin is most consistent, sure-footed and passionate in his celebration of prudence, practical reasoning, and good old-fashioned English probabilism and empiricism. Judgment under uncertainty cannot be repaired nor is it generally in need of expert repair: 'Our best-founded beliefs are still uncertain.' The heuristics of everyday life can, indeed, lead to error, but to be human is to err, and promises of axiomatically derived, error-free judgment are expert snake-oil whose most notorious early modern salesmen were Descartes and Leibniz. Indeed, despite the awkward case of Hobbes (too much time in Paris?), Toulmin is a philosophical Eurosceptic, representing the tyranny of Rationality as something of a French plot. In all sorts of domains, from garden design to electrical theory to law, 'French insistence on geometrical exactitude faced English commitment to pragmatic flexibility.' But prudence is powerful, and, if its guidance cannot guarantee perfection, it nevertheless offers all the assurance you can reasonably expect in real-world practical action.

In his essay 'Of the Standard of Taste', Hume made a distinction between how people judge in matters of aesthetics and how they judge in science. In the former, according to Hume, everyone tends to agree about standards – elegance and simplicity are good; affectation

and bombast are bad – while they are at each others' throats about whether this particular painting is beautiful. In the latter, the situation is reversed: scientists, for example, agree about facts and fall out when the matter turns to metaphysics. To what domain, Hume asked, do morals belong? Toulmin follows Hume's scepticism about the merit of general ethical principles. Take the case of the National Commission for the Protection of Human Research Subjects which was instituted by the United States Congress in the 1970s. Toulmin was impressed by the Commission's 'near-total agreement' about practical action in particular cases, while its members could not achieve consensus about the moral principles on which their specific recommendations were supposedly based. So much for attempts to deduce ethical judgments from universal and general principles, and so much for philosophical condescension towards case-based ethical reasoning. So much, too, for Alasdair MacIntyre's view that consensual ethical judgments are only possible within 'traditions'. One can, however, take Toulmin's point about the limitations of general ethical principles while remaining bemused by his description of the current American moral environment: 'One of the successes of the United States has been to create traditions of its own that are humane and middle-of-the-road enough to attract Americans from very different backgrounds.' Well, not where I live, and that's only a hundred miles south of Toulmin's Los Angeles.

Return to Reason is a fittingly unprofessional work. It is loosely organised, occasionally saccharine, at times out of touch with much of what's going on in the present-day academy, some of which is indeed supportive of Toulmin's sentiments but a lot of which remains deeply antipathetic to his case for prudence and intellectual humility. That Toulmin thinks a range of academic practices ought to return to standards of reasonableness is clear, but his evidence for claiming that there is in fact such a contemporary drift towards modesty remains unconvincing. For all that, this is a Noble Book – serious, sincere, humane and, for the most part, profoundly right-headed. What remains a bit unclear – in this case, as in most learned criticism of learned tendencies – is just what the book is *for*. 'Cleansing the Augean stables of the intellect' – Toulmin's admiring version of Wittgenstein's vocation – may be a useful act of philosophical

hygiene, but, if you're consistent in such things, it lacks consequentiality. If, on the other hand, you really believe that philosophical and social scientific Dreams of Rationality and Certainty are disrupting basically healthy lay patterns of judgment and action, then you've got both a case to make and a case worth making. You've got to show, as Toulmin doesn't quite manage to do, that Rational expertise fails in general as a guide to real-life practical action, and that it does so not merely because it is in the service of unjust or uncaring agents but because it is abstracted from the world it is supposed to regulate. In which case, your message might take on a rather simpler quality: 'Don't prescribe a solution before you describe the predicament'; 'When you confront the real world, be suitably modest about your powers and your knowledge'; or, with Montaigne, 'Que sçais-je?'

So far as philosophical hygiene is concerned, it's probably useful to remind intellectuals that they, too, are practical actors, when they're not working (of course) and even when they are working. For Toulmin, Descartes marks 'the beginning of the Modern Age', and that's quite a standard way of talking in the history of philosophy. After all, Descartes aimed to squeeze the last drops of scepticism out of philosophy and he wanted to make a rationally reformed philosophy into a secure foundation not only for science but also for ethics. The Dream of Certainty, and the intention to reconstitute practical action on Rational foundations, starts here. But when he wrote the *Discourse on Method* in 1637, Descartes knew that he wasn't quite there yet, and that in the meantime he had better provide himself with some more or less adequate 'provisional' standards to guide his moral conduct until his Rational philosophical system was completed. And so he decided to act according to prudence and custom: he would 'obey the laws and customs' of his country and regulate his behaviour 'according to the most moderate opinions . . . adopted in practice with general consent of the most judicious of those among whom I might be living'. When Descartes died in 1650, he hadn't come up with anything better than that.

Steven Shapin teaches at Harvard and has written several books on the history of early modern science. His next will be *The Life of*

Science: A Moral History of a Late Modern Vocation.

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