

RESEARCH ARTICLE

Adam Smith and the Foundations of Pluralism

Sheila Christine Dow 

University of Stirling
Email: s.c.dow@stir.ac.uk

Abstract

The purpose of this essay is to explore Adam Smith's work for ideas relevant to modern-day discourse on pluralism (understood as methodological pluralism). It is argued here that the emphasis on difference of perspective in his theory of human nature is potentially foundational for pluralism. I explore Smith's philosophy of science, where his theory of human nature explains the motivation for building knowledge, the conduct of enquiry, and the appraisal of resulting theories. Finally, I explore exemplars of pluralist practice in Smith's treatment of alternative approaches to economics to his own as well as in his account of different approaches to history and astronomy.

Keywords: pluralism; moral philosophy; economic theory; Adam Smith; David Hume

Introduction

Studying the history of economic thought can be fruitful in shedding light on current issues in economics. It helps us to understand the way in which thought has evolved up to the present day. Furthermore, unless economic thought has inexorably progressed such that modern thinking encapsulates everything of benefit from the past, there is also scope for drawing attention to past ideas that had been set aside in “wrong turnings.” It is in this spirit that I approach Adam Smith's work in relation to modern discussions of pluralism in economics. While I draw on a range of existing analyses of Smith, the contribution here offers a focused consideration of Smith in terms of pluralism.

Smith would be the first to point out the importance of context and the care that needs to be taken in considering ideas expressed in the eighteenth century in relation to twenty-first century discourse. The term “pluralism” itself takes its meaning from the history of science and of economics since the mid-twentieth century. In fact, it has a range of meanings depending on the domain to which it is

applied. Here, we define pluralism as the tolerance and sustenance of multiple approaches to knowledge. Alternative definitions refer, for example, to a plurality of theories and methods.

Pluralism emerged in the 1970s as a reaction to the monism of logical positivist philosophy of science to which mainstream economics subscribed (in profession if not in practice).¹ Many concluded that absolute empirical proof of propositions was impossible and, indeed, that evidence from the history of science and of economics revealed a plurality of approaches. In economics this plurality took the form of schools of thought, such as post-Keynesian economics, neo-Austrian economics, and Marxian economics.

The purpose here is to explore Smith's works for ideas that either presaged pluralism or could usefully be drawn upon in modern discourse on pluralism. I consider first his theory of human nature and, in particular, his theory of sympathy. Here, we find the core of pluralism in Smith's understanding of difference of perspective. I then consider Smith's philosophy of science and the role played by difference of perspective. Third, I consider Smith's economics for applications of the concept of difference of perspective. In the process of these explorations, I draw attention to Smith's understanding of the nature of the subject matter of science. This is a critical factor in justifying whether to take either a monist or a pluralist view of knowledge.

Adam Smith's theory of human nature

While the Enlightenment period is widely regarded as the age of reason, the Scottish Enlightenment was distinctive in placing reason in the context of prior moral sentiments.² Like David Hume, Smith challenged the capacity of reason alone to generate knowledge or to explain human behavior. They both conclude that a theory of human nature is required in order to understand and to motivate science.

Smith's theory of human nature is expressed most fully in his *The Theory of Moral Sentiments*.³ Such a theory was required for understanding both individual behavior and the social structures within science. For Smith, the individual is social rather than isolated. Individual behavior and knowledge are fundamentally conditioned by social institutions and socially conventional knowledge.⁴ Accordingly, as Andrew Skinner explains, Smith emphasizes in *The Theory of*

¹ The deviation of practice from profession is explored by Mark Blaug, *The Methodology of Economics* (Cambridge University Press, 1980).

² There is a substantial literature on the origins and characteristics of the Scottish Enlightenment as distinct from other enlightenment traditions. See, e.g., Alexander Broadie, *The Scottish Enlightenment: The Historical Age of the Historical Nation* (Birlinn Ltd., 2001); and Alexander Broadie, ed., *The Cambridge Companion to the Scottish Enlightenment* (Cambridge University Press, 2003).

³ Adam Smith, *The Theory of Moral Sentiments*, Glasgow ed., ed. David D. Raphael and Alec Macfie (1759; repr., Oxford University Press, 1976).

⁴ See also Warren J. Samuels, "The Case for Methodological Pluralism," in *Pluralism in Economics*, ed. Andrea Salanti and Ernesto Screpanti (Routledge, 1997).

Moral Sentiments the pervasive influence on behavior of “habits, customs and manners.”⁵

Smith entered into contemporary debates as to whether behavior was based on self-interest and whether self-interest was the product of reason. On the first issue, for Smith, social behavior is not completely governed by self-interest. He opens *The Theory of Moral Sentiments* as follows: “How selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in the fortunes of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it” (TMS I.i.1). Therefore, even taking account of man’s social context, virtuous behavior could not be fully accounted for by selfishly seeking the approval of others.

Furthermore, Smith goes to great lengths in *The Theory of Moral Sentiments* (for example, in Part VII) to explain the limitations of reason for analyzing virtue. Here, Smith challenges ethical rationalism and Bernard Mandeville’s egoistic theory (a challenge also pursued by Hume).⁶ Accordingly, Smith developed an alternative theory of human nature that has moral sentiments at its heart, though reason also plays a part. This theory rests on two important contributions: his theory of imaginative sympathy and his notion of the impartial spectator. Both show the influence of Hume,⁷ but, as noted in the editorial introduction to *The Theory of Moral Sentiments*, Smith’s analysis extends significantly beyond that of Hume. For example, Smith differs from Hume “in insisting on the plurality of moral feelings.”⁸

According to Smith’s theory of sympathy, behavior is governed by a synthetic combination of self-love, reason, and virtue that can best be understood in terms of sympathy applied in a social context. Sympathy, in turn, requires input from the human capacity of imagination. Rather than being just an expression of compassion, Smith’s notion of sympathy is much more complex. Imagination allows an individual to perceive how her actions are understood and judged by others. This exercise of sympathy is critical for pursuing the propriety that, for Smith, is a central motivation for behaviour: “Sympathy, however, cannot, in any sense, be regarded as a selfish principle” (TMS VII.iii.1.4). It is central to the social character of human identity that imagination also allows an individual to consider another’s behavior and judgment from the other person’s perspective. This involves an effort to perceive and understand other perspectives, even though each perspective reflects the different circumstances faced by each individual. This effort is not always successful; Smith explores the inevitable imperfections of imagination’s attempts to see the world from different perspectives.

⁵ Andrew S. Skinner, “National Realities: David Hume, Precursor of Sir James Stuart,” in *Political Economy and National Realities*, ed. Manuela Albertone and Alberto Maseoro (Fondazione Luigi Einaudi, 1994), 35.

⁶ See also the editors’ introduction to TMS. For Mandeville’s egoistic theory, see Bernard Mandeville, *The Fable of the Bees*, ed. Frederick B. Kaye, two vols. (1714; repr., Liberty Fund, 1988).

⁷ See Timothy Costelloe, *The Imagination in Hume’s Philosophy: The Canvas of the Mind* (Edinburgh University Press, 2018).

⁸ Raphael and Macfie, “Introduction,” in Smith, TMS 14.

Smith's theory of sympathy includes the role of an imagined impartial spectator who helps the individual to pursue her moral sentiments. Rather than expressing the approval or disapproval of others, judgment is imagined to be expressed by an independent agent, by the "man within" rather than the "man without." The impartial spectator is a medium for rethinking on the part of the individual.⁹ Crucially, unlike other members of society, the impartial spectator is imagined to have closer knowledge than others of the circumstances and the perspective of the individual concerned, and is thus better able to form a good judgment. But to the extent that achieving propriety rests on actual social approval, as well as satisfying the impartial spectator as a conscience, difference of perspective may dampen well-being.

For Smith, therefore, the impartial spectator is a mechanism for dealing with a plurality of perspectives in daily life, encouraging efforts to understand the world from these differing perspectives. As Smith himself explains, his theory of human nature is thus very different from the prioritization of pure reason on the part of the isolated individual as the proper basis for decision-making.

Smith argues further that individuals may deceive themselves by applying false reasoning. He gives the example of a poor man's son who imagines the happiness he would enjoy as a result of his industry and ensuing riches (TMS IV. i.8). Even if the individual deceives himself, the imagined outcome is a spur to action, with the unintended consequence of contributing to economic growth. More generally, it is imagination that spurs on the creativity involved in applying the division of labor, which is the focus of Smith's *An Inquiry into the Nature and Causes of the Wealth of Nations*.¹⁰ Similarly, in the case of Hume's monetary theory,¹¹ it is the imaginative creativity sparked by growth in export earnings that is the underlying spur for action, which increases productivity. The attendant increase in specie is merely the symptom of growing productivity. An apparent causal role for money masks the actual causal role of an increase in production (and its attendant increase in the money supply and inflation) that "keeps alive a spirit of industry in the nation, and increases the stock of labour, in which consists all real power and riches."¹² Conversely, in the case of a fall in the stock of money, "the effect [of limited prosperity], here supposed to flow from scarcity of money, really arises from the manners and customs of the people; and that we mistake, as is usual, a collateral effect for a cause. The contradiction is only apparent; but it requires some thought and reflection to discover the principles, by which we can reconcile *reason* to *experience*."¹³

Any propositions about the features of human nature outlined above lack universality in that they are manifested in a way particular to the relevant context, something evident from the historical approach to knowledge: "if Hume

⁹ See William P. D. Wightman, "Adam Smith and the History of Ideas," in *Essays on Adam Smith*, ed. Andrew S. Skinner and Tom Wilson (Clarendon, 1975).

¹⁰ Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, ed. Roy H. Campbell and Andrew S. Skinner (1776; repr., Oxford University Press, 1976).

¹¹ David Hume, "Of Money," in *Essays Moral, Political, and Literary* (1777; repr., Liberty Fund, 1985).

¹² Hume, "Of Money," 288.

¹³ Hume, "Of Money," 290.

did argue that the principles of human nature were constant, he also appreciated that the way in which men *behaved* would be profoundly affected by the socio-economic environment which might happen to exist; by changes in habits, customs and manners.”¹⁴

Because “customs, habits and manners” differ from one (spatial or temporal) context to another, the evolution of structures cannot be seen as mechanistic. Furthermore, because the human faculties of imagination and the passions induce creative changes in behavior, neither is individual behavior mechanistic. In modern terminology, Smith’s socioeconomic system is “open.”¹⁵ Relations within the system may evolve and the system is subject to unanticipated change, as occurs with the result of creativity. Knowledge is subject to uncertainty, so there is scope for a plurality of approaches to building knowledge. I pursue this line of thought in the next section.

Adam Smith on science

By building on his theory of human nature, Smith’s theory of knowledge represents an important development of Scottish Enlightenment thought. This tradition had been the outcome of a range of influences, due in large part to the strong connections between Scotland and various centers of learning on the continent. Scotland’s political history had encouraged intellectual interchange with continental Europe.¹⁶ But the range of influences was extended by the cultural differences between Gaelic and non-Gaelic culture within Scotland itself.¹⁷ The organicism of Gaelic culture, in particular, arguably contributed to the nonmechanistic approach to knowledge noted above. In addition, engagement with English culture and the process by which that developed further contributed to a consciousness of what would now be referred to as “otherness” in terms of perspective.

Smith pursued his enquiry into human behavior in his philosophy of science, that is, his theorizing about what governs the behavior of (natural or moral) philosophers. He intended his essay “The History of Astronomy”¹⁸ as a case study of his theory of human nature. Here, he provides evidence of theories being judged by sentiment as well as by reason and evidence. These sentiments are moral, conventional, and aesthetic and reflect power relations (notably, between scientists and the Church). Thus, not only is reason only one factor in judging behavior, but also sentiment tempers the role of reason in judging science.

¹⁴ Skinner, “National Realities,” 35.

¹⁵ See Victoria Chick, “On Open Systems,” *Brazilian Review of Political Economy* 24, no. 1 (2004): 3–17; Victoria Chick and Sheila C. Dow, “The Meaning of Open Systems,” *Journal of Economic Methodology* 12, no. 3 (2005): 363–81.

¹⁶ The prohibition for a time on Scottish students attending English universities encouraged the practice (which later persisted) of students attending continental universities.

¹⁷ See Sheila C. Dow, “Hume and the Scottish Enlightenment – Two Cultures,” *Revista de Economia* 35, no. 3 (2009): 7–20.

¹⁸ Adam Smith, “The History of Astronomy,” in *Essays on Philosophical Subjects*, ed. William P. D. Wightman and John C. Bryce (1795; repr., Oxford University Press, 1980); hereafter HA.

Smith's consciousness of variety of perspective carries forward into the context of persuasion as to the relative merits of different theories and approaches to building theory.

Smith challenges the centrality of reason in the conduct of science in his critique of René Descartes (HA IV.61–66). For Smith, the task of science is to attempt to identify causal mechanisms: "Philosophy is the science of the connecting principles of nature" (HA II.12). He follows Hume's belief¹⁹ in the existence of an independent natural world even when it cannot be proven by means of reason. Although Hume believes in the existence of the origins of physical processes, such as the workings of the body, he finds them "mysterious and unintelligible."²⁰ Even more than with respect to the physical world, Smith's and Hume's economic analyses make it clear that they understand the social world as an open (that is, complex and evolving) system.²¹ Humans are characterized not only by the exercise of their faculties to experience and to reason, but also the exercise of sentiment (virtue, the "passions") and imagination. The behavior of isolated agents thus lacks the determinacy required for its explanation in mechanical terms.

While Smith's goal was to identify the invisible connecting principles governing social systems, the complex, evolving nature of those systems prevents demonstrably true propositions about them from being established. But some of the very factors that account for the nature of those systems nevertheless provide the basis for theorizing to be possible. Smith followed "Hume's advice to turn from the insoluble problem of demonstrable truth to the psychological question of how people come to accept the truth of certain propositions."²² When patterns are identified, the faculty of imagination allows conjectures about possible connecting principles. Furthermore, "pattern-recognition ... permits the understanding and appraisal of a scientific community, ... supported by that community's adherence to a set of norms which are the equivalent of Smith's moral sentiments."²³

The belief in existence itself arises from the human faculty of imagination. While "[u]ncertainty is the price we pay for imagination,"²⁴ imagination in turn allows us to transcend uncertainty, and it is central to Smith's philosophy of science. In "The History of Astronomy," Smith ascribes the motivation for science to the sense of wonder at new events that do not accord with conventionally accepted understanding of causal mechanisms, thus disturbing the imagination. This prompts enquiry to seek a new account that explains the

¹⁹ David Hume, *A Treatise of Human Nature*, ed. Lewis A. Selby-Bigge and Peter H. Nidditch, 2nd ed. (1739–1740; repr., Clarendon, 1978), I.IV.II, 187.

²⁰ David Hume, "An Enquiry Concerning Human Understanding," in *Enquiries Concerning Human Understanding and Concerning the Principles of Morals*, ed. Lewis A. Selby-Bigge and Peter H. Nidditch, 3rd ed. (1748; repr., Clarendon, 1975), 66.

²¹ Manolis Manioudis, "Adam Smith and the Scottish Historical School: Method, Epistemology & History," *Filosofía de la Economía* 3 (2014): 25–47.

²² Brian J. Loasby, "Closed Models and Open Systems," *Journal of Economic Methodology* 10, no. 3 (2003): 296.

²³ Loasby, "Closed Models and Open Systems," 298.

²⁴ Loasby, "Closed Models and Open Systems," 301.

event. But, to soothe the imagination, the new account also needs to satisfy the aesthetic requirements of simplicity and elegance, while according with what is already familiar. Furthermore, a new explanation appeals particularly if its novelty itself evokes wonder and surprise (HA IV.33). In order to satisfy these requirements successful persuasion is therefore specific to particular contexts.²⁵ Indeed, in his own contribution on the practice of rhetoric,²⁶ Smith emphasizes the persuasive force of tailoring an argument to the audience in question, which requires reference to that audience's sentiments, prior knowledge, and experience, as well as their reason.

While the success of a theory depends on its psychological appeal, the nature of the subject matter is also important. The truth of a theory cannot be categorically demonstrated, but the scientist nevertheless aims for true explanations of real experience. Evidence can provoke disquiet with a conventional explanation, but it also constitutes what is already familiar as the benchmark by which to judge new explanations. If social processes are not mechanistic, then mechanical explanations will be inadequate. Yet there is a psychological need for patterns, and thus a system, to be identified. As Skinner explains, Smith's approach to knowledge was based on systems.²⁷ In Smith's words, "[a] system is an imaginary machine invented to connect together in the fancy those different movements and effects which are already in reality performed" (HA IV.19).

While Smith uses mechanical imagery for abstract principles, his practical theorizing applies the principles within a knowledge system that reflects the nonmechanistic nature of social systems. His theorizing starts by abductively drawing out patterns from copious study of different (historical and geographical) experience. The use of metaphor and analogy then results in a theoretical conjecture that forms the basis for deriving an abstract principle, such as the principle of the division of labor. The next stage involves considering the relevant principle in particular contexts and analyzing factors that could explain deviations of real experience from what the principle predicted. This analysis is a central developmental stage in theorizing and in promoting understanding. The principle is thus a guide to analysis and a reference point for the main business of analyzing a particular context, as well as being a rhetorical device.²⁸ This methodological approach is Smith's social-science application of Isaac Newton's experimental philosophy.²⁹

²⁵ See Warren J. Samuels, "The History of Economic Thought as Intellectual History," *History of Political Economy* 6, no. 3 (1974): 305–23; Leonidas Montes, "Adam Smith's Foundational Idea of Sympathetic Persuasion," *Cambridge Journal of Economics* 43, no. 1 (2019): 1–15.

²⁶ Adam Smith, *Lectures on Rhetoric and Belles Lettres*, ed. John C. Bryce (1762–1763; repr., Oxford University Press, 1983); hereafter LRBL.

²⁷ Andrew S. Skinner, *A System of Social Science* (Clarendon, 1979).

²⁸ Sheila C. Dow, "The Methodological Role of the History of Economic Thought," in *New Perspectives on Political Economy and Its History*, ed. Maria Cristina Marcuzzo et al. (Palgrave Macmillan, 2020).

²⁹ See also Flavio Comim, "Adam Smith: Common Sense and Aesthetics in the Age of Experiments," in *A History of Scottish Economic Thought*, ed. Alexander C. Dow and Sheila C. Dow (Routledge, 2006); Leonidas Montes, "Smith and Newton: Some Methodological Issues Concerning General Economic Equilibrium Theory," *Cambridge Journal of Economics* 27, no. 5 (2003): 723–47; Leonidas Montes, "Adam

The expectation was that, in the absence of lawlike behavior, real experience would deviate from the principle, such that Smith was using the principle to appeal to the imagination. Both he and Hume emphasize that what is being imagined is a way of thinking about reality rather than reality itself. With respect to evidence, Hume warns against interpreting constant conjunctions of events as revealing real causal processes.³⁰ With respect to theory, Smith warns of the tendency to be drawn into thinking that the representation of these processes by the imaginary machine is in fact real:

And even we, who have been endeavouring to represent all philosophical systems as mere inventions of the imagination, to connect together the otherwise disjointed and discordant phaenomena of nature, have insensibly been drawn in, to make use of language expressing the connecting principles of this one, as if they were the real chains which Nature makes use of to bind together her several operations. (HA IV.76)

Such a danger arises in the process of attempting to persuade an audience to accept a theory. For Smith, because theories could not categorically be proven true, the art of persuasion is a necessary ingredient in theory appraisal. The expression of theory by means of metaphor and analogy is employed in order to appeal to the imagination. There is a tendency, therefore, to appeal to the imagination by *presenting* a theory in straightforward deductive terms, even when it has been *arrived at* by abduction and then *developed* by applying it to observed circumstances.³¹ Thus, while the Newtonian method of theory development is open-ended and derives provisional principles from observation, the rhetorical presentation designed to persuade an audience is different. What soothes the imagination is to present first principles and then account for various phenomena, connecting them all in one chain.³² But, as Smith demonstrates in his economics, principles serve to illuminate the “various phenomena” by requiring theoretical developments to explain deviations from the principles. The principles provide an abstract starting point for realist analysis.

Smith: Real Newtonian,” in *A History of Scottish Economic Thought*, ed. Dow and Dow; Leonidas Montes, “Newton’s Real Influence on Adam Smith and Its Context,” *Cambridge Journal of Economics* 32, no. 4 (2008): 555–76; Eric Schliesser, “Some Principles of Adam Smith’s Newtonian Methods in The Wealth of Nations,” *Research in the History of Economic Thought and Methodology* 23, no. 1 (2005): 33–74; Eric Schliesser, “Wonder in the Face of Scientific Revolutions: Adam Smith on Newton’s ‘Proof’ of Copernicanism,” *British Journal for the History of Philosophy* 13, no. 4 (2005): 697–732.

³⁰ See Hume, *A Treatise of Human Nature*, I.III.XII, 131–32. This was Hume’s problem of induction. While observed constant conjunctions of events prompted the *idea* of causation, they revealed nothing about the underlying causal mechanisms that could produce future outcomes, confounding the conjunction.

³¹ On the distinction between axioms and provisional principles arrived at through abduction, see Sheila C. Dow, “Smith’s Philosophy and Economic Methodology,” in *Elgar Companion to Adam Smith*, ed. Jeffrey T. Young (Edward Elgar, 2009).

³² Jesse Norman, *Adam Smith: What He Thought and Why It Matters* (Penguin Random House, 2019), 150.

The role of difference of perspective in Smith's work

The focus of this essay is on the light which Adam Smith's work might shed on pluralism defined in terms of the tolerance and sustenance of multiple approaches to knowledge. Starting, as Smith does, with human nature, we have seen his emphasis on the scope for individuals to have different perspectives when it comes to sympathizing with and judging their own behavior and the behavior of others. This difference in perspective enters also into judgments about the relative merits of theories developed to explain events in the physical and social worlds. Perspective arises from the particularities of experience and moral sentiments. These sentiments arise from social convention as well as individual experience. But, given the scope for a variety of social context, there is scope also for variety of sentiments. We have seen that the resulting variety of perspective provides the basis for variety of approaches to knowledge. In this fundamental sense Smith provides a building block for pluralism with his theory of human nature and its application to the conduct and appraisal of science. In this section we turn to his work on history and economics to see how he himself applied this understanding of difference of perspective that arose from his theory of human nature and his philosophy of science.

Arguably, some aspects of pluralism were intrinsic to Smith's intellectual environment, which embodied what we would now call an understanding of "otherness," or perspective. In particular, the typically historical approach of the Scottish Enlightenment and Smith's own discourses on history embodied this understanding. For example, the historical approach to education meant coverage of a range of systems of thought within each discipline in terms of the environment that spawned them, all building on a foundation of training in moral philosophy.³³ This approach equipped students to choose among alternative approaches according to their applicability to practical problems. It contrasted with the Oxford approach to education, which focused only on those theories currently accepted as best.³⁴

Smith developed the Scottish approach to history, which is called variously "philosophical," "conjectural," or "analytical" history. It played an essential role in Smith's Newtonian methodology, involving identification of patterns in order to suggest causal mechanisms behind historical events. Historical evidence that did not fit these patterns were of particular value in helping Smith to understand why the circumstances deviated from the ideal. Rather than what might appear to the orthodox historian as inconsistencies, which devalued theories, such evidence provided the basis for adapting provisional principles to different contexts. In the process, as Skinner³⁵ argues, Smith

³³ See Sheila C. Dow, "The Scottish Political Economy Tradition," *Scottish Journal of Political Economy* 34, no. 4 (1987): 335–48.

³⁴ It was a particular focus of the nineteenth-century education debates whether the degree program should start with moral philosophy (as in Scotland) or be offered as an advanced specialization (as in Oxford). See George E. Davie, *The Democratic Intellect: Scotland and Her Universities in the Nineteenth Century* (Edinburgh University Press, 1961); Robert D. Anderson, *Education and Opportunity in Victorian Scotland* (Clarendon, 1983).

³⁵ Skinner, *A System of Social Science*, 91–93.

respected the merits of alternative approaches to history, such as the narrative approach, on the grounds that no one approach could claim to be the most robust. Indeed, he used narrative history alongside philosophical history in his own work.³⁶

In “The History of Astronomy” Smith explores the different systems of astronomy not for appraisal, but as case studies to illustrate his theory of mind. Anticipating Thomas Kuhn’s account of the history of astronomy,³⁷ Smith explains the successive coexistence of different systems of astronomy.³⁸ Alternative theories were grounded to a greater or lesser degree in reason and evidence viewed through the lens of a particular understanding of the nature of the universe and associated beliefs. For example, Smith notes the significance of the belief that the earth was the center of the universe for the initial reluctance to accept the Copernican alternative. The succession of one approach after another was not a continuous process. Different approaches could coexist, at least for a time, in different environments.

Contemplation of alternative approaches for Smith involved further exercise of the imagination and sentiment. In “The History of Astronomy” Smith argues that theories are persuasive (or not) in terms partly of their respective appeals to the imagination and to sentiment within their own contexts. In the process Smith puts forward his own system for understanding science, not least in seeking to categorize different approaches (in a manner consistent with his more general philosophical and historical approach). While the imagination provides the motivation for science itself, context determines what causes wonder, what sets the mind at rest, and what is already conventionally known. The psychological appeal of a new system of thought will thus vary from context to context and from audience to audience, which explains the coexistence of different systems. Smith draws attention particularly to the long-lasting psychological appeal of Descartes’s abstract theorizing in spite of the fact that it was derived deductively without empirical input:

It gives us a pleasure to see the phaenomena which we reckoned the most unaccountable all deduced from some principle (commonly a wellknown one) and all united in one chain We need not be surprised then that the Cartesian Philosophy ... tho it does not perhaps contain a word of truth ... should nevertheless have been so universally received by all the Learned in Europe at that time. The Great Superiority of the method over that of Aristotle ... made them greedily receive a work which we justly esteem one of the most entertaining Romances that has ever been wrote. (LRBL ii.134)

³⁶ As explained in the editorial introduction to WN.

³⁷ Thomas S. Kuhn, *The Structure of Scientific Revolutions* (University of Chicago Press, 1962).

³⁸ See Andrew S. Skinner, “Adam Smith: Philosophy and Science,” *Scottish Journal of Political Economy* 19, no. 3 (1972): 307–19; Andrew S. Skinner, “Adam Smith: An Aspect of Modern Economics?” *Scottish Journal of Political Economy* 26, no. 2 (1979): 109–25.

Smith's history "sets up a human rather than an absolute or natural standard for science, and it leaves all science essentially hypothetical."³⁹ It demonstrates how astronomy developed as each new theory came to fall short of fully satisfying the imagination and as conventional understandings eventually weakened in the face of evidence. Irregularities in the flux of events relative to the regularities posited by a prevailing theory were only one possible spur to further inquiry. The imagination also needed to be soothed by explanations that were simple and aesthetically appealing. Smith points out that systems of thought in the natural sciences could in fact persist for a long time in the face of apparently contradictory evidence because they were isolated from popular critique: "Natural philosophers, in their independency upon the public opinion, approach nearly to mathematicians, and, in their judgments concerning the merit of their own discoveries and observations, enjoy some degree of the same security and tranquillity" (TMS III.ii.20).

For some "The History of Astronomy" is an account of the (rather halting) progress of astronomical research spurred on by reason and evidence. But for Smith, it was more than this. It was a case study in the workings of the mind whereby a much wider range of factors is at play, including the aesthetic imagination as well as different perspectives fostered by prevailing power structures and the resulting conventional understandings.

Smith applied his thinking on difference of perspective further in his economics. The fact that Smith argued strongly for, and jealously guarded, his own theoretical system about the economy⁴⁰ does not conflict with the interpretation that he engaged with other perspectives. Indeed, in the absence of demonstrable proof, pluralism *requires* argument and debate. In any case, Smith still showed respect for differences of opinion. As Jacob Viner puts it, "how refreshing it is to return to *The Wealth of Nations* with its eclecticism, its good temper, its common-sense, and its willingness to grant that those who saw things differently from itself were only partly wrong."⁴¹

This approach was evident in the way Smith respected and addressed Francois Quesnay's work in the process of rejecting much of it. Smith drew on Quesnay's analysis in terms of categorizations by class and returns to factors, and he expressed his admiration for Quesnay's system of thought (WN IV.ix). Nevertheless, having engaged constructively with physiocratic ideas, he was critical of them at different levels.⁴² Smith followed Quesnay in understanding macroeconomic outcomes in terms of class and returns. However, unlike Quesnay, Smith saw human motivation and the exercise of the imagination as central to economic growth, so he developed the analysis accordingly, incorporating

³⁹ Richard S. Olson, *Scottish Philosophy and British Physics, 1740–1870* (Princeton University Press, 1975), 123.

⁴⁰ See, e.g., Alexander C. Dow, "The Hauteur of Adam Smith," *Scottish Journal of Political Economy* 31, no. 3 (1984): 284–85.

⁴¹ Jacob Viner, "Adam Smith and Laissez-Faire," in *Adam Smith, 1776–1926: Lectures to Commemorate the Sesquicentennial of the Publication of The Wealth of Nations*, ed. John Maurice Clark and Paul Howard Douglas (University of Chicago Press, 1928), 155.

⁴² Skinner, *A System of Social Science*, chap. 5.

additional elements of dynamism to the analytical framework. The result was Smith's key theoretical objection to the physiocratic system and its classification of manufacturing, unlike agriculture, as unproductive. Nevertheless, Smith illustrated his understanding of perspective by noting that this aspect of physiocracy tended to appeal to popular imagination.

Smith was also critical of physiocrat methodology. He was particularly anxious to reject the implied universality of the conclusion drawn from analysis of Quesnay's 1758 *Tableau Economique* that economies would only reach their potential under completely free trade: "If a nation could not prosper without the enjoyment of perfect liberty and perfect justice, there is not in the world that could ever have prospered" (WN IV.ix.28). Instead, Smith applies his preferred method of examining the evidence from different historical periods, taking care to qualify general statements as appropriate. For example, while Smith argues forcefully against mercantilism, his analysis of economic relations between Britain and its colonies (notably in North America) involves a nuanced analysis of various restrictions on trade in relation to their context, noting benefits as well as costs.⁴³

Contributions from Smith to pluralism in modern economics

In tracing the successive replacement of dominant theories in astronomy, Smith anticipated Kuhn's theory of successions of paradigms in science, which was also based on a history of astronomy. The importance of difference of perspective to Smith's theory of human nature corresponds to Kuhn's notion of the incommensurability that inhibits understanding and communication between paradigms. There is a plurality of approaches within modern physical sciences, as pluralists such as Hasok Chang argue,⁴⁴ but plurality is more evident in the social sciences within institutional structures of schools of thought.

Kuhn's framework, in turn, has been adapted by others to explain developments in the social sciences where there are multiple contemporary approaches. But even within astronomy, Smith demonstrates the incommensurability of paradigms that Kuhn identifies. This difference of meaning of terms, use of concepts, understandings of the subject matter, and so on makes different approaches incommensurate and accounts for difference of approach. Smith's history thus demonstrates the importance of recognizing difference of approach, even if successful approaches supersede their predecessors rather than continue alongside them. Approaches succeed, as Smith explains, not just on account of preferred reason and evidence, but also by the exercise of sentiment.

The specialist fields of philosophy of science and philosophy and methodology of economics have focused particularly on approaches to building knowledge. Modern discourse on pluralism in economics was spurred on by dissatisfaction

⁴³ Andrew S. Skinner, "The Mercantile System," in *Elgar Companion to Adam Smith*, ed. Young.

⁴⁴ Hasok Chang, *Is Water H2O? Evidence, Realism, and Pluralism* (Springer, 2012), 293.

with the dominant approach in the middle of the twentieth century, namely, logical positivism.⁴⁵ That approach requires theory to be expressed in deductive mathematics and (even if only in principle) to be testable against data. We can see a parallel with Smith's and Hume's reactions to their dissatisfaction with Descartes's rationalism, which opened up consideration of alternative approaches. Warren Samuels draws attention to the plurality of ways in which economic theory had developed and was appraised over its history.⁴⁶ He emphasizes the significance of context and the scope for different perspectives both for selecting research questions and for settling on what constitutes a good argument.

Nevertheless, some within mainstream economics attempted to retain logical positivism as the demonstrably best approach to economics. As a result, alternative approaches were by definition inferior; pluralism tended to be dismissed as introducing an unacceptable degree of relativism of "anything goes."⁴⁷ At the same time, others have insisted that all of economics is pluralistic in the sense that there is theoretical variety.⁴⁸ But *theoretical* pluralism can operate within a common approach, that is, it is not *methodological* pluralism. Smith's early contribution was to illuminate the significance of there being a range of approaches, not just a range of theories.

A range of alternative approaches persisted in economics and they have continued to be developed as "schools of thought," which correspond to Kuhn's "paradigms." The nature of the economy is understood differently in each school, different concepts are employed to understand it, language is used differently (for example, with concepts such as "equilibrium" and "rationality"), different criteria are employed in appraising theory, and crucially different values are applied (corresponding to Smith's "moral sentiments"). Smith's argument that theory appraisal necessarily involves imagination and sentiment means that the reason and evidence on which logical positivism is based are insufficient for appraisal.

Nevertheless, possibilities are limited in that perspectives in practice are limited by the social nature of academic discourse. In particular, the range of conventional beliefs and judgments that allows academic discourse to proceed is limited because, by definition, they are shared by some subcommunity, such as a school of thought. An infinite plurality of perspective would be unmanageable, just as an infinite choice set is unmanageable for the consumer. Conventions

⁴⁵ See Bruce J. Caldwell, *Beyond Positivism: Economic Methodology in the Twentieth Century* (Allen & Unwin, 1982); Bruce J. Caldwell, "The Case for Pluralism," in *Popperian Legacy in Economics*, ed. Neil de Marchi (Cambridge University Press, 1988).

⁴⁶ Samuels, "The History of Economic Thought as Intellectual History."

⁴⁷ See Till Grüne-Yanoff and Philippe Verreault-Julien, "How-Possibly Explanations in Economics: Anything Goes?" *Journal of Economic Methodology* 28, no. 1 (2021): 114–23, for a recent discussion in relation to economic modeling.

⁴⁸ See, e.g., David Colander, "New Millennium Economics: How Did It Get This Way, and What Way Is It?" *Journal of Economic Perspectives* 14, no. 1 (2000): 121–32; John B. Davis, "Heterodox Economics, the Fragmentation of the Mainstream, and Embedded Individual Analysis," in *Future Directions for Heterodox Economics*, ed. Robert Garnett and John Harvey (University of Michigan Press, 2008).

facilitate decision-making among economists just as among economic agents where mental processes are understood as complex systems.⁴⁹

Smith's emphasis on the essential role of rhetoric in theory appraisal also indicates the limits on plurality of perspective imposed by sociality.⁵⁰ Rhetoric involves argument as to the merits of a theory relative to alternatives, which requires some understanding of the alternative perspectives on which those theories are based even if they are to a degree incommensurate. Productive debate thus requires communication based on efforts to understand alternative perspectives. Herein lies a particular benefit of pluralism: the exercise of debate itself strengthens both the expression and the content of each argument.

In considering economics, it is instructive to consider how Smith first introduced the idea of the division of labor by applying it to the activity of "philosophy" (academic inquiry).⁵¹ He argues that individuals specialize in different activities "not so much from nature, as from habit, custom, and education" (WN I.ii.4). Those who specialize in different branches of enquiry (such as disciplines) build up expertise and thereby increase output. But Smith cautions about the reduced scope for communication across specializations that is likely to ensue. Each would tend to build on analogies drawn from only one of a range of other disciplines, determining the cast of any argument and thus reducing commensurability (HA II.12).

Tony Lawson classifies differences between schools of thought in terms of a division of labor.⁵² Each school of thought is associated with its particular understanding of the nature of the economy. There is, therefore, an issue as to whether a school of thought is more usefully thought of as a specialization (like Smith's disciplinary specialization) than defined by its understanding of the economy. Feminist economics, for example, could be said to specialize in gender studies, but this could be seen in turn as reflecting a particular understanding of how particular economies work in a gendered way. Neo-Austrian economists, as another example, could be said to specialize in entrepreneurial studies, but this too could be seen as reflecting a different particular understanding of how the world works, with implications at the macro level, which is the subject matter of other approaches. Other schools of thought are even more difficult to think of as specializations. Post-Keynesians, Institutionalists, and Marxists share a subject matter, but address it in very different ways according to how they think the world works. Each approach "cuts" the economic system in a different way. Each also chooses research methods accordingly. Marxists, for example, would no

⁴⁹ See Sheila C. Dow, "Structured Pluralism," *Journal of Economic Methodology* 11, no. 3 (2004): 275–90; Peter E. Earl, "Lifestyle Changes and the Lifestyle Selection Process," *Journal of Bioeconomics* 19, no. 1 (2017): 97–114.

⁵⁰ Smith's ideas on rhetoric have been developed and applied to modern economics by the modern rhetoric literature, building on Deirdre N. McCloskey, *The Rhetoric of Economics* (Wheatshaf, 1985).

⁵¹ For an account of Smith's first discussion of the idea of division of labor as a feature of knowledge production, see Andrew S. Skinner, "Adam Smith, the Philosopher and the Porter," in *Knowledge, Social Institutions, and the Division of Labour*, ed. Pier Luigi Porta et al. (Edward Elgar, 2001).

⁵² Tony Lawson, *Reorienting Economics* (Routledge, 2003); Tony Lawson, *Essays on the Nature and State of Modern Economics* (Routledge, 2015), chap. 3.

sooner conduct lab experiments to identify perceptions of alienation than neo-Austrians would model aggregate entrepreneurial behavior in a formal model.

What Smith's epistemology suggests is that theory is developed—and succeeds (or not) in persuading different audiences—according to a range of factors that involve appeal to the imagination. Does the theory accord with experience (as understood from a particular perspective)? Does it accord with how the world is understood to work? Is the analogy on which the theory is based appealing (for example, mathematical formulation)? Is the theory aesthetically appealing (simple, elegant, surprising)? Does the theory relate to what is already familiar? Does the theory and its presentation accord with moral sentiments? These considerations go way beyond commitment to a particular focus of study, such that, as Smith had warned, communication is difficult across specializations. But his own examples also go beyond disciplinary specialization; he demonstrated the range of systems of thought that can coexist, for a variety of reasons, including different worldviews, within a subject area such as astronomy.

Concluding remarks

Issues surrounding the reliability of economic theories have assumed increased importance in the context of a range of crises, with some audiences in the general public articulating how unpersuasive they find the analysis and policy conclusions of much of economics. Evidently, the economics that has dominated policymaking has been falling short, particularly in its lack of connection with the understanding of different groups in society of how the economy actually works. The deductivist mathematical approach, using a physics analogy, persuaded non-economists for a long time that economics was a technical science with which the general population did not need to engage. The presumption was that no moral sentiments were involved.

We are returning to a situation with which Smith was very familiar, where successful persuasion of the general population assumes great importance. While consistency with evidence is something to be established within the academic physical science community, social science must address real social experience:

A system of natural philosophy may appear very plausible, and be for a long time very generally received in the world, and yet have no foundation in nature, nor any sort of resemblance to the truth. ... But it is otherwise with systems of moral philosophy, and an author who pretends to account for the origin of our moral sentiments, cannot deceive us so grossly, nor depart so very far from all resemblance to the truth. (TMS VII.ii.4.14)

Having enjoyed relative immunity from public challenge for a long time, it seems that economists now need to renew their efforts to persuade their audience of the strength of their arguments.

The heightened level of public debate on socioeconomic issues induced by recent crises in a range of spheres has given more weight to the public audience's

lived experience and moral sentiments. An understanding of how the world works may well be very different for someone at the sharp end of austerity policies from someone employed in the financial center, from policymakers, and so on. Different approaches to economics will appeal differently to the imagination, experience, and moral sentiments of each group, such that the persuasiveness of any argument will benefit from greater awareness of this. Where debates are aired in public among academic economists and policymakers as to the causal mechanisms underlying lived experience, greater public awareness will follow. As a result, understanding and communication will benefit, and persuasion among the different parties will be more effective.

In the meantime, Smith's analysis of theory development provides further guidance for theorizing about underlying causal mechanisms. As the sociopolitical and technical economic environment evolves, Smith's approach is to treat arguments as provisional and open to adaptation when applying abstract principles to real contexts. This requires us to engage with alternative approaches not only to persuade, but also to learn. The key to this exercise is to understand the nature of "approach" to knowledge and its origins in human nature. The incommensurabilities identified by Kuhn in scientific discourse correspond to the plurality of perspectives Smith identified more generally in human discourse. Accordingly, we find in Smith a set of ideas that can be seen as potentially foundational to modern discourse on pluralism.

Acknowledgments. This essay has benefited from helpful comments and suggestions from David Schmidtz as well as from four anonymous referees.

Competing interests. The author declares none.