

# The Foundations of Knowledge and Management: An Introduction

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#### Abstract

As a discipline, management history has suffered from the fact that it has typically paid insufficient heed to economics, just as economics has suffered from paying insufficient heed to management and the mechanics of production. In recent years, management history has also divided over matters related to epistemology, the intellectual principles that guide our inquiries and understandings of the world. Accordingly, this Part of the Handbook has two aims. First, it explores the core theoretical principles that have informed economics through a study of classical economics, neo-classical economics, and Marxism. Second, it considers the origins of contemporary debates relating to positivism and postmodernism in the intellectual ferment of the eighteenth and early nineteenth centuries, a period that witnessed both epistemological understandings that supported the emergence of capitalism and modern management as well as philosophies deeply opposed to the advance of science, rationality, and industrialization.

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#### Problems of Economic Understanding

In the general introduction to this Palgrave Handbook of Management History, we observed that, "Management history as a discipline is different from business and economic history in that it is primarily concerned with the supply side of the economic equation, with the nature of work, the ideas that guide it, and the economic wealth that is produced" (▶ Chap. 1, "Management History in the Modern World: An Overview" by Bowden). It is also noted that one of the weaknesses of management history is the lack of attention that is typically paid to economics, a failing that mirrors that found in economics, where economists typically pay insufficient heed to management, the problems of production, and what makes for an efficient and effective business. Where economic concepts are utilized in management and business history, they are often used in error. Alfred Chandler (1977: 1), for example, in the opening page of his famed study, The Visible Hand: the Managerial Revolution in American Business, spoke of "what Adam Smith referred to as the invisible hand of market forces." In fact, as we discuss in the chapter in this Part entitled, ▶ Chap. 15, "Economic Foundations: Adam Smith and the Classical School of Economics," Smith never spoke of "the invisible hand of the market." Instead, in his only reference to "an invisible hand" in The Wealth of Nations, Smith (1776: Book IV, Chap. 2, para. 9) associated the concept with self-interest and the economic pursuits of the individual businessperson, declaring that in directing "industry":

 $\dots$  in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention.

Spurious understandings of economics in general and Smith in particular also characterize Cummings et al's (2017) recent *A New History of Management*, where the authors fancifully claim that Smith was an enthusiast of neither capitalism nor the division of labor. Such conclusions are belied by Smith's (1776: Book 1, Chap. X, para. 53) observation that, "In opulent countries the market is generally so extensive that any one trade is sufficient to employ the whole labour and stock of those who occupy it." Only in "poor countries," Smith (1776: Book 1, Chap. X, para. 53) added, did one witness production methods built around anything other than the "division of labor."

Even if economics has played – and will continue to play – a secondary role in management history, it is nevertheless the case that the management historian invariably brings to their analysis an understanding of economics, be it implicit or explicit, spurious, or accurate. One of the primary purposes of this Part is therefore

one of redressing misunderstandings of economics. To this end, this Part devotes chapters to both classical and neo-classical economics. In the first of these, we (> Chap. 15, "Economic Foundations: Adam Smith and the Classical School of Economics" by Bowden) discuss how the genius of Adam Smith lay in his capacity for synthesis rather than in original thought. His ideas on "self-interest" as the prime motive force in a capitalist society were derived from his close friend, David Hume. His concept of value was obtained from the French *physiocrat*, Richard Cantillon. Such was Smith's propensity to borrow unreferenced ideas from others that Murray Rothbard (2006: 435) declares him "a shameless plagiarist, acknowledging little or nothing and stealing large chunks ... from Cantillon ... he originated nothing that was true." Rothbard's condemnation was misplaced. Yes, Smith borrowed some of his central concepts from others without formal acknowledgement. Nevertheless, in synthesizing concepts derived from elsewhere, and adding insightful additions of his own. Smith deserves his status as the effective founder of modern economics. One of the key distinctions that Smith drew, and which still escapes the understanding of many, is the distinction between "wealth" and "capital." This distinction certainly eluded Thomas Piketty in his much cited but deeply flawed study, Capital in the Twenty-First Century. Throughout his study, Piketty (2012/2014) constantly conflated "wealth" and "capital," using the terms interchangeably. However, as Smith understood, "wealth" (i.e., consumables, jewellery, wine, etc.) is something that results from the combination of "labor" and "capital" (i.e., machinery, factory buildings, etc.). As such items of personal "wealth" typically have an "exchange" value but little if any "use" value. Accordingly, the productive capacity of a society ultimately rests on the "wealth" that it allocates to "capital" rather than the goods and services that it consumes at any given point in time.

In our second chapter on economic thought, we (▶ Chap. 16, "Neo-classical Thought: Alfred Marshall and Utilitarianism" by Boccalatte) explore how understandings of utility and value were transformed through the insights of Jeremy Bentham, David Ricardo, John Stuart Mill, and, above all, Alfred Marshall. Whereas Adam Smith primarily understood "utility" as a good's usefulness to a consumer, Jeremy Bentham (1781/2000), in his An Introduction to the Principles of Morals and Legislation, made "utility" the basis of a complex moral philosophy, one where individual choice is driven by an oscillating sense of pleasure and pain. Libertarian in its ethos, utilitarianism in Bentham's analysis always returns to individual choice, to the individual capacity to choose between pleasure and pain. By contrast, for Ricardo – as subsequently for Marx – the utility or value of a good was associated with the quantity of labor invested in its production. For his part, John Stuart Mill, in considering the problems of utility and value, found inspiration in both Bentham and Smith. In one of his later works, Utilitarianism, Mill (1861/2009) adopted an essentially hedonistic view of utilitarianism. More commonly, however, Mill spoke of utility in classical economic terms, adding little to the opinions previously advocated by Smith. It was the genius of Marshall, however, who fundamentally transformed not only our understandings of utility and value but also of economics more generally. As Marshall understood it, utility does not exist in isolation, just as production is incomprehensible apart from consumption. Instead, utility is

influenced by price. In other words, a good's usefulness to me is indicated by the price that I am prepared to pay for it. For almost every good or service, there will thus come a point where the price at which it is sold exceeds its perceived utility, an outcome that curtails demand. Each good or service thus has what Marshall (1890/1997) called its "marginal utility," a want that increases or diminishes in accordance with price.

If classical and neo-classical are central to understandings of management in liberal, free market economies, it is also the case that these understandings have always encountered opposition: from "romantic" defenders of a bucolic existence, Marxists, non-Marxian socialists, anarchists, postmodernists. During the latter half of the nineteenth century and for most of the twentieth century, capitalism's principal opponent was Marxism. In our third chapter on economics, we ( Chap. 18, "The Marxist Opposition to Capitalism and Business" by Boccalatte) consider not only the nature of Karl Marx's ideas but also how these ideas emerged out of a now largely forgotten debate between a youthful Marx and the French socialist, Pierre-Joseph Proudhon. In responding to Proudhon's (1847/1888) La Philosophie de la Misère (The Philosophy of Poverty) – a work that argued that capitalism and its system of private property is based upon theft - Marx (1847/ 1955) penned a similarly (if sardonically) titled book, La Misère de la Philosophie (The Poverty of Philosophy). As we note, many of the core concepts that came to characterize Marxism – that labor is the sole source of wealth, that the capitalist acquires wealth by purloining the "surplus-value" of the waged laborer, that the ever-increasing use of machinery was furthering both the growth of a proletariat and an inevitable class conflict - were derived from Proudhon. Despite this acquisition, however, we suggest that it is wrong to depict Marx as a plagiarist. As with Smith, who derived his key ideas from Hume and Cantillon, Marx used his understandings to reach fundamentally different conclusions to Proudhon, synthesizing novel understandings of economics and politics. Whereas Proudhon's view of capitalism was uniformly hostile, Marx's understandings - as expressed in *Capital* – were more nuanced. Where Proudhon perceived the worker as the sole creator of value, Marx (1867/1954: 72-73) argued that capitalist production was always a collective endeavor with the "specific social character of each producer's" efforts only revealing "itself in the act of exchange." Accordingly, Marx (1867/ 1954: 146) continued, "The circulation of commodities is the starting-point of capital." In short, Marx - like Marshall - argued that the problems of capitalism and management can never be ascertained solely by looking to workplace circumstances. We also need to locate these problems within the wider context of the society that it serves. The tragedy of Marxism, of course, lay not only in its belief that the capitalist market could be replaced by a planned economy, but also in its understanding that history always revolved around class struggle. In every Marxist society, to a greater or lesser extent, this view of society manifested itself in woes far more grievous than a stultified market and a chronic mismatch between production and consumption. It also resulted in societies built upon denunciation, in which every failing is perceived to be the result of some real or imaginary enemy.

#### Problems of Epistemology

If the problems and achievements of management cannot be understood apart from economics, and the debates that economics has engendered, it is also the case that debates as to the nature of management are intertwined with different understandings of epistemology. Many now subscribe to Michel Foucault's (1976/1978: 100) view that, "it is in discourse that power and knowledge are joined together." Conversely, many "traditional" historians, positivist by inclination, ascribe to a "common sense" view of knowledge, sharing Thomas Hobbes's (1651/2002) learned opinion that, "science is the knowledge of consequences, and dependence of one fact upon another." Unfortunately, for the advocates of a "common sense" view of knowledge, one does not need to be a postmodernist to ascertain the flaws in their epistemological premises. As the great Austro-English philosopher, Karl Popper (1935/2002: 12) observed, "the most important and most problems of epistemology must remain completely invisible to those who confine themselves to analyzing ordinary or common-sense knowledge." For it is the nature of the human condition that our minds constantly deal in abstractions – management, freedom, productivity, marginal utility, use value, geometry, algebra – that are a creation of our minds, not the world. Historical processes are also in large part the product of social and economic institutions, of accumulated capital and physical resources. But they are also the result of human consciousness and will, of attempts to reshape the world anew. As an historian, there is thus no greater difficultly than in giving proper weight to these different motive forces, one grounded in the past (i.e., institutions, physical resources, culture, etc.) and the other in the present (i.e., human consciousness and will).

One of the unfortunate tendencies that mares contemporary management history is the tendency to embrace various epistemologies and methodologies without explaining either their origins or, more importantly, the *implications* for using the nominated approach *vis-à-vis* another. Accordingly, the first and second last chapters in this Part – ( $\triangleright$  Chap. 14, "Intellectual Enlightenment: The Epistemological Foundations of Business Endeavor" by Bowden) and ( $\triangleright$  Chap. 17, "Foundations: The Roots of Idealist and Romantic Opposition to Capitalism and Management" by Bowden) – speak to the origins of the intellectual debates that currently transfix management history: debates that see postmodernist understandings opposed to more "traditional" approaches grounded in positivism.

Through an exploration of the origins of the empiricist or positivist tradition, the first chapter in this Part –  $\triangleright$  Chap. 14, "Intellectual Enlightenment: The Epistemological Foundations of Business Endeavor" – pays special heed to the foundational ideas of Hobbes, John Locke, David Hume and Edmund Burke. Among the exponents of the empiricist or positivist tradition, arguably none was more insightful then Hume. In his most significant work, *An Inquiry Concerning Human Understanding*, Hume outlined three key propositions. First, Hume (1748/1902: 25) began by noting that "human reason" deals with not only "matters of fact" but also with the "operation of thought, without dependence on what is anywhere existent in the universe." In explaining this distinction, Hume noted the common use of circles and triangles in

geometry, even though "there were never a [pure] circle or triangle in nature." The second foundational principle that Hume expounded was one that emphasized the fundamentally skeptical and conservative nature of the intellectual tradition that Hume himself helped establish. Declaring, "our thought" is "confined within very narrow limits," Hume (1748/1902: 19, 30) concluded that we are incapable of determining "any single evident, or infer any cause or effect, without the assistance of observation and experience." Finally, and most controversially, Hume argued that the human mind is incapable of judging cause and effect relationships given the uniqueness of each historical experience. As a result, Hume (1748/1902: 36–37) advised his readers, the most we can ever infer is that from "causes which appear *similar* we can expect similar effects. This is the sum of all our experimental conclusions" [stress in origina].

In reflecting upon Hume's arguments, the German philosopher, Immanuel Kant (1783/1902: 3-4), thoughtfully concluded that, "since the origin of metaphysics ... nothing has ever happened which was more decisive to its fate than the attack made upon it by David Hume." In turning to Hume's key argument – that human reason is incapable of determining cause and effect – Kant (1783/1902: 58-59) came to argue on a contrary proposition, that the "concept of cause ... is a pure concept of the understanding, which is totally disparate from all possible perception." Often derided as an idealist philosopher, Kant (1783/1902: 48-49) himself vigorously denied the charge, declaring: "My protestations ... against all charges of idealism is so valid and clear as even to seem superfluous ... My idealism concerns not the existence of things ... since it never came into my head to doubt it." In his most famed study, the Critique of Pure Reason, Kant (1787/2007: 348) continued his denial of charges of idealism with the declaration that "the real, or the material" exists in "space actually and independently of all fancy." Nevertheless, despite this denial, Kant continued to chart a fundamentally different path to Hume, establishing in the process a third intellectual tradition in between empiricism on the one hand and philosophical idealism on the other. For whereas Hume believed that reason and thought progressed from empirical observation, Kant (1787/2007: 137) argued the reverse, stating,

All knowledge requires a concept, however obscure and imperfect that concept may be; and a concept is always, with regard to its form, something that is general and that can serve as a rule.

If Kant sought to weave a path between pure empiricism and pure idealism, in the course of the nineteenth century the various strands of idealist philosophy grew in strength, intermingling with the English "Romantic" tradition and eventually giving motive force to postmodernism is its disparate hues. Beginning our discussion of philosophic idealism in the first chapter in this Part ( $\triangleright$  Chap. 14, "Intellectual Enlightenment: The Epistemological Foundations of Business Endeavor"), we return to a discussion of German idealism and English Romanticism – and the ways in which they have informed postmodernist thought – in our penultimate  $\triangleright$  Chap. 17, "Foundations: The Roots of Idealist and Romantic Opposition to Capitalism and Management."

existence" signals within it "another existence."

Although the linkages between philosophical idealism and the dominant figures in postmodernist thought – Jacques Derrida, Michel Foucault, Hayden White – are rarely discussed in the "critical management" literature, it is our contention that it is impossible to understand these dissident traditions apart from their origins in German idealism. Like Nietzsche, who declared that through acts of will it is always possible to break the "invisible spell" of societal mores (Nietzsche 1886/1989: 31, 27), Foucault (1966/1994: xx) believed that we can break free of the "fundamental codes" of "culture" through acts of will. This Foucauldian/Nietzschean emphasis on consciousness and will as transformative forces owes a clear debt to Schopenhauer's (1859/1969) The World As Will and Representation, a work that proclaimed that, "this world is, on the one side, entirely *representation*, just as, on the other, [it] is entirely will" [emphasis in original]. In turn, not only Schopenhauer but also Nietzsche, Foucault, Martin Heidegger, and Derrida derived core understandings from Friedrich Schelling's (1809/2006) Philosophical Investigations into the Essence of Human Freedom. In this, Schelling (1809/2006: 33) argued for the "complete freedom" of individual consciousness and will "above and outside of all nature." In his critique of modernity, Derrida also found inspiration in an intellectual lineage that stretched back through Heidegger, Edmund Husserl, Schopenhauer, and Schelling to Johann Fichte, arguably the true founder of German idealist thought. Like Derrida, who argued that language had "traces" of previous forms of existence of which the author is often unaware, Fichte (1799/1910: 7) argued, that "every

In exploring the intellectual roots of postmodernism and other idealist traditions hostile to capitalism and modern forms of management, our penultimate chapter also traces the way in which a critical tradition emerged through the cross-fertilization between German idealism and English "Romanticism." Like the English Romantics who believed that the new factory cities cut humanity off from what Wordsworth (1802/1935: 296) described as "eternal Nature, and the great moving spirit of things" – Fichte (1799/1910: 11) declared that "Nature is one connected whole." Within this spiritually infused Nature, Fichte (1799/1910: 11) continued, one cannot "move a single grain of sand ... without thereby ... changing something throughout all parts of the immeasurable whole." Finding a resonance in the contemporary environmental movement, the English "Romantics" (William Blake, Samuel Coleridge, William Wordsworth, Percy Shelley, Mary Shelley, John Polidori, Lord Byron) also argued that the human spirit found "a better soil" in a "low and rustic life" than it did in an urban existence (Wordsworth 1800/2009: 142, 144). Far from offering humanity a way forward, William Blake (1808/1969: 481) famously argued in its epic poem on Milton, industrialization condemned ever-growing numbers to lives among "dark Satanic Mills."

The enduring value German idealist philosophy and English "Romantic" literature is found in its emphasis on human consciousness, spirit, and will as central elements in the historical experiences. Nevertheless, the depiction of a bucolic existence as one superior to that offered by an advancing modernity was a figment of largely aristocratic imaginations. For the overwhelming majority of the population in a preindustrial society the reality of daily life was one of filth, illiteracy, powerlessness, backbreaking toil, disease, and early death. As the French political theorist, Jean-Jacques Rousseau (1762/1979: 47) observed in reflecting upon life in eighteenth-century France, "Almost all of the first age is sickness and danger. Half the children born perish before their first year." Although there is a tendency to think of the Renaissance, the Reformation and the Age of European Discovery as an era of rising prosperity, in truth the conquest of empire and a one-sided trade with the non-European world did little to change the living conditions of people either within Europe or without. As Palma and Reis's (2019) recent study has shown, despite the benefit of empire the per capita incomes of most European societies in the mid-nineteenth century remained barely above the subsistence level. Accordingly, as Fig. 1 indicates – which records per capita income in so-called Geary-Khamis "international" United States dollars that adjust for inflation and national price variations – only in Britain do we witness a society able to break from of the misery and poverty that was the historic norm. In doing so, Britain provided the world with an economic and managerial model where the benefits soon far outweighed the longterm costs. If the English "Romantics" in particular provided an idealized image of preindustrial life that little corresponded to reality, it is also the case that – with the partial exception of Percy and Mary Shelley - both the English "Romantic" movement and German idealism tended to regard democracy and the advance of the common citizen with disdain. Of the English advocates of the popular vote, Byron (1820/2015: 353) declared them "a pack of blackguards ... who disgust me with their Cause ... I shall pause before I lend myself to the views of such ruffians." In a similar vein, William Wordsworth (1821/1978: 27–28) argued that only through "an

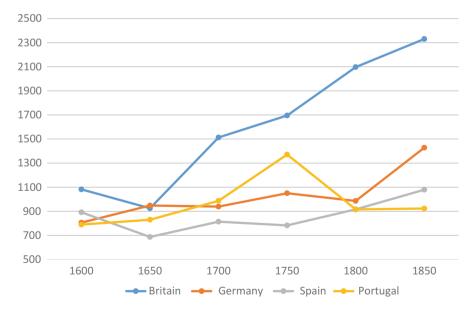


Fig. 1 Output per Capita in US Dollars (1990 value), 1600–1850 –England, Germany, Portugal and Spain. (Source: Palma and Reis, "From Convergence to Divergence," p. 500, Table 4)

armed Yeomanry" and a "Press properly curbed" was the maintenance of "order" possible. For Nietzsche (1874: 39–40) as well, "the popular masses and working classes" were "dangerous," "unintelligent," the "lowest clay and loam layers of society."

If those who seek inspiration in the intellectual traditions of German philosophic idealism and English "Romanticism" are misinformed if they think these traditions are democratic in ethos, it is also the case that one is misguided if one believes that these traditions are the basis for a sound epistemology, a set of principles that helps one explain the world. Yes, it is true, as Popper pointed out, that the empiricism of Hume was misguided in its rigid adherence to experience and observation as the touchstone of understanding. Nevertheless, as Popper (1935/2002: 280) accurately observed in *The Logic of Scientific Discovery*, "We do not stumble upon our experiences, nor do we let them flow over us like a stream. Rather, we have to 'make' our experiences ... every step is guided by theory." In other words, as Kant inferred, research begins with concepts and theses, with propositions that act as our guides, guides to whom we adhere or dispense with to the extent that their guidance is confirmed by evidence.

Central to the debates that currently divide management history, as it divides other disciplines, is the process of energy-intensive industrialization that commenced with the "Industrial Revolution." Few of us stop to think, however, of where the term "Industrial Revolution" came from - a term used neither by John Stuart Mill nor Karl Marx. Nor do we stop to consider why the Industrial Revolution is typically dated from 1760 to 1830, dates that correspond with the accession of George III and the death of George IV rather than any particular economic or technological transformation. The arbitrary nature of the dates and terminology associated with the Industrial Revolution are such that the Chicago-based John Nef (1943: 1) declared that, "There is scarcely a conception that rests on less secure foundations." In the final chapter of this section, therefore, we explore how the concept of the "Industrial Revolution" emerged from the posthumous publication of the lectures of Arnold Toynbee the elder (1884/1894), a work that gained renown as Lectures on the Industrial Revolution of the eighteenth century in England. From this starting point we (> Chap. 19, "Conflicting Understandings of the Industrial Revolution and Its Consequences: The Founding Figures of British Management History" by Bowden) explore in our final chapter, how the concept of *the* Industrial Revolution became a source of contestation among economic, labor and social historians most notably John Nef, John Clapham, Arnold Toybee the younger, Sidney and Beatrice, E.P Thompson and Sidney Pollard – and how the discipline of management history arose in large part as a response to these debates.

#### **Cross-References**

- Conflicting Understandings of the Industrial Revolution and Its Consequences: The Founding Figures of British Management History
- ▶ Economic Foundations: Adam Smith and the Classical School of Economics

- ► Foundations: The Roots of Idealist and Romantic Opposition to Capitalism and Management
- ► Intellectual Enlightenment: The Epistemological Foundations of Business Endeavor
- ▶ Neo-classical Thought: Alfred Marshall and Utilitarianism
- ▶ The Marxist Opposition to Capitalism and Business

### References

- Bentham J (1781/2000) An introduction to the principles of morals and legislation. Batoche Books, Kitchener
- Blake W (1808/1969) Milton. In: Keynes G (ed.) Blake: Complete Writings. Oxford University Press, Oxford
- Byron L (1820/2015) Letter from Lord Byron to John Murray, 21 February 1820. In: Byron L (ed) Byron's letters and journals: a new selection (ed: Lansdown R). Oxford University Press, London, pp 351–353
- Chandler AD Jr (1977) The visible hand: the managerial revolution in American business. Belknap Press, Cambridge, MA
- Cummings S, Bridgman T, Hassard J, Rowlinson M (2017) A new history of management. Cambridge University Press, Cambridge, UK
- Fichte JG (1799/1910) The vocation of man, 2nd edn. Open Court Publishing House, Chicago
- Foucault M (1966/1994) The Order of Things. Vintage Books, New York
- Foucault M (1976/1978) The history of sexuality an introduction (trans: Hurley R). Pantheon Books, New York
- Hobbes T (1651/2002) Leviathan. Broadway Press, Peterborough
- Hume D (1748/1902) An inquiry concerning human understanding. In: Hume D (ed) Inquiries concerning the human understanding and concerning the principles of morals (ed: Selby-Bigge LA), 2nd edn. Clarendon Press, Oxford, pp 2–165
- Kant I (1783/1902) Prolegomena (trans: Carus P). Open Court Publishing, Chicago/La Salle
- Kant I (1787/2007) Critique of pure reason (trans: Weigelt M), 2nd edn. Penguin Classics, London Marshall A (1890/1997) Principles of economics, 8th edn. Prometheus Books, New York
- Marx K (1847/1955) The poverty of philosophy. Progress Publishers, Moscow, USSR
- Marx K (1867/1954) Capital: a critical analysis of capitalist production, vol 1. Foreign Languages Publishing House, Moscow, USSR
- Mill JS (1861/2009) Utilitarianism. Floating Press, Auckland
- Nef JU (1943) The industrial revolution reconsidered. J Econ Hist 3(1):1-31
- Nietzsche F (1874) On the use and abuse of history for life (trans: Hollingdale R). http://la.utexas. edu/users/hcleaver/330T/350kPEENietzscheAbuseTableAll.pdf
- Nietzsche F (1886/1989) Beyond good and evil: prelude to a philosophy of the future (trans: Hollingdale R). Vintage Books, New York
- Palma N, Reis J (2019) From convergence to divergence: Portuguese economic growth 1527–1850. J Econ Hist 79(2):477–506
- Piketty T (2012/2014) Capital in the twenty-first century (trans: Goldhammer A). Belknap Press, Cambridge, MA
- Popper K (1935/2002) The logic of scientific discovery. Routledge, London/New York
- Proudhon P-J (1847/1888) The philosophy of poverty. McMaster University, Hamilton
- Rothbard MN (2006) Economic thought before Adam Smith: an Austrian perspective on the history of economic thought, vol 1. Ludwig von Mises Institute, Auburn
- Rousseau J-J (1762/1979) Emile: on education (trans: Bloom A). Penguin Classics, London
- Schelling FWJ (1809/2006) Philosophical investigations into the essence of human freedom. State University of New York, Albany

- Schopenhauer A (1859/1969) The world as will and representation, 3rd edn. Dover Publications, Dover
- Smith A (1776/1999) An inquiry into the nature and causes of the wealth of nations. Penguin Classics, London
- Toynbee A (1884/1894) Lectures on the industrial revolution of the 18th century in England. Longman, Green, London
- Wordsworth W (1800/2009) Preface of 1800. In: Wordsworth W (ed) Prose Works of William Wordsworth (ed: Owen WJB, Smyser JW), vol 1. Humanities e-Book http://ebookcentral. proquest.com/lib/griffith/detail.action?docID=3306065
- Wordsworth W (1802/1935) Letter to John Wilson June 1802. In: Wordsworth W (ed) The early letters of William and Dorothy Wordsworth 1787–1805 (ed: Selincourt E). Clarendon Press, Oxford, pp 292–298
- Wordsworth W (1821/1978) Letter from William Wordsworth to Viscount Lowther, 9 February 1821. In: Wordsworth W (ed) The letters of William and Dorothy Wordsworth 1821–1828 (ed: Hill AG, Selincourt E), 2nd edn. Clarendon Press, Oxford, pp 27–29