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The Day of the Political Economist

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by

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> The intention of moral philosophy is to direct men to that course of action which tends most effectually to promote their greatest happiness and perfection; as far as it can be done by observations and conclusions discoverable from the constitution of nature, without any aids of supernatural revelation: these maxims, or rules of conduct are therefore reputed as laws of nature, and the system or collection of them is called the Law of Nature.*
>
> Francis Hutcheson (c. 1740)

The eighteenth is a remarkable century insofar as the emergence of modern Western thought is concerned. It was a century of revolution in politics, of change from the traditional centralized form of political organization, the monarchy, to experiments in more decentralized polities. It was a century of dramatic change in science. It was the century of the Enlightenment, the Age of Reason.[1] And since reason was widely viewed in intellectual circles as a vehicle that would insure progress, improve the human condition, it was a century of widespread optimism.[2] It can also be seen as a century of a "natural order" of a sort, a century in which intellectual attention was focused, to a greater extent than before, on the natural world, that is, the observed world, the experimental world, the empirical world. It is in the soil of this natural order that we find the development of many of the sciences of the modern world, including physics, chemistry, biology, and botany. It is also the soil in which

we find the germination of political economy as a defined discipline, a unique field of study.

This paper is an occasion to formulate a comment on the economic doctrine of this natural order. The paper has four parts. First, I want to consider the natural order itself. Here my concern is to bring to the surface the main intellectual currents of the day, currents that figure centrally in the emergence of political economy. Second, it will be in our interest to visit for a bit with Adam Smith, the eighteenth century Scottish moral philosopher. This brief look at Smith's life will afford an increment of insight into the man whose work was instrumental in founding the discipline of political economy. Third, I want to summarize the political economy of Smith. Here I intend to examine the main features of his economy and his analysis of economic activity. Finally, I will bring this piece to a close with a concluding comment on the place of Smith's political economy in the subsequent development of economic doctrine.

I. The Natural Order

In November 1660 a few learned men meeting at Gresham College in London set out to create a "Colledge for the promoting of Physico-Mathematicall Experimentall Learning."[3] The men included Robert Boyle, the chemist, William Petty, physician, professor of anatomy and music, surveyor and inventor, and Christopher Wren, the astronomer and architect. What these men founded turned out to be, not a college, but rather a scholarly society, what would become the Royal Society of London for the Promotion of Natural Knowledge. His Majesty, Charles II, chartered the Society in 1662. The Fellows of the Society, in these early years, met weekly to set their agenda, to listen to lectures, to debate, to argue, to track down truth in natural philosophy, and then to publish the noteworthy knowledge in the journal,

Philosophical Transactions.[4]

The founding of the Royal Society is of interest to us because, in its establishment, we find expression of a largely new intellectual movement, a movement driven by a spirit of independence and focused on the pursuit of natural knowledge. The Society's motto, *Nullius in Verba*, taken from Horace, is a declaration of obedience to *no* master.[5] In taking this maxim the Fellows declared their independence from the traditional systems of knowledge, those associated with Aristotle, Ptolemy, and other ancients that tended to dominate the university curricula of the day. The axiom was also a statement of the Society's independence from Church and State, institutions whose governance was often stifling, that is, arbitrary and oppressive, as in the Holy Inquisition. Then, the focus on nature, or natural knowledge, meant an emphasis on inquiry into the observable natural world, the natural order, in contrast to those less observable moral, religious, or other supernatural worlds.

The intellectual movement suggested in the founding of the Royal Society had two sweeping facets, one political and one scientific. The two aspects are given expression in the work of two of the distinguished Fellows of the early Royal Society. The political side is expressed in work of John Locke (1632-1704)[6] with the scientific side prominent in work of Isaac Newton (1642-1727).[7] These facets are important for our purpose because they are central aspects of the eighteenth century natural order, an order rather widely defined at the time with reference to nature, and the order in which a rather modern political economy took shape. Consider each of these dimensions in turn.

Locke's scholarly interests varied widely from natural philosophy, that is natural

science, to moral philosophy, particularly political thought. His enduring work includes *An Essay Concerning Human Understanding* published in 1690, a rather long philosophical discourse remembered primarily for its message pointing to the fundamental importance of sensory perception, or experience, in the pursuit of knowledge. The *Essay* thus stands as a foundation for modern scientific analysis of the empirical sort. Also prominent among his works is his tract on political thought, *Two Treatises of Government*, published in 1689. The *First Treatise* is a critique of the doctrine of "the divine right of kings" presented in Robert Filmer's *Patriarcha*. The *First Treatise* thus stands as an argument against centralized political authority ordained by the Deity. The *Second Treatise* is the work of importance to us. This is his, then timely, now classic, philosophical argument on the nature and proper role of government in civil society.[8]

The argument follows from his postulated "state of nature," a political setting which existed, or at least can be imagined, prior to the emergence of government. In this state, men were free and equal agents. Since no man had any legitimate claim to authority over another man, each was free of constraints imposed by others. Consequently each man was also equal in the possession of authority over his own affairs. Moreover, in this antecedent state, men were commonly endowed with certain "natural rights." Each man held as inviolable the rights to his own person and to the produce of his labor. While the right to his person encompassed his rights to life and liberty, the right to the produce of his labor meant that he was legitimately entitled to private property, property reserved for his exclusive use. And the man of this native state was subject to merely one constraint, albeit a demanding one. He was bound by the moral "law of nature" made known to him through his faculty of reason. He

was bound by the constraint that he respect the natural rights, the person and property, of his fellow men.[9]

Man might have enjoyed a pacific existence in this pristine state, without government, had he only been a more reasoning animal, had he only behaved himself strictly in accordance with the law of nature. However, the state of nature was deficient to the extent that man was not always so respectful of his fellow men. He was too often prone to trample on the rights of others. He frequently sought to gain special advantages; he was inclined at times to enslave some of his numbers; and he occasionally invaded and seized the property of others. These all too apparent instances of disrespect, these deviations from nature's moral law inevitably reduced the state of nature to a condition of conflict and chaos, an altogether inhospitable environment for the species, a "state of war." To avoid the costly onslaught of the state of war, reasonable men of good will were naturally disposed to enter into an agreement, a "compact," calling for the formation of a tranquilizing increment of civil government.[10]

The compact was a voluntary agreement among men who were bent on preserving the bulk of their natural rights. It was an exchange of a few rights for the retention of remaining rights. In the exchange, men consented to the creation of a central authority, government, but one having only that measure of power necessary to maintain law and order in the commonwealth. A body of law formulated by a representative assembly was to be the basis for resolving disputes; an impartial judge was to apply the law in particular cases and render binding decisions; and an executive authority would be empowered to enforce the law and the decisions of the judge. In consenting to this authority, men willingly sacrificed the right

to take the law into their own hands, and agreed to maintain the authority by submitting themselves to a modest tax on their property. In return for these sacrificed rights, men would retain all of their remaining rights to their persons and property. And what is more, they would enjoy these essential rights in an altogether more fitting environment, one of greater tranquility and less hostility.[11]

Such were the essential elements of Locke's argument. It portrayed a political order with a decidedly libertarian bent. It postulated a milieu wherein men were largely at liberty to pursue their own well-being, to exercise their natural rights to provide for themselves. The individual was essentially a free agent in authority of his own affairs. And government, legitimate government, properly constituted government, was merely a necessary civic instrument within this libertarian order. Since it was borne out of a contractual agreement among free and reasonable men interested in preserving their natural rights, government was itself properly an instrument for the preservation of individual rights. Since its authority was derived from the consent of the governed, its power was necessarily diffuse and representative. Its power was also strictly limited, limited to the establishment of a system of justice and to the levy of modest taxes to support such a system. Thus, while the authority of the government was to be exercised to maintain an environment of law and order in the commonwealth, this was a power that required the citizenry to merely settle its sundry disputes in a civilized rather than an uncivilized manner, in representative legislatures and impartial courts of law rather than in fields of uncivil strife.

Locke's argument is important in that it was suggestive of a new and different political order, an order having increasing appeal among the more literate of the day. The

weight of tradition in the England leading up to Locke leaned heavily in the direction of an order of centralized authority, one emphasizing, not individual rights, but individual duty. The traditional order was that of the patriarch or matriarch, the monarch, whose ordained calling was that of governing the realm and its subjects. The monarch's authority, grounded in the doctrine of divine right of kings, and perhaps queens, was considerable, on the side of absolute. And this power was doubtless no less compelling for the more earthly reason that The Majesty nearly always had the wherewithal to remove the head of a subject suspected of disloyalty. The calling of the subject with any presence of mind at all in this traditional order was one of loyalty to the monarch, of duty to the majesty, of servitude to the realm. The thrust of Locke's argument was to reverse this conventional power structure. In the Lockean order, political authority was vested, not so much in the head of state, but more in the civic individual, by virtue of his natural rights. And since government was created expressly for the purpose of preserving the inalienable rights of the individual, it was the head of state, and not the subject, who was bound to duty and servitude, to protect the life and property of the individual from the sometimes disrespectful lot in the realm. Locke's appealing argument therefore signaled a shift away from the traditional order of centralized power, and toward a new order of decentralized authority.

Moreover, in the rightful individual in Locke's decentralized order, we find a somewhat different *homo œconomicus*. Economic man had always been around. Surely there had always been, in some numbers in large measure and in the rest in small measure, the individual driven by gain, the calculator out to maximize his own wealth or utility, the character behaving in service only to himself and perhaps a narrow circle of family and

friends. But he had hardly ever been counted among the more respectable in society. Indeed, the dominant institutions of tradition, the Church and the Nation, tended to relegate economic man to a somewhat less than honorable station. In the thirteenth-century divine order of Thomas Aquinas, the gainful merchant was a rascal prone to sin. And in the seventeenth-century national order of Thomas Mun, private gain of the merchant was harbored only to the extent that it was earned in service to the public good, in service to the interests of the Nation. The well-being of the species in these traditional orders was largely a function of the individual serving, not so much the interests of himself as those of the dominant institution of the time and place, the Church or the Nation. However, now, in the eighteenth century libertarian order of Locke, the gainful individual is not so much the deviant in society as a natural chap worthy of respect. After all, he did hold the right to life, which included the right to better his life. Furthermore, he held the right to the produce of his labor, and was thereby entitled to private property. He was naturally authorized to enter into exchange agreements, contracts, with his fellow men for the betterment of his condition. And he enjoyed these rights secure in the knowledge that the institutions of government were there to guarantee his liberties.

The order of Locke, thus defined in his *Second Treatise*, is a libertarian political order, an order in which economic man is at liberty to pursue his own interests while the state, government, is merely a necessary instrument for preserving a pacific environment. This classical liberal order, more than any other, was the political order of choice of the Enlightenment intellectuals, and was an order of sweeping importance. It was important in that it provided heavy intellectual justification for the great seventeenth and eighteenth

century liberal political revolutions, including the Glorious Revolution in England, the American War for Independence, and the French Revolution.[12]

Such is the philosophical argument of Locke, an argument that serves to summarize the political facet of the eighteenth century intellectual movement in the West. Now I want to consider the other facet of the intellectual climate of the time, the scientific world of Isaac Newton.

Newton's field was primarily natural philosophy, natural science – physics, astronomy, and mathematics. The work for which he is most noted is his *Philosophae Naturalis Principia Mathematica*, the *Mathematical Principles of Natural Philosophy*, or simply the *Principia*, originally published in Latin in 1686 and translated into English in 1729. The volume is a treatise on celestial and fluid mechanics, and on the rigorous use of mathematical analysis using primarily analytic geometry, but also the method of fluxions, Newton's term for calculus. It is also a tract on the method of natural philosophy, the scientific method, and a demonstration of its proper use. He is remembered as well for his other classic, *Opticks, or, a Treatise of the Reflections, Refractions, Inflections & Colours of Light*, published in 1704.[13]

The remnant of Newton's work of interest to us is his scientific method writ large. While his rules for reasoning in natural philosophy are formally presented and demonstrated in the *Principia,* it will be sufficient for our purpose to simply take note of two essential points about his approach to science.[14] First, Newton's natural philosophy, his science, is focused on the "natural world," on the observable physical world. This is the world accessible through observation, measurement, and then analysis of the collected observations

and measurements. And, second, knowledge of the natural world is encapsuled in "natural laws," principles derived from rigorous experiment and observation. Newton's law of inverse squares is the supreme example of the natural law, the so enlightening law of nature. The universal law of gravity in classical Newtonian physics accounts for all manner of motion, from the legendary fall of the apple from tree to ground to the orb of the moon.[15]

Thus, in the *Principia*, Newton defined and illustrated in a forceful and convincing manner an approach to science, a method having essential objectivity, broad explanatory power, and wide applicability. The method focused on the observable natural world, not on the parochial or partisan interests of the Church or the Nation. The method marked a shift away from traditional knowledge – unquestioned dogma, loose hypothesis, and superstition – and toward new rigorously conceived and empirically verified forms of knowledge. The method marked a move away from speculation of the value-laden normative sort and toward the austere analyses of the positive type, away from questions of "What ought to be?" and toward interrogatives of the "What is?" class, away from matters of morality and toward scientific problems. The Newtonian science substituted the more powerful inductive and empirical methods for the less convincing intuitive and deductive analyses based as much on authority and/or faith as on reason. The search for knowledge, in the new order, was a search for enlightening natural laws rigorously reasoned out and verified by observation.

And this was the scientific world of Newton. In the hands of imaginative contemporary followers, the Newtonian universe became a magnificent clockwork mechanism at once driven, and held together, by the law of inverse squares. The poet of the age, Alexander Pope, celebrated Newton's work in verse:[16]

Nature, and Nature's Laws lay hid in Night.
God said, *Let Newton be!* and All was *Light*.

Then, in 1705 Newton was given high royal recognition when he was knighted by Queen Anne. The work of Newton became, not only the foundation for the science of physics, but also the catalyst for a mass of work done by other men of science, resulting in the advance of other physical sciences including anatomy, astronomy, biology, botany, chemistry, zoology, and others.

The natural order of the eighteenth century, in sum, can now be seen as a bifurcated order, an order of two monumental currents of thought. The first is the political thought taken from the *Second Treatise* of John Locke. Here, by virtue of the moral philosopher's reading of nature, we found the world of classical liberalism, a timely characterization of a legitimate *homo œconomicus*, economic man of a respectable sort, pursuing his interests in a rather decentralized libertarian political environment. The second is the scientific thought derived largely from the *Principia* of Sir Isaac Newton. Here, in the natural philosopher's observations of his world, we found an immutable universe under the governance of natural laws like the law of inverse squares. We thus have in this natural order two enormous forces that operated to shape Western thought in the eighteenth century and beyond. We have, as well, in this natural order of Locke and Newton the essential elements of the soil in which political economy took root. And for the cultivation of this field we turn to the husbandman of the discipline, Adam Smith.

II. Adam Smith (1723-1790)

The sixty-seven year life of Adam Smith, more than anything else, was a life of

scholarship.[17] Smith cultivated interests in *belles-lettres*, literature, and in natural philosophy, the new science of Newton. However, his primary interest was in moral philosophy, a department of knowledge that included natural theology, ethics, jurisprudence, and politics.

Smith was born in 1723 in Kirkcaldy, Scotland, a small town some thirty miles north of Edinburgh, across the Firth of Forth. His father, also Adam Smith, was a Writer to the Signet, a lawyer specializing in finance. The father was the Controller of Customs in the seaport village at the time of his premature death at age 43, some months before the birth of the younger Adam. The mother, Margaret, was of the Douglas clan, a once powerful and yet landed family, of nearby Strathenry. So young Adam was brought up by a single parent, his mother, assisted by family and friends of the deceased father. The childhood surroundings were apparently on the comfortable, nurturing, supportive side.

Smith's formal education was acquired over the fifteen-year period from 1731 to 1746. He initially attended the burgh school in Kirkcaldy during the six years from 1731 to 1737. From there he went to Glasgow University for three years. And the final six years, from 1740 to 1746, were spent at Oxford University.

His years at the burgh school seem to have been a fitting start for a career in scholarship. The school itself had a good reputation under a talented schoolmaster, one David Miller. Contemporary reports suggest that Smith was studious, had a good memory, and a passion for books. He apparently acquired a love of the classics, an interest in history, and some skill in mathematics. One biographer says, ". . . Miller gave his pupil a serviceable education, with its training in English expression, firm basis in Latin, and

apparently a start in Greek . . . [sufficient] for acceleration in university studies at Glasgow."[18]

If the burgh school provided an agreeable beginning, Glasgow University proffered an environment of intellectual exhilaration. It had a faculty enthusiastic about new ideas, including the new political thought of Locke and the new science of Newton. It was an institution of the Scottish Enlightenment, an intellectual movement encouraging fresh, new, independent thought and reason, particularly "in those fields associated with the enquiry into 'the progress of society' – history, moral and political philosophy and, not least, political economy."[19] Here, young Smith studied Latin under George Rosse, Greek under Alexander Dunlop, logic under John Loudoun, mathematics under Robert Simson, natural philosophy under Robert Dick, and moral philosophy under Francis Hutcheson. The Latin and Greek permitted continued pursuit of the young scholar's interests in history and classical literature; Loudoun introduced Smith to some of the works of Locke; Simson taught him Euclidian geometry; and Dick perhaps infected Smith with his enthusiasm for the new science of Newton. No doubt, each had his influence on Smith. And yet the indelible impression was that left by the moral philosopher, "the never-to-be-forgotten Dr. Hutcheson."[20] Hutcheson broke with tradition, lecturing in English rather than in Latin. One of those rare captivating lecturers, Hutcheson introduced Smith to aesthetics, ethicks, the law of nature, and principles of œconomicks and politicks. Under aesthetics Hutcheson lectured on beauty, order, harmony, design, and laughter, all creations of the "benevolent Author of Nature;" under ethics the master held forth on various aspects of the virtuous life including the supreme guiding moral sense, or conscience, and happiness of the sort anticipating the utilitarians;

under the law of nature he gave discourse on natural law, positive law, natural liberty, individual rights and obligations, private property, contracts, value of goods and money in commerce, division of labor in production, and so on; and under the principles of economics and politics the Professor lectured on the laws and rights of family members, and of civil government, respectively. While Smith did not take a degree at Glasgow, he did acquire a liberal education, an admixture of classical and "new light" training, just the sort of preparation that would be useful in his subsequent pursuits.

Smith then concluded his formal education at Balliol College, Oxford, under Snell and Warner Exhibitions, fellowships awarded to talented Scottish students.[21] If the faculty at Glasgow had offered a culture of stimulating teaching in interesting subject matter, the same could not be said of the professorate at Oxford. The dons were apparently mired, for the most part, in the likes of the old, doctrinaire, rote, Aristotelian scholasticism and were not particularly interested in the new Enlightenment scholarship. And they were on the indolent side insofar as their teaching duties were concerned. As a result, Smith's years at Balliol were largely spent in independent study and reading, study of languages and composition, and reading political history and literature, all to the end of gaining a "familiar acquaintance with everything that could illustrate the institutions, the manners, and the ideas of different ages and nations."[22] He was, however, sufficiently attached to the institution to be awarded the B.A. Degree in 1744. That Oxford was something of a cold, intellectually inhospitable, institution for Smith is suggested in the anecdote that he was once severely reprimanded when he was found in his room reading David Hume's *Treatise of Human Nature*. Smith left Balliol reportedly "in disgust" in August 1746.[23]

Formal education was then followed by a largely intellectual career spanning the 44 years from 1746 to 1790. The career can be seen as having some five phases in the following, only approximate, order: lecturer, professor, traveling tutor, author, and civil servant.

The first five years of his work remain preparatory. From late 1746 into 1748, Smith is back home in Kirkcaldy living with his mother and continuing his studies in the *belles-lettres* in hopes of getting an academic position. Then, from 1748 to 1751, he is living in Edinburgh giving courses of lectures in literature, rhetoric (speech and composition), history of philosophy, and jurisprudence. The early jurisprudence lectures include commentary on economic topics suggesting his opposition to government interference with "the natural course of things."[24] The lectures are well received. And he is apparently the recipient of an A.M. Degree from Oxford by early 1749.

During the next twelve years, from 1751 until 1763, Smith holds a professorship at the University of Glasgow. His Edinburgh efforts are rewarded by his initial appointment to a Chair in Logic, which he holds for one year, and then to a Chair in Moral Philosophy, which he holds for the remaining eleven years. Smith is productive during these Glasgow years. His teaching load consists of a variety of public and private offerings, including his course in Moral Philosophy in which he lectures on natural theology, ethics, law, and government. The pursuit of the opulent society, economic growth, is one of the topics considered in this course. The course gains a degree of fame, attracting students from the British Isles as well as countries on the continent including France and Russia. Beyond his teaching duties, Smith serves on the University Library Committee and is Dean of the Faculty

during his final two years at Glasgow. And his writings during this period are not unimportant. His first book, *The Theory of Moral Sentiments*, is published in 1759. And his other writings include a lengthy essay on the History of Astronomy, which he concludes with an admiring examination of the system of Newton.[25] His established station in the intellectual community in Scotland, rather early in his career, is suggested by his election to the Philosophical Society of Edinburgh in 1752, and by his being awarded an LL.D. Degree by the University of Glasgow in 1762.

Smith then spends the bulk of the next three years, from early 1764 through 1766, as a traveling tutor to Henry Campbell Scott, the Duke of Buccleuch (pronounced Buck-LOO), and Hew Campbell Scott. They are the stepsons of statesman, Charles Townshend. Impressed by *The Theory of Moral Sentiments* and by the author's reputation as a fine scholar, Townshend retains Smith to take the two boys on a tour of the continent, to make the young Duke "a grounded politician."[26] For this venture, Smith is to receive travel expenses and £300 per year for life. It is an offer that Smith did not refuse. The tour takes Smith and his charges to Paris for ten days, then to Toulouse for twenty months (with side trips to Bordeaux, Bagneres-de-Bigorre, and Montpellier), next to Geneva for four months, and then back to Paris for eight months. The tour is concluded abruptly due to the illness and death of Hew Scott. Smith and the young Duke returned to London in November 1766.

Beyond its tutorial intent, Smith found much food for thought, and writing, on the tour. The excursion brought him into contact with leading intellectuals of the French Enlightenment, the *philosophes* and *Les Économistes*, the Physiocrats. The *philosophes* included Voltaire, Rousseau, Diderot, d'Alembert, d'Holbach, Helvétius, and Condorcet. And

the Physiocrats included François Quesnay, Marquis de Mirabeau, Mercier de la Rivière, and Du Pont de Nemours. A kindred spirit of both groups was Anne Robert Jacques Turgot. Smith, doubtless, found an intellectual camaraderie in these associations. His *Theory of Moral Sentiments* had been read and was given favorable reviews, especially among the female literati.[27] So he was well received in Geneva and in the Paris *salons*, the little centers where new developments in the sciences and humanities were discussed. His relationship with Voltaire was one of mutual admiration. He and the *philosophies*, were commonly skeptical of old knowledge, interested in the new knowledge, and optimistic that reason, the new science, would bring progress, improve the lot of the species in the future. The "new light" knowledge was reported in the articles collected in their *Encyclopédie*, seven volumes of which Smith had previously purchased for the Glasgow University Library. And Smith, of course, had a considerable interest in the economic doctrine of the Physiocrats, in their "natural order," in their policies for promoting an "opulent society," and in the policies of Turgot centering on *laissez-faire, laissez-passer*.[28]

In the ten years following the tutorship, from 1766 to 1776, the bulk of Smith's time was spent in studying and writing. Initially, he was in London for six months concluding his work with the young Duke and Townshend. Then he was back in Kirkcaldy for some seven years living with his mother, studying, writing, and amusing himself in "long, solitary walks by the Sea side."[29] And, finally, he was back in London for two years. During these ten years Smith reworked, again and again, *The Theory of Moral Sentiments*, through three more editions. Smith's high reputation in academe was further confirmed when he was elected Fellow in the Royal Society of London in 1767, and then admitted to that august association

in 1773.[30] The crowing accomplishment in this period, however, was the completion of his treatise on political economy, the *Wealth of Nations*. The work, started while on tour in 1764, was published in two volumes on March 9, 1776.

In the final years of his life, from 1776 to 1790, Smith lived, for the most part, in Edinburgh, at Panmure House, Canongate. His time was spent mainly in two lines of work. He revised his two books. He turned out two more editions of *The Theory of Moral Sentiments*, the fifth and sixth, and four revisions of the *Wealth of Nations*, the second through the fifth editions. His other line of work was in public service. On the recommendation of the Duke of Buccleuch, he was appointed Commissioner of Customs for Scotland, a position that he held from 1778 to 1790. Here, he was one of the five Commissioners whose charge centered on levying customs duties and administering their collection. The charge also included invoking measures to catch and punish smugglers.[31] Beyond his work, Smith was accorded yet another accolade in this period. He was elected Lord Rector of the University of Glasgow in 1787. This was an honorary title, which he held for two years. Smith's "Great Change," his term for his death, came at age 67 on July 17, 1790.

Such are the salient features of Smith's life. His education and work were essentially academic. And the high honors he was accorded in his lifetime suggest that his work was recognized, among his contemporaries, as a contribution to learning, a contribution to natural knowledge. Other details of his life only add to the academic conclusion. Smith never married. Much of his life was lived with his mother and cousin, Janet Douglas, the housekeeper. He had a circle of friends, but even his friends were intellectuals like

philosopher, David Hume, with whom he carried on a correspondence over some twenty-five years. He joined literary groups and attended their meetings. He had a personal library that numbered some 2,800 volumes at the time of his death. He once remarked to a friend, "I am a beau in nothing but my books."[32] His assessment may be a bit on the narrow side, but the essentials of his life suggest that he was into few things other than his books.

Indeed, Smith was more than occasionally obsessed in his own thoughts. His character was one prone to distraction, absent-mindedness. A 1759 incident holds that the Professor, lost in conversation, fell into a tanning pit while giving a visitor a tour of a Glasgow tannery. A 1767 episode maintains that, during morning discourse with a friend, he prepared a beverage of buttered bread and water in a teapot, and, after tasting the heated concoction, proclaimed it "the worst tea he had ever mett with."[33] On another occasion Smith apparently found himself one Sunday morning on a road near Dunfermline, a village some fifteen miles away from his home in Kirkcaldy, dressed in his bathrobe. He had intended to simply stroll in his garden and perhaps take a swim in the adjacent Firth of Forth, but instead had walked to the neighboring village where he was awakened from his trance by the kirk bells calling parishioners for morning worship. And in his latter years, on his daily walks to work at the Custom-House, he would be seen engaged in a conversation with an invisible companion, lips in motion and occasionally breaking into a smile, prompting observers to lament at the lunatic in their presence.[34] It is probably not altogether unreasonable to find these instances of distracted behavior as part of Smith's baggage. They may well be indicators, not of his absent-mindedness, but of his concentrated thought, his focused thought, on some matter on his mind at the moment. And in this sense they are

simply externalities of a beau in little more than his books. And with this we take leave of Smith's life and turn to his work, his political economy.

III. The Political Economy of Adam Smith

Smith's political economy is presented in his treatise, *An Inquiry into the Nature and Causes of the Wealth of Nations*.[35] It is a work comprised of five books. Book 1 is titled, "Of the Causes of Improvement in the productive Powers of Labour, and of the Order according to which its Produce is naturally distributed among the different Ranks of the People." Book 2 is, "Of the Nature, Accumulation, and Employment of Stock." Book 3, "Of the different Progress of Opulence in different Nations." Book 4, "Of Systems of Political Œconomy." And Book 5, "Of the Revenue of the Sovereign or Commonwealth."

While the titles of the treatise and its component books are suggestive of matters attended in the work, they fall short of placing the treatise in its, also important, historical context. It is a work grounded in the Enlightenment, the new knowledge, knowledge derived largely from observation. Following Locke and Newton, Smith is examining the natural order. He is searching, sometimes groping, for the natural laws governing commerce – production and exchange. The work is an analysis in search of a path toward an opulent society, a progressive state, a nation of advancing material well-being. It is an analysis with a panglossian message pointing the way to the betterment of the human condition over time. Then the treatise, in a very broad sense, is a window on an age. It is a robust collection of eighteenth century economic thought – history, theory, and policy. It is a compendium of ideas of predecessors and contemporaries fashioned into his own analysis.

The essence of Smith's political economy can be gleaned from an inspection of two

facets of thought drawn from his treatise. The first aspect is his economy, his economic system, we might say, his natural economy. This economy is important because we find therein a conception of wealth, actually national product, that is on the modern side, and a view of economic activity and policy of the classical liberal sort. Then the second feature to be inspected is his economic analysis. In his analysis of production, value, and distribution we find the structure, the framework, for the Classical School of Political Economy, the dominant school of thought through much of the eighteenth century, at least in the Anglo world. Let us consider these two facets of thought, in turn, in some detail.

The Natural Economy

Embedded in the title of Smith's treatise, *An Inquiry into the Nature and Causes of the Wealth of Nations*, are two questions: What is wealth? And how do we get it? First, what is the wealth of a nation, or what provides for the well-being of a national population? And then, second, given its nature, what are the sources of this wealth, or how can the nation best grow this wealth over time?

These questions were important to Smith largely in the context of English mercantilism.[36] This economic doctrine held a monetary conception of wealth, and promoted a centrally directed form of economic organization to acquire wealth. Treasure, bullion, money, was considered wealth because of its purchasing power in a bellicose world. It was the sinews of national security. Money was necessary to purchase the services of an army and a navy. Then, production, consumption, and commerce were centrally regulated so as to achieve a favorable balance of trade yielding a continuous net inflow of treasure, money, to, thus, bankroll the security of the nation. The population in this ecosystem, the

peer and commoner alike, was expected to be patriotic to The Majesty, serve the interests of the nation as much as the self.

It is against this strain of mercantilist thought and policy that Smith posits and answers the two questions. His response to the first inquiry is a rejection of the mercantilist conception of wealth. Money is not wealth in the economy of Smith. Money is merely an instrument to facilitate exchange, a medium of exchange. The real wealth of a nation is found in, "the annual produce of the land and labour of the society."[37] The annual produce being the quantities of food, clothing, housing, and luxury goods produced each year and made available to the population for enjoyment in consumption. It is from this cornucopia that a population acquires its life, its health, its comforts. So the wealth of a nation, the well-being of its population, is in the nation's annual produce, the production on which the population thrives. The annual produce is central in Smith's economy because it, or its growth over time, is the chief ingredient in, the very stuff of, the opulent society, the progressive state, the advancing nation.

On the second question, that concerning the economic system which will best grow the annual produce, Smith proffered, not the centrally directed economy of mercantilism, but rather much the converse: [38]

> All systems either of preference or of restraint . . . being . . . completely taken away, the obvious and simple system of natural liberty establishes itself of its own accord. Every man, as long as he does not violate the laws of justice, is left perfectly free to pursue his own interest his own way, and to bring both his industry and capital into competition with those of any other man, or order of men. The sovereign is completely discharged from a duty, in the attempting to perform which he must always be exposed to innumerable delusions, and for the proper performance of which no human wisdom or knowledge could ever be

> sufficient; the duty of superintending the industry of private people, and of directing it towards the employments most suitable to the interest of the society.

In this system of natural liberty, Smith envisaged something of a mechanism that could be relied upon to organize and carry out the processes of production and distribution in society, largely without plan or direction, more-or-less automatically. The essential elements of this mechanism, suggested in the foregoing passage, include the exercise of individual self-interest in competitive markets with government playing a limited role in economic affairs.

Consider, for a moment, each of these elements. Economic agents, people, are driven by the motive of self-interest in the economic sphere: [39]

> It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages. Nobody but a beggar chuses to depend chiefly upon the benevolence of his fellow-citizens.

Consumers are at liberty to purchase goods that serve their own interests, goods from which they derive satisfaction. And resources, labor and capital, are at liberty to enter lines of employment, production, that serve their interests, that they find rewarding.

Smith, then, uses a grocery market to illustrate competition in the marketplace: [40]

> The quantity of grocery goods . . . which can be sold in a particular town, is limited by the demand of that town and its neighborhood. The capital, therefore, which can be employed in the grocery trade cannot exceed what is sufficient to purchase that quantity. If this capital is divided between two different grocers, their competition will tend to make both of them sell cheaper, than if it were in the hands of one only; and if it were divided among twenty, their competition would be just so much the greater, and the chance of their combining together, in order to raise price, just so

> much the less. Their competition might perhaps ruin some of themselves; but to take care of this is the business of the parties concerned, and it may safely be trusted to their discretion. It can never hurt either the consumer, or the producer; on the contrary, it must tend to make the retailers both sell cheaper and buy dearer, than if the whole trade was monopolized by one or two persons.

Competition among sellers in product markets results in consumers getting the goods that they want at lower rather than higher prices. Competition among producers in resource markets results in the allocation of labor and capital to higher rather than lower valued uses.

And Smith is largely unequivocal on the role of government in his system: [41]

> According to the system of natural liberty, the sovereign has only three duties to attend to; three duties of great importance, indeed, but plain and intelligible to common understandings: first, the duty of protecting the society from the violence and invasion of other independent societies; secondly, the duty of protecting, as far as possible, every member of the society from the injustice or oppression of every other member of it, or the duty of establishing an exact administration of justice; and, thirdly, the duty of erecting and maintaining certain public works and certain public institutions, which it can never be for the interest of any individual, or small number of individuals, to erect and maintain; because the profit could never repay the expense to any individual or small number of individuals, though it may frequently do much more than repay it to a great society.

In Smith's economy, the sovereign, government, is limited to providing for the national defense, maintaining a system of domestic justice, and supporting selected public works, like maintaining roads, waterways, and harbors, as instruments of commerce. It is decidedly not within the purview of government to direct or regulate economic activity, in any comprehensive way, in the system of natural liberty.

So, in Smith's natural economy, we find a system of a libertarian sort. It is driven by a mechanism in which economic agents are at liberty to serve primarily their own

private interests in competitive product and resource markets, and, in the process, get the wealth of the nation, the annual produce, produced. And this market mechanism is important for the vast work that it accomplishes, day after day. It is this mechanism that gets the multitude of products wanted in society produced in roughly the correct quantities, the quantities demanded in society. It is this mechanism that gets the product correctly distributed, distributed to those willing to pay the price for the product, the cost of its production.

Beyond serving the private interests of individuals in society, Smith suggests that this mechanism also promotes the general welfare, the material well-being of the broad community: [42]

> As every individual . . . endeavors as much as he can . . . to direct . . . [his] industry that its produce may be of the greatest value; every individual necessarily labours to render the annual revenue of the society as great as he can. He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it. . . . [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.

It is a mechanism that does much to insure the survival of the human species in this, the best of all possible worlds. And it is a mechanism that accomplishes all this, rather automatically, with little governmental direction or regulation. Government, in performing its limited functions, merely establishes an environment conducive to the operation of the mechanism, that is, the exercise of self-interest in competitive product and resource markets. Such is the essence of the economic system, the natural economy, of Adam Smith.

Analyses of Production, Value, and Distribution

I now want to turn to the other facet of Smith's political economy, his economic

analyses. The analyses of interest to us, here, are found primarily in the first two books of the *Wealth of Nations*. They traverse the three matters of production, value, and distribution. Smith's concern in the field of production is to examine the central forces underlying economic growth, growth of the annual produce. Under the topic of value he considers exchange value and price in economic activity. And in the realm of distribution he looks at factors determining the shares of income and output going to the contributors to production – the laborers, the proprietors of stock, and the lords of the land. I want to consider each of these matters in sufficient detail so as to gain some sense of the breadth and depth of his analyses.

Of the three areas, production, or growth in the annual produce, is the matter of first concern to Smith. After all, the opulent society depends on a bountiful, growing, cornucopia of annual produce. Growth, in Smith's analysis, can be seen as having three sources. They are the extent of the division of labor, the proportion of labor engaged in productive employment, and capital accumulation in the economy.

The first of these sources is the centerpiece of Smith's theory of growth. The opening sentence in Book I of the *Wealth of Nations* reads: [43]

> The greatest improvement in the productive powers of labour, and the greater part of the skill, dexterity, and judgment with which it is any where directed, or applied, seems to have been the effects of the division of labour.

This observation is, then, illustrated in a pin factory: [44]

> To take an example . . . from a very trifling manufacture; but one in which the division of labour has been very often taken notice of, the trade of the pin-maker; a workman not educated to this business . . . nor acquainted with the use of the machinery employed in it . . . could scarce,

> perhaps, with his utmost industry, make a pin in a day, and certainly could not make twenty. But in the way in which this business is now carried on, not only the whole work is a particular trade, but it is divided into a number of branches, of which the greater part are likewise peculiar trades. One man draws out the wire, another straights it, a third cuts it, a fourth points it, a fifth grinds it at the top for receiving a head; . . . the important business of making a pin is, in this manner, divided into about eighteen distinct operations, which, in some manufactories, are all performed by distinct hands, though in others the same man will sometimes perform two or three of them. I have seen a small manufactory of this kind where ten men only were employed, and where some of them consequently performed two or three distinct operations. But though they were very poor, and therefore but indifferently accommodated with the necessary machinery, they could, when they exerted themselves, make among them about twelve pounds of pins in a day. There are in a pound upwards of four thousand pins of a middling size. Those ten persons, therefore, could make among them upwards of forty-eight thousand pins in a day. Each person, therefore, making a tenth part of forty-eight thousand pins, might be considered as making four thousand eight hundred pins in a day. But if they had all wrought separately and independently, and without any of them having been educated to this peculiar business, they certainly could not each of them have made twenty, perhaps not one pin in a day. . . .

Specialized labor, labor assigned separate tasks in a production process, is exponentially more productive than unspecialized labor.

Then, extension of the division of labor to industries across the economy can be expected to yield a growing and diffuse annual produce: [45]

> It is the great multiplication of the productions of all the different arts, in consequence of the division of labour, which occasions, in a well-governed society, that universal opulence which extends itself to the lowest ranks of the people. Every workman has a great quantity of his own work to dispose of beyond what he himself has occasion for; and every other workman being exactly in the same situation, he is enabled to exchange a great quantity of his own goods for a great quantity, or, what comes to the same thing, for the price of a great quantity of theirs. He supplies them abundantly with what they have occasion for, and they accommodate him as amply with what he has occasion for, and a general plenty diffuses itself through all the different ranks of society.

Thus, in the division of labor, Smith finds a wellspring of general plenty, of universal opulence.[46]

The second source of growth in Smith's analysis is apparent in his distinction between productive and unproductive labor: [47]

> There is one sort of labour which adds to the value of the subject upon which it is bestowed: there is another which has no such effect. The former, as it produces a value, may be called productive; the latter unproductive labour. Thus the labour of a manufacturer adds, generally, to the value of the materials which he works upon, that of his own maintenance, and of his master's profit. The labour of a menial servant, on the contrary, adds to the value of nothing. Though the manufacturer has his wages advanced to him by his master, he, in reality, costs him no expense, the value of those wages being generally restored, together with a profit, in the improved value of the subject upon which his labour is bestowed. But the maintenance of a menial servant never is restored. A man grows rich by employing a multitude of manufacturers: he grows poor, by maintaining a multitude of menial servants.

Productive is labor that produces a vendible commodity which can, in some way, generate a quantity of revenue for its owner equal to its cost of production. In addition to the manufacturer the productive labor set includes farmers, miners, and fishermen. Unproductive is labor that produces no such vendible product. Beyond the menial servant unproductive labor includes the sovereign[!], officers in the justice system, personnel in the army and navy, and "churchmen, lawyers, physicians, men of letters of all kinds; players, buffoons, musicians, opera-singers, opera-dancers, &c. . . . [T]he work of all of them perishes in the very instant of its production." [48]

Then, concerning the two types of labor and the annual produce, Smith observes: [49]

> Both productive and unproductive labourers, and those who do not labour at all, are all equally maintained by the annual produce of the land and labour of the country. This produce, how great soever, can never be

> infinite, but must have certain limits. According, therefore, a smaller or greater proportion of it is in any one year employed in maintaining unproductive hands, the more in the one case and the less in the other will remain for the productive, and the next year's produce will be greater or smaller accordingly; the whole annual produce, if we except the spontaneous productions of the earth, being the effect of productive labour.

The annual produce, Smith is saying, is directly related to the proportion of the population engaged in employment of the productive sort.

The third source of growth in Smith's analysis is capital accumulation: [50]

> The annual produce of the land and labour of any nation can be increased in its value by no other means, but by increasing either the number of its productive labourers, or the productive powers of those labourers who had before been employed. The number of its productive labourers, it is evident, can never be much increased, but in consequence of an increase of capital, or of the funds destined for maintaining them. The productive powers of the same number of labourers cannot be increased, but in consequence either of some addition and improvement to those machines and instruments which facilitate and abridge labour; or of a more proper division and distribution of employment. In either case an additional capital is almost always required. It is by means of an additional capital only, that the undertaker of any work can either provide his workmen with better machinery, or make a more proper distribution of employment among them. . . . When we compare, therefore, the state of a nation at two different periods, and find, that the annual produce of its land and labour is evidently greater at the latter than at the former, that its lands are better cultivated, its manufactures more numerous and more flourishing, and its trade more extensive, we may be assured that its capital must have increased during the interval between those two periods, and that more must have been added to it by the good conduct of some, than had been taken from it either by the private misconduct of others, or by the public extravagance of government.

Growth in time period, $\underline{t}$, is, therefore, a direct function of capital accumulation in time period, $\underline{t}_{-1}$. Increased capital, resulting from parsimonious conduct, will subsequently increase productive labor as well as the productivity of labor, and, thus, yield a growing

annual produce. Diminished capital, resulting from prodigal misconduct or profligate government, will decrease productive labor and labor productivity, and, alas, result in a shrinking annual produce.

Such is Smith's analysis of production, economic growth. His theory of growth, in sum, points to the importance of an expanding division of labor, an increasing proportion of the population engaged in productive employment, and capital accumulation over time. And growth in the annual produce is important because, in it, resides the path toward the opulent, advancing, society. Lack of growth is the road toward a declining, decadent, society.

Let me now turn from Smith's analysis of production to his analysis of value.[51] Here, he considers, "the principles which regulate the exchangeable value of commodities. . . ."[52] These principles have to do with the real value of commodities, the component parts of price, and price as it relates to the coordination of exchange.

The foundation of Smith's theory of value, it should not be surprising, is labor. This is suggested in the following passages: [53]

> The real price of everything, what everything really costs to the man who wants to acquire it, is the toil and trouble of acquiring it. What every thing is really worth to the man who has acquired it, and who wants to dispose of it or exchange it for something else, is the toil and trouble which it can save to himself, and which it can impose upon other people. What is bought with money or with goods is purchased by labour, as much as what we acquire by the toil of our own body. That money or those goods indeed save us this toil. They contain the value of a certain quantity of labour which we exchange for what is supposed at the time to contain the value of an equal quantity.

Hence: [54]

> The value of any commodity . . . to the person who possesses it, and who means not to use it himself, but to exchange it for other commodities, is

> equal to the quantity of labour which it enables him to purchase or command. Labour, therefore, is the real measure of the exchangeable value of all commodities.

And then: [55]

> Labour alone . . . never varying in its own value is alone the ultimate and real standard by which the value of all commodities can at all times and places be estimated and compared. It is their real price; money is their nominal price only.

So Smith holds to a labor theory of value of a sort. It is a command-over-labor theory of value. The value of any given commodity lies, in the final analysis, in the quantity of labor that the commodity can purchase.

From his analysis of the real value of commodities, Smith turns to an examination of the component parts of price. He considers this matter in two different time periods: first, in an early state, and, second, in a later, more developed, society.

In the early period, the price of a commodity had just one component, the labor cost: [56]

> In that early and rude state of society which precedes both the accumulation of stock and the appropriation of land, the proportion between the quantities of labour necessary for acquiring different objects seems to be the only circumstance which can afford any rule for exchanging them for one another. If among a nation of hunters, for example, it usually costs twice the labour to kill a beaver which it does to kill a deer, one beaver should naturally exchange for or be worth two deer. It is natural that what is usually the produce of two days or two hours of labour, should be worth double of what is usually the produce of one day's or one hour's labour.

Moreover: [57]

> In this state of things, the whole produce of labour belongs to the labourer; and the quantity of labour commonly employed in acquiring or producing any commodity, is the only circumstance which can regulate the

> quantity of labour which it ought commonly to purchase, command, or exchange for.

The one component of the price of a commodity in the early state is, thus, the quantity of labor required to produce the good.

In the more developed society, commodity prices acquire two additional components. First, the profits of stock: [58]

> As soon as stock has accumulated in the hands of particular persons, some of them will naturally employ it in setting to work industrious people, whom they will supply with materials and subsistence, in order to make a profit by the sale of their work, or by what their labour adds to the value of the materials. In exchanging the complete manufacture either for money, for labour, or for other goods, over and above what may be sufficient to pay the price of the materials, and the wages of the workmen, something must be given for the profits of the undertaker of the work who hazards his stock in this adventure. The value which the workmen add to the materials, therefore, resolves itself in this case into two parts, of which the one pays their wages, the other the profits of their employer upon the whole stock of materials and wages which he advanced. He could have no interest to employ them, unless he expected from the sale of their work something more than what was sufficient to replace his stock to him. . . .

And then, second, the rent of land: [59]

> As soon as the land of any country has all become private property, the landlords, like all other men, love to reap where they never sewed, and demand a rent even for its natural produce. The wood of the forest, the grass of the field, and all the natural fruits of the earth, which, when land was in common, cost the labourer only the trouble of gathering them, come, even to him, to have an additional price fixed upon them. He must give up to the landlord a portion of what his labour either collects or produces. This portion, or, what comes to the same thing, the price of this portion, constitutes the rent of land, and in the price of the greater part of commodities makes a third component part.

In sum: [60]

> In every society the price of every commodity finally resolves itself

> into some one or other, or all of those three parts; and in every improved society, all the three enter more or less, as component parts, into the price of the far greater part of commodities.
>
> In the price of corn, for example, one part pays the rent of the landlord, another pays the wages or maintenance of the labourers and the labouring cattle employed in producing it, and the third pays the profit of the farmer. These three parts seem either immediately or ultimately to make up the whole price of corn.

The component parts of the price of commodities in the developed societies are, therefore, the wages of labor, the profits of the owners of stock, and the rents of landlords.

The final aspect of Smith's analysis of value concerns price as it relates to the coordination of exchange in competitive markets. His analysis, in particular, centers on a "natural price," and a "market price."

The natural price is the price that just covers the cost of producing the given good and of bringing it to market: [61]

> When the price of any commodity is neither more nor less than what is sufficient to pay the rent of the land, the wages of labour, and the profits of the stock employed in raising, preparing, and bringing it to market, according to their natural rates, the commodity is then sold for what may be called its natural price.
>
> The commodity is then sold precisely for what it is worth, or for what it really costs the person who brings it to market. . . .

And the natural rates of rent, wages, and profit are the "ordinary or average" rates prevailing at a given time and place.[62]

The market price of a given good, on the other hand, is the price at which the good is exchanged in the market. Says Smith, "The actual price at which any commodity is commonly sold is called its market price."[63]

This market price is determined by the relationship between the quantity of the good

supplied by sellers and the quantity of the good demanded among buyers: [64]

> The market price of every particular commodity is regulated by the proportion between the quantity which is actually brought to market, and the demand of those who are willing to pay the natural price of the commodity, or the whole value of the rent, labour, and profit, which must be paid in order to bring it thither. Such people may be called the effectual demanders, and their demand the effectual demand; since it may be sufficient to effectuate the bringing of the commodity to market.

Furthermore, the quantity supplied will continuously tend toward the level of the quantity demanded: [65]

> The quantity of every commodity brought to market naturally suits itself to the effectual demand. It is the interest of all those who employ their land, labour, or stock, in bringing any commodity to market, that the quantity never should exceed the effectual demand; and it is the interest of all other people that it never should fall short of that demand.

The market price is, thus, the price where buyers and sellers are in agreement about the quantity of the commodity exchanged, where the quantity brought to market is equal to the effectual demand.

And on the relationship between the natural price and the market price: [66]

> The natural price . . . is, as it were, the central price, to which the prices of all commodities are continually gravitating. Different accidents may sometimes keep them suspended a good deal above it, and sometimes force them down even somewhat below it. But whatever may be the obstacles which hinder them from settling in this center of repose and continuance, they are constantly tending towards it.

The natural price, the price in the "center of repose and continuance," is something of an equilibrium price.[67]

This, then, is Smith's analysis of exchange value. While short reference is given to effectual demand in this analysis, his conjectures on exchange value, taken together, point

largely to the conclusion that value has its origins on the supply side, in cost of production. The toil and trouble of acquiring something is a matter of cost. Wages, profits, and rents are all costs in his theory of value, costs of eliciting the cooperation of labor, owners of stock, and landlords in production. And to say that market forces move market prices toward their natural prices, toward their "centers of repose and continuance," is to say that prices of goods naturally settle at levels that just cover their respective costs of production. So the theory of value that Smith puts forward is a cost of production theory of value, a theory that claims that the price of any given good is determined, in the main, by the costs incurred in producing and bringing the good to market.

Let me, now, turn to the third area of Smith's analysis, that of distribution. The following passage provides an apt transition to this topic: [68]

> The whole annual produce of the land and labour of every country, or what comes to the same thing, the whole price of that annual produce, naturally divides itself . . . into three parts; the rent of land, the wages of labour, and the profits of stock; and constitutes a revenue to three different orders of people; to those who live by rent, to those who live by wages, and to those who live by profit. These are the three great, original and constituent orders of every civilized society. . . .

So what principles govern the distribution of revenue among these orders of society? Consider, first, the wages of labor, second, the profits of the owners of stock, and third, the rents of landlords.

The condition of labor, according to Smith, is governed by a wage fund: [69]

> The demand for those who live by wages, it is evident, cannot increase but in proportion to the increase of the funds which are destined for the payment of wages. These funds are of two kinds; first, the revenue which is over and above what is necessary for the maintenance; and, secondly, the stock which is over and above what is necessary for the

employment of their masters.

> When the landlord, annuitant, or monied man, has a greater revenue than what he judges sufficient to maintain his own family, he employs either the whole or a part of the surplus in maintaining one or more menial servants. Increase this surplus, and he will naturally increase the number of those servants.
>
> When an independent workman, such as a weaver or shoemaker, has got more stock than what is sufficient to purchase the materials of his own work, and to maintain himself till he can dispose of it, he naturally employs one or more journeymen with the surplus, in order to make a profit by their work. Increase this surplus, and he will naturally increase the number of his journeymen.
>
> The demand for those who live by wages, therefore, necessarily increases with the increase of the revenue and stock of every country, and cannot possibly increase without it. The increase of revenue and stock is the increase of national wealth. The demand for those who live by wages, therefore, naturally increases with the increase of national wealth, and cannot possibly increase without it.

The wage fund is, thus, a quantity of revenue and stock generated in previous periods of production and destined for the employment of labor in the current period. The wage fund is directly related to the size of the annual produce of society. Hence, an increase in the annual produce increases the wage fund which, in turn, increases the demand for labor.

Smith, then, sums up the connection between the condition of labor and alternative levels of national wealth: [70]

> The liberal reward of labour, therefore, as it is the necessary effect, so it is the natural symptom of increasing national wealth. The scanty maintenance of the labouring poor, on the other hand, is the natural symptom that things are at a stand, and their starving condition that they are going fast backwards.

Beyond the wage fund, the returns to labor also depend on a contract between the worker and the employer: [71]

> What are the common wages of labour, depends every where upon the contract usually made between those two parties, whose interests are

> by no means the same. The workmen desire to get as much, the masters to give as little as possible. . . .
>
> It is not, however, difficult to foresee which of the two parties must, upon all ordinary occasions, have the advantage in the dispute, and force the other into a compliance with their terms. . . .
>
> But though in disputes with their workmen, masters must generally have the advantage, there is however a certain rate below which it seems impossible to reduce, for any considerable time, the ordinary wages even of the lowest species of labour.
>
> A man must always live by his work, and his wages must at least be sufficient to maintain him. They must even upon most occasions be somewhat more; otherwise it would be impossible for him to bring up a family, and the race of such workmen could not last beyond the first generation.

So masters, employers, commonly have the advantage over workers in setting wages, and their interest is to set wages as low as possible. And yet, in the lower labor markets there is something of a minimum wage. The lowest species of labor must receive a wage at least sufficient to provide family subsistence if there is to be a successive generation of labor. Above these markets wages vary depending on the type of work, with higher wages going to more skilled labor, workers having more responsibility in their jobs, and work requiring more training.[72] But then, "The most detestable of all employments, that of public executioner, is, in proportion to the quantity of work done, better paid than any common trade whatever."[73]

Consider, now, the revenues of the second order of society, the returns to proprietors, the profits of the owners of stock: [74]

> It is the stock that is employed for the sake of profit, which puts into motion the greater part of the useful labour of every society. The plans and projects of the employers of stock regulate and direct all the most important operations of labour, and profit is the end proposed by all those plans and projects.

Stock, in Smith's analysis, is a cache of goods and revenue accumulated by a proprietor

through his production: [75]

> . . . when the division of labour has once been thoroughly introduced, the produce of a man's own labour can supply but a very small part of his occasional wants. The far greater part of them are supplied by the produce of other mens [sic] labour, which he purchases with the produce, or what is the same thing, with the price of the produce of his own. But this purchase cannot be made till such time as the produce of his own labour has not only been completed, but sold. A stock of goods of different kinds, therefore, must be stored up somewhere sufficient to maintain him, and to supply him with the materials and tools of his work, till such time, at least, as both these events can be brought about. A weaver cannot apply himself entirely to his peculiar business, unless there is beforehand stored up somewhere, either in his own possession or in that of some other person, a stock sufficient to maintain him, and to supply him with the materials and tools of his work, till he has not only completed but sold his web.

And capital is surplus stock used to generate revenue: [76]

> [When a man] possesses stock sufficient to maintain him for months or years, he naturally endeavours to derive a revenue from the greater part of it; reserving only so much for his immediate consumption as may maintain him till his revenue begins to come in. His whole stock, therefore, is distinguished into two parts. That part which, he expects, is to afford him this revenue, is called his capital. The other is that which supplies his immediate consumption. . . .

The proprietor, then, naturally uses his excess stock, capital, to employ more labor and thereby acquire additional net revenue, profit, from the added production.[77]

What, say Smith, determines the level of profits in the economy? His answer, here, is bifurcated. On the one hand, profits, like wages, are directly related to the annual produce of society. On the other hand, profits can be expected to be forced down to some natural level over time in competitive markets: [78]

> The rise and fall in the profits of stock depend upon the same causes with the rise and fall in wages of labour, the increasing or declining state of the wealth of the society; but those causes affect the one and the

other very differently.

> The increase of stock, which raises wages, tends to lower profit. When the stocks of many rich merchants are turned into the same trade, their mutual competition naturally tends to lower its profit; and when there is a like increase of stock in all different trades carried on in the some society, the same competition must produce the same effect in them all.

While competitive markets will, thus, put a downward pressure on profits, Smith also recognizes that this may not be the result in markets that are not competitive: [79]

> To widen the market and to narrow the competition, is always the interest of the dealers. To widen the market may frequently be agreeable enough to the interest of the public; but to narrow the competition must always be against it, and can serve only to enable the dealers, by raising their profits above what they naturally would be, to levy, for their own benefit, an absurd tax upon the rest of their fellow-citizens.

What, then, can happen to profits over time? If the annual produce increases, profits will likely increase initially and then fall to some natural level in competitive markets, but remain above the natural level in noncompetitive markets. But then if the annual produce decreases, profits will likely decrease.

Finally, rent, in the analysis of Smith, is the price that a tenant pays the landlord for the use of land: [80]

> Rent, considered as the price paid for the use of land, is naturally the highest which the tenant can afford to pay in the actual circumstances of the land. In adjusting the terms of the lease, the landlord endeavours to leave him no greater share of the produce than what is sufficient to keep up the stock from which he furnishes the seed, pays the labour, and purchases and maintains the cattle and other instruments of husbandry, together with the ordinary profits of farming stock in the neighborhood. This is evidently the smallest share with which the tenant can content himself without being a loser, and the landlord seldom means to leave him any more. Whatever part of the produce, or, what is the same thing, whatever part of its price, is over and above this share, he naturally endeavours to reserve to himself as the rent of his land, which is evidently the highest the tenant can afford to pay in the actual circumstances of the land.

So a tenant works the land to generate produce. The portion of the produce of the land used to cover production costs is set in the lease, on terms more favorable to the landlord than the tenant. Any produce beyond this portion is rent that the landlord reserves for himself.

Rent is, therefore, a surplus increment of product or revenue above production costs. It therein differs in this analysis from wages and profit as a component of price: [81]

> Rent . . . enters into the composition of the price of commodities in a different way from wages and profit. High or low wages and profit, are the causes of high or low price; high or low rent is the effect of it. It is because high or low wages and profit must be paid, in order to bring a particular commodity to market, that its price is high or low. But it is because its price is high or low; a great deal more, or very little more, or no more, than what is sufficient to pay those wages and profit, that it affords a high rent, or a low rent, or no rent at all.

Rent is not a cost of production in Smith's analysis of distribution.

And what is likely to happen to rent over time? Smith suggests what will occur in an improving economy: [82]

> . . . every improvement in the circumstances of the society tends either directly or indirectly to raise the real rent of land, to increase the real wealth of the landlord, his power of purchasing the labour, or the produce of the labour of other people.

While improvements in cultivation and increases in agricultural output prices increase real rents directly, decreases in the prices of manufactured goods resulting from improved labor productivity increase real rents indirectly. As the annual produce increases, so too will the rents of landlords.

Smith, in a final observation, points to the aristocratic due diligence, not, of the landed set: [83]

> They [the landlords] are the only one of the three orders whose revenue costs neither labour nor care, but comes to them, as it were, of its own accord, and independent of any plan or project of their own.

Landlords, in Smith's theory of distribution, are apparently not among the prime movers of economic progress.

Such are the central elements of Smith's political economy – the natural economy and his analyses of production, value, and distribution – gleaned from *The Wealth of Nations*.[84] Let us now conclude this piece with a comment on the place of Smith's political economy in the subsequent development of economic doctrine.

IV. Smith's Contribution to Economic Doctrine

Smith, the moral philosopher, in his *Wealth of Nations*, did much to move economic thought toward the modern world, the world of modern economic institutions and the world of empirical analysis, positive science. Modern institutions are more than hinted at in his economic system, the natural economy. His measure of the wealth of the nation, the annual produce, is something of a conceptual precursor to the Gross Domestic Product (GDP) of today.[85] And his "system of natural liberty" with its economic agents driven by self-interest and synchronized by competition, is a prototype of capitalism, the private enterprise system, the mixed economy.

Then the move toward positive science is suggested in much of his economic analyses. His production - value - distribution structure established the agenda for the Classical School. It became the scope of the Classical School and guided the development of economic thought in the Anglo World, and beyond, for most of the nineteenth century. It became the program for much of the work of Thomas Robert Malthus, David Ricardo, John

Stuart Mill, and others. The analyses of Smith, as much as any other, served to establish Political Economy as a discipline, a nascent science, separate from moral philosophy.

Then certain of his theories have a particular modernity. His principle of the division of labor appears in all elementary economics textbooks of today. Moreover, it does not seem to be a very large intellectual leap from his theory of production to the Cobb-Douglas production function. Furthermore, we find in his theory of value much of the essence of current supply and demand analysis of price. And we see in his theory of distribution a perhaps more modern than antiquated analysis of the factors of production and their owner's economic incentives.

Smith, indeed, contributed much to the development of economic doctrine. However, his analysis is not without flaws. His theory of price, for example, is largely a cost of production theory which ignores demand factors as determinants of price. Then there is the glaring inconsistency that while rent is regarded as a cost component in his natural price it is treated as a residual, in excess of cost and price, in his theory of distribution. And the "menial servants" in his theory of production are now counted among the productive labor in the national income accounts, along with all others employed in the service sector. These are, indeed, imperfections in Smith's large edifice, but surely a few flaws can be expected in such an early and ambitious effort in economic analysis.

Notes

*Francis Hutcheson, *A System of Moral Philosophy* (Reprints of Economic Classics Series; New York: Augustus M. Kelley, 1968), vol. I, p. 1. This work was published posthumously by the author's son in 1755.

[1] An anthology of Enlightenment source readings is Isaac Kramnick, *The Portable Enlightenment Reader* (New York: Penguin Books, 1995).

[2] An expression of the optimism of the Enlightenment period in France is Condorcet, "The Tenth Stage: The Future Progress of the Human Mind," in *Sketch for a Historical Picture of the Progress of the Human Mind* [1793] reprinted in Keith M. Baker, *Condorcet: Selected Writings* (Indianapolis, Indiana: The Bobbs-Merrill Company, 1976), pp. 258-281. And a satire on the optimism of the period is Voltaire, *Candide* (John Butt translation; New York: Penguin Books, 1947 [1759]).

[3] Henry Lyons, *The Royal Society 1660-1940* (New York: Greenwood Press, 1968), p. 21.

[4] The story of the founding and the early years of the Royal Society is the subject of Lyons, pp. 1-116; Thomas Sprat, *History of the Royal Society* (St. Louis: Washington University Press, 1958); and Michael Hunter, *Establishing the New Science: The Experience of the Early Royal Society* (Woodbridge: The Boydell Press, 1989).

[5] Lyons reports that the motto, *Nullius in Verba*, comes from Horace, *Epistles*, I, i, ll, 13, 14 (that is, Book I, Epistle i, verse ii, lines 13 and 14), which in the original Latin reads:

> *Ac ne forte roges, quo me duce, quo lare tuter,*
> *Nullius addictus iurare in verba magistri.*

The English translation of one Sir Cecil Carr is:

> You shall not ask for whom I fight
> Nor in what school my peace I find;
> I say no master has the right
> To swear me to obedience blind.

See Lyons, p. 39, n. 2.

Another translation of the entire verse ii, lines 10 through 19 reads:

So now I am laying aside my verses and other amusements.
My sole concern is the question 'What is right and proper?'
I'm carefully storing things for use in the days ahead.
In case you wonder whom I follow and where I'm residing,
I don't feel bound to swear obedience to any master.
Where the storm drives me I put ashore and look for shelter.
Now I'm a man of action and plunge into civic affairs,
doing my highest duty with stern and selfless devotion;
now I slip quietly back to the rules of Aristippus, attempting
to induce things to conform to me, not vice versa.

This latter translation appears in *Horace: Satires and Epistles; Persius: Satires* (Niall Rudd Translation; London: Penguin Books, 1997), p. 129.

[6] John Locke was physician, philosopher, and political advisor to Anthony Ashley Cooper, Lord Ashley, the first Earl of Shaftesbury. Locke was elected Fellow of the Royal Society in 1668. The life of Locke is recounted in Maurice Cranston, *John Locke: a biography* (London: Longmans, Green and Company, 1957).

[7] Isaac Newton was the Lucasian Professor of Mathematics at Cambridge University, warden of the mint in London, and President of the Royal Society from 1703 to 1727. The life of Newton is recounted in Richard Westfall, *The Life of Isaac Newton* (Cambridge: Cambridge University Press, 1993).

[8] John Locke, *An Essay Concerning Human Understanding* (John W. Yolton Edition; London: J. M. Dent, 1976). John Locke, *Two Treatises of Government* (Mark Goldie Edition; London: J. M. Dent, 1993). The object of Locke's criticism in the first treatise is Robert Filmer, *Patriarcha: a Defense of the Natural Power of Kings against the Unnatural Liberty of the People* reprinted in Peter Laslett (Ed.), *Patriarcha and Other Political Works of Sir Robert Filmer* (Oxford: Basil Blackwell, 1949).

[9] John Locke, *Two Treatises of Government*, pp. 116-140.

[10] *Ibid*., pp. 122-125.

[11] *Ibid*., pp. 163-197.

[12] Early interpretations suggest that the *Two Treatises of Government* were written for the specific purpose of justifying the Glorious Revolution that resulted in the abdication of James II and enthroned William and Mary in 1688. This does not seem to be the case since recent research suggests that the *Two Treatises* were probably written prior to 1684 even though they were not published until 1689. It is, however, possible, even likely, that the work was a retroactive justification of the Bloodless Revolution. See John Locke, *Two Treatises of Government*, pp. xix-xxi.

[13] Isaac Newton, *Mathematical Principles of Natural Philosophy* (Florian Cajori Edition; Berkeley: University of California Press, 1934). Isaac Newton, *Opticks, or, A Treatise of the Reflections, Refractions, Inflections & Colours of Light* (I. Bernard Cohen Edition; New York: Dover Publications, 1979).

[14] A formal statement of the "Rules of Reasoning in Philosophy" appears in Isaac Newton, *Mathematical Principles of Natural Philosophy*, pp. 398-400. The two elements noted here are apparent in the following passage in a document titled, "A Scheme for Establishing the Royal Society," probably written in the 1670s:

> Natural Philosophy consists in discovering the frame and operations of Nature, and reducing them, as far as may be, to general Rules or Laws,– establishing these rules by observations and experiments, and thence deducing the causes and effects of things . . . .

See H. S. Thayer, *Newton's Philosophy of Nature: Selections From His Writings* (New York: Hafner Press, 1953), pp. 1, 181; and David Brewster, *Memoirs of the Life, Writings, and Discoveries of Sir Isaac Newton* (Richard S. Westfall Edition; New York: Johnson Reprint Corporation, 1965), pp. 101-102.

[15] The law of inverse squares can be written:

$$F = (G\ m_1\ m_2\ ) / d^2$$

where F is the force of gravity, G is the gravitational constant, m_1 and m_2 are the masses of the respective bodies, and d is the distance between the centers of m_1 and m_2. Modern quantum mechanics, however, points out that Newtonian gravity does not explain motion in the subatomic particle realm.

[16] Alexander Pope, *Minor Poems*, Vol. VI of John Butt, Ed., *The Poems of Alexander Pope* (London: Methuen & Co., 1964), pp. 317-318.

[17] The sketch of Smith's life presented here was pieced together from a variety of sources including Ian S. Ross, *The Life of Adam Smith* (New York: Oxford University Press, 1995); Andrew S. Skinner, "Smith, Adam," *The New Palgrave: A Dictionary of Economics* (New York: Stockton Press, 1987), v. 4, pp. 357-375; John Rae, *Life of Adam Smith* (Reprints of Economics Classics Series; New York: Augustus M. Kelley, 1965 [1895]); and Dugald Stewart, "Account of the Life and Writings of Adam Smith, LL.D.," in Adam Smith, *Essays on Philosophical Subjects* (The Liberty Fund Reprint of The Glasgow Edition of the Works and Correspondence of Adam Smith, Vol. III; Indianapolis, Indiana: The Liberty Fund, 1982), pp. 263-351.

[18] Ross, p. 21.

[19] John Robertson, "Scottish Enlightenment," *The New Palgrave: A Dictionary of Economics*, v. 4, pp. 270-272.

[20] Adam Smith, *Correspondence of Adam Smith* (The Liberty Fund Reprint of The Glasgow Edition of the Works and Correspondence of Adam Smith, Vol. VI; Indianapolis, Indiana: The Liberty Fund, 1982), Letter 274 (dated November 16, 1787), pp. 308-309.

[21] While the Snell and Warner Exhibitions were endowed to train Episcopal clergymen for service in Scotland, they apparently were open to otherwise qualified Scottish students.

[22] Stewart, p. 272.

[23] Ross, pp. 77, 79.

[24] Stewart, p. 322.

[25] Adam Smith, *The Theory of Moral Sentiments* (The Liberty Fund Reprint of The Glasgow Edition of the Works and Correspondence of Adam Smith, Vol. I; Indianapolis, Indiana: The Liberty Fund, 1982). Adam Smith, "The Principles Which Lead and Direct Philosophical Enquiries; Illustrated by the History of Astronomy," in Adam Smith, *Essays on Philosophical Subjects* (The Liberty Fund Reprint of The Glasgow Edition of the Works and Correspondence of Adam Smith, Vol. III; Indianapolis, Indiana: The Liberty Fund, 1982), pp. 31-105.

[26] Ross, pp. 198-199.

[27] *Ibid*., p. 210. Apparently French women were attracted to Smith's treatment of sympathy in the *Theory of Moral Sentiments*.

[28] Among the Paris *salons* that Smith visited were those of duchesse d'Enville and Julie de L'Espinasse. And Smith was, as well, entertained in the homes of Baron d'Holbach and Helvétius. See Ross, p. 210.

[29] Adam Smith, *Correspondence of Adam Smith*, Letter 103 (dated June 7, 1767), p. 125. Ross, p. 228.

[30] Although elected to the Royal Society on May 21, 1767, Smith was apparently either unable or unwilling to attend the induction ceremony in London until May 27, 1773. See Ross, p. 225.

[31] Ross, pp. 320-333.

[32] *Ibid*., p. 311.

[33] Lady Mary Coke, *The Letters and Journals of Lady Mary Coke* (Bath: Kingsmead Reprints, 1970 [1889-96]), Vol. 1, p. 141. Ross, p. 226.

[34] These incidents of absentmindedness are recounted in Ross, pp. 152, 226, 237, and 316, respectively.

[35] Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* (The Edwin Cannan Edition; New York: The Modern Library, 1937). Hereinafter referred to as Smith, *Wealth of Nations*.

[36] English mercantilism is considered in greater detail in Lewis Karstensson, "The Day of the Merchant: A Comment on Economic Thought in a National Order," *Managerial Finance*, 25 (1999), 5-18; and in Lewis Karstensson, "The Merchant and Mr. Reagan: The Case of a Half-Classical Trade Policy," *The American Journal of Economics and Sociology*, 62 (July 2003), 567-582.

[37] Smith, *Wealth of Nations*, p. lx.

[38] *Ibid*., p. 651.

[39] *Ibid*., p. 14.

[40] *Ibid*., pp. 342-343.

[41] *Ibid*., p. 651.

[42] *Ibid*., p. 423.

[43] *Ibid*., p. 3.

[44] *Ibid*., pp. 4-5.

[45] *Ibid*., p. 11.

[46] While the division of labor is a source of opulence, Smith says it has a dark side, as well:

> The man whose whole life is spent in performing a few simple operations, of which the effects too are, perhaps, always the same, or

> very nearly the same, has no occasion to exert his understanding, or to exercise his invention in finding out expedients for removing difficulties which never occur. He naturally loses, therefore, the habit of such exertion, and generally becomes as stupid and ignorant as it is possible for a human creature to become. *Ibid*., p. 734.

[47] *Ibid*., p. 314.

[48] *Ibid*., p. 315.

[49] *Ibid*.

[50] *Ibid*., pp. 326-327.

[51] Smith distinguishes between "value in use" and "value in exchange" and therein presents the famous water and diamond paradox:

> The word VALUE, it is to be observed, has two different meanings, and sometimes expresses the utility of some particular object, and sometimes the power of purchasing other goods which the possession of that object conveys. The one may be called "value in use;" the other, "value in exchange." The things which have the greatest value in use have frequently little or no value in exchange; and on the contrary, those which have the greatest value in exchange have frequently little or no value in use. Nothing is more useful than water: but it will purchase scarce any thing; scarce any thing can be had in exchange for it. A diamond, on the contrary, has scarce any value in use; but a very great quantity of other goods may frequently be had in exchange for it. *Ibid*., p. 28.

[52] *Ibid*.

[53] *Ibid*., p. 30.

[54] *Ibid*.

[55] *Ibid*., p. 33.

[56] *Ibid*., p. 47.

[57] *Ibid*., pp. 47-48.

[58] *Ibid*., p. 48.

[59] *Ibid*., p. 49.

[60] *Ibid*., p. 50.

[61] *Ibid*., p. 55.

[62] *Ibid*. The rates of wages and profit are, ". . . naturally regulated . . . partly by the general circumstances of the society, their riches or poverty, their advancing, stationary, or declining condition; and partly by the particular nature of each employment" while the rate of rent is, ". . . regulated too . . . partly by the general circumstances of the society or neighbourhood in which the land is situated, and partly by the natural or improved fertility on the land. *Ibid*.

[63] *Ibid*., p. 56.

[64] *Ibid*.

[65] *Ibid*., p. 57.

[66] *Ibid*., p. 58.

[67] Smith describes something of an equilibrating process along these abbreviated lines: If the quantity of a good brought to market exceeds the effectual demand for the good, the sellers will compete the market price down below the natural price so as to dispose of the surplus; losses due to the lower market price will cause sellers to exit the market and thus bring the quantity offered for sale down to the effectual demand; and the lesser quantity brought to the market will pressure the market price back upward toward the natural price which just covers the costs of production. If the quantity of a good brought to market falls short of the effectual demand for the good, buyers will compete the market price up to a level above the natural price so as to obtain the good; excess profits resulting from the higher market price will cause additional sellers to enter the market and thus bring the quantity offered for sale up to the effectual demand; and the greater quantity brought to market will pressure the market price back downward toward the natural price which, again, just covers the costs of production. In equilibrium, in Smith's system, the quantity brought to market is equal to the effectual demand, and the market price is equal to the natural price. *Ibid*., pp. 56-57.

[69] *Ibid*., p. 69.

[70] *Ibid*., pp. 73-74.

[71] *Ibid*., pp. 66-68.

[72] *Ibid*., pp. 100-106.

[73] *Ibid*., p. 100.

[74] *Ibid*., p. 249.

[75] *Ibid*., p. 259.

[76] *Ibid*., p. 262.

[77] Capital, in Smith's analysis, can be used in two ways, as circulating capital or as fixed capital. On circulating capital Smith says:

> The goods of the merchant yield him no revenue or profit till he sells them for money, and the money yields him as little till it is again exchanged for goods. His capital is continually going from him in one shape, and returning to him in another, and it is only by means of such circulation, or successive exchanges, that it can yield him any profit. Such capitals, therefore, may very properly be called circulating capitals. *Ibid*., pp. 262-263.

And on fixed capital:

> [Capital] may be employed in the improvement of land, in the purchase of useful machines and instruments of trade, or such like things as yield a revenue or profit without changing masters, or circulating any further. Such captials, therefore, may very properly be called fixed capitals. *Ibid*., p. 263.

[78] *Ibid*., p. 87.

[79] *Ibid*., p. 250.

[80] *Ibid*., p. 144.

[81] *Ibid*., pp. 145-146.

[82] *Ibid*., p. 247.

[83] *Ibid*., p. 249.

[84] Beyond the matters considered in this paper, Smith examines topics in public finance, taxes and tax policy, in Book 5 of the *Wealth of Nations*, "Of the Revenue of the Sovereign or Commonwealth."

[85] While Smith considers the annual produce a measure of wealth, it and the Gross Domestic Product are measures, not of wealth, but of production.