ESSAYS IN REGULATION

A Commentary on the Opening Chapters of 'An Inquiry into the Nature and Causes of the Wealth of Nations'

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NS 11.1 2021

REGULATORY POLICY INSTITUTE

Essays in Regulation, New Series

Published by the Regulatory Policy Institute
300 Banbury Road, Oxford OX2 3ED, UK
www.rpieurope.org

First published October 2021

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Preface

Adam Smith's Wealth of Nations ("*WoN*") is a foundational book in the social sciences and one of the classic works of human civilization, but like many classics it is rarely read. Its influence has been profound, but that influence has come largely via the work of Smith's successors who, in their own writings, have frequently cherry picked the text in ways that have served their own, particular purposes in a range of different, later contexts. In consequence many of Smith's own points have been lost or distorted.

There are, for example, widespread beliefs, not least among economists, that Smith's invisible hand metaphor was used to signify the self-coordinating or self-balancing properties of an unregulated market economy and, further, that he was an advocate of *laissez faire* economic policies. Neither of these beliefs is correct.

Correcting misconceptions is one possible reason for reading the book itself. Another is that, as can be the case when listening to a great scholar give a lecture, the side comments can be highly illuminating. They give insights into the ways of thinking, the ways of framing issues and questions, the ways of seeing or imagining things, of a Master at work. Such know-how is difficult to transmit in textbooks and summaries, but reading the original text takes us one step closer to the author.

A third motivation is that substantial parts of the reasoning and analysis to be found in Smith's work have retained a striking relevance for policymaking throughout the quarter of a millennium since the publication of the *WoN*, right down to the present day. His work covered a wide range of areas, including: evolutionary theories; the philosophy of science; social and moral psychology; the behaviour of complex, adaptive systems; jurisprudence; as well, of course, as more specifically economic, social and political issues and challenges.

The *WoN*, however, is a long work, written in the 18th century in an 18th century linguistic style and with extensive sections that focus on specific issues of the day. These sections are full of factual material unlikely to be of interest other than to specialists in the period. Notwithstanding Smith's lucid prose, taken in its entirety it is a hard read.

Fortunately, two features of the *WoN* provide an easier access to material sufficient to give the non-specialist reader a broad appreciation of some central themes which are foundational for all else that follows. First, Smith's style is to put his most striking propositions and reasoning right up front, leaving the subtleties to be developed later. Second, the first four chapters of the

WoN are relatively self-contained and set out what is, in effect, an evolutionary theory of economic development.

What follows therefore is a commentary on those first four chapters, both for the general reader and for students of economics of all ages who may have not been exposed to this type of political economy in the more formalized, university economics courses that are today's norm. For the latter in particular, the commentary seeks not only to link the material to later developments in the subject, but also, looking back with hindsight, to identify an unfortunate (for posterity) gap in Smith's analysis: it failed to give an account of the development of one of the institutional pillars central to the functioning of today's commercial societies, namely *markets*.

The relevant text in the commentary is taken from one of several of the original editions of the *WoN* that are freely downloadable online. Smith made changes to the book over time, but where these are substantive they tend to be concentrated in the later sections of the work and do not have major implications for the more foundational Chapters 1-4.

I have made no attempt to 'modernise' the language save for a very small number of changes of word where original 18th century expressions are so different from modern usage that they would be jarring and potentially misleading to the reader. The changes are intended to convey the original sense of the points, not to adjust that sense in any way.

The Introduction and Plan of the Work is included in the commentary even though it covers the whole book, not just the first four chapters. This is (a) to give a sense of how the early chapters fit into the wider framework of the *WoN* and (b) to afford an opportunity, in commenting on it, to point out just how radical and critical Smith's thinking was. As Gavin Kennedy put it, much of it became a 'lost legacy'.

Part of the reason for the loss may be that, in a number of areas, Smith was far ahead of his time, but another contributing factor is likely to have been a later tendency to read and interpret the *WoN* as a stand-alone work, without due recognition of it being the culmination of a lifetime's intellectual endeavour. There is, though, much in his prior work that has bearing on what Smith says in the *WoN* and, to give sight of these historical linkages, the commentary is preceded by a brief introduction to his three major works, taken in sequence.

In the commentary itself Smith's text is shown in italics, the comments are in standard typeface.

George Yarrow

15 October 2021

Introduction: Adam Smith's major works

Smith produced three major works: The History of Astronomy ("*HA*"), The Theory of Moral Sentiments ("*TMS*") and the Wealth of Nations ("*WoN*"). The first written of these, *HA*, was only published posthumously in 1795, decades after its composition, largely because of some radically challenging content in a society that was still heavily influenced by religious dogmas and sectarian conflicts. Nervousness about publishing controversial views was in the air in mid-18th century Scotland, just as it is again (more widely) now, albeit with less hazardous consequences now.

The History of Astronomy (HA)

The *HA* is a long essay that examines what would now be called the philosophy of science using Astronomy as a case study for the development of more general arguments. It is a youthful work.

For the leading thinkers of the Scottish Enlightenment the notion of science was a broad one that might be summed up as 'the systematic study of nature'. *Homo Sapiens* was very much part of the nature to be studied, and the words 'nature' and 'natural' occurred frequently in the writings of the Scottish *literati*. David Hume might nowadays be classified chiefly as a philosopher, but both he and Smith were consciously attempting to bring scientific methods to the study of mankind, recognising that, at the time, the use of such methods was more fully developed in the natural sciences, from which much could be learned, but whose more detailed heuristics (ways of learning) could simply not be replicated in the social sphere.

The *HA* is characterised by an unusual emphasis on the psychological motivations of scientists ('natural philosophers'). These people are driven, in Smith's view, by a propensity to be disturbed by surprising or unaccounted-for observations: they cannot pass these things by on the other side of the street as most can and do, but are compelled by an intense curiosity (wonder) to develop explanations/theories that render the observations unsurprising, thereby quietening the mind.

It is an anti-realist philosophy: it leads to no hard truths, if only because the possibility of future observations that could surprise and could disturb a maintained set of beliefs (based on existing explanations of previously observed patterns) cannot be excluded. It is also a first example of Smith's prescience: the approach has found much more resonance in developments in the philosophy of science in the 20th century than it did with thinking in the intervening period.

The essay contains Smith's first use of the invisible hand metaphor, an expression that likely impressed itself on his mind by its usage in Shakespeare's 'Scottish Play', Macbeth, where it plays a part in malign, not benign, human conduct. The relevant passage of the *HA* is striking: *"Fire burns, and water refreshes; heavy bodies descend, and lighter substances fly upwards, by the necessity of their own nature; nor was the invisible hand of Jupiter ever apprehended to be employed in those matters."*

Here he is pouring scorn on unsatisfactory, magical accounts of why things are as they are, and it is easy to see how church elders might take offence at this kind of sentiment (and of others

in the *HA*, such as a need for strong epistemic humility when speaking of complex, natural phenomena). The reference may be to a pagan god, Jupiter, but an easily triggered reader might incline to the view that the problematic absence of an observable cause for an observable effect is a point directed at her/his own belief system.

The Theory of Moral Sentiments (TMS)

TMS, first published in 1759, is a much longer and more mature work than *HA* and is a masterpiece in the Scottish tradition of moral sense philosophy developed by Smith's mentor at Glasgow University, Francis Hutcheson, building on the thinking of the Earl of Shaftesbury earlier in the 18th century. Smith's friend, David Hume, had also carried the tradition forward in his *A Treatise of Human Nature* (1739, and there's that word 'nature' again).

Sentimentalists ground moral philosophy and moral judgments in emotions and feelings rather than in reason, whether of a sophisticated or a much more basic kind. For Smith and Hume empathy is hard wired into human nature, or at least into those humans we would recognise as capable of moral judgments. Characteristically, Smith goes straight to the point. The opening sentence of *TMS* is*: "How selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it."* The wellbeing of one person is naturally connected to that of others: *homo sapiens* is a social animal**.**

This opening statement is another example of prescience, as can be seen from the title of Matthew Lieberman's account for lay readers of developments in the relatively new field of cognitive neuroscience, *Social: why our brains are wired to connect* (2013), and it is interesting to note that Lieberman cites Smith in that work.

Starting from this point, Smith goes on to examine how we evaluate the conduct of others and ourselves. The key test is whether we afford approbation or disapprobation to any particular pattern of human conduct that might be put under the microscope and this leads him to a specific meaning of the word 'sympathy', to be distinguished from empathy, compassion, or the fellow feeling that might come from 'putting yourself in the shoes of others'. We feel sympathy when we *approve* of the conduct or the feelings under examination, but not otherwise. First we empathise ('have fellow feeling with'), but then we judge: can we afford the relevant conduct/feelings approbation?

Both the giving and receiving of sympathy are causes of satisfaction, so the argumentation transcends the kinds of consequentialist utilitarianism that would be more fully developed by thinkers later in time than Smith. The approbation afforded or not afforded is based on an evaluation of conduct, including expressions of feelings (are they appropriate in the relevant context?): it is not restricted to criteria concerned solely with the *effects* of conduct, whether intended or unintended, although it doesn't exclude evaluation of such effects. Economists could think of it as establishing a preference ('utility') function whose range is extended to personal conduct, as well as covering the outcomes/consequences of human conduct in terms of goods and services consumed (the standard assumption in teaching).

The approach can be regarded as scientific in that it seeks to build a theory of moral sentiments that is based on ordinary, everyday moral judgments (data, in a philosopher's use of that word) rather than one developed from an abstract, philosophical viewpoint that lies above or outside of these judgments. Smith goes a critical step further, however, in search of a greater generality, i.e. of more foundational, universal benchmarks for making moral judgments that are functional for a society whose members typically have social encounters with a much larger and more diverse range of 'others' than might have been the case in previous eras of families, clans and tribes.

By way of illustration of the challenge, a group of bank robbers might well sympathise (in the Smithian sense) with the conduct of the safe-cracker in their number and might disapprove of the conduct of the police in arresting them for the robbery, in which case they could be said to form their own, distinctive moral community. This is not, however, a moral system that can be expected to carry a wide degree of consent across a society as a whole: in judging their comrades the robbers are 'partial' (in the sense of partisan) spectators of each others' conduct.

To go the extra step Smith introduces the imagined notion of an impartial spectator who *"dwells within the human breast"* and whose approbation or disapprobation applies to the partial spectator's own conduct/feelings, including the individual's feelings of approbation or disapprobation concerning the conduct/feelings of others.

At this point the ground becomes more difficult. Empirically, it is difficult to deny the existence of a widespread tendency for people to content themselves with their own, solipsistic judgments of self-approbation or self-disapprobation, or with mutual approbation among family, friends and colleagues.

This observation, however, is not entirely dissimilar to the situation of scientists addressed in *HA*. Most people are, for the most part, not disturbed by anomalous observations – if they are noticed at all, it is easy enough to turn a blind eye to them – but it is a characteristic of scientists that they are so disturbed and what Smith is aiming at is a science of moral sentiments, or, as it might now be put, a science of moral psychology.

In effect, Smith took the view that there is a bit of the scientist in most people, i.e. that it too is part of human nature, albeit more developed in some than others. Sticking with the underlying, naturalistic approach, he identifies the recourse to the perspective of an impartial spectator when making judgments as arising from the sentiments of (a) a desire to be praise-worthy and (b) an aversion to being blame-worthy, *in both cases across a much fuller range of social encounters than is likely within a narrow moral community*. The payoff from a potential assessment of praise-worthiness, i.e. the incentive/motivation for calling on the impartial spectator and hearing her/his voice, is much the same as that of the scientist in *HA*: peace or serenity/tranquillity of mind.

Underlying all this is a very social view of Man, something that, as already noted, is characteristic of Scottish Enlightenment thinking as a whole. There was little in this intellectual tradition by way of social-contract theorising in the manner of Hobbes, Locke, Rousseau et al, based on a hypothetically assumed state of nature in which fully formed human individuals

come together to determine the principles of a social order. Adam Ferguson, put it this way: *"Like the winds that we come we know not whence and blow whither soever they list, the forces of society are derived from an obscure and distant origin. They arise before the date of philosophy, from the instincts, not the speculations of men."* Today, post Darwin, we might say that, descended from primates, sociability is an inherited part of human nature and to ignore that fact is almost necessarily a rather large, immediately de-humanising, analytical mistake. Put other ways: *homo* was social before becoming *sapiens*, or, following Lieberman, the human brain is wired to connect.

In their different ways, Smith, Hume, Ferguson and others were working toward a shared goal, to move away from speculative philosophy applied to human affairs to a more scientific approach based on empirical observations. As Hume wrote: *"Mankind are so much the same, in all times and places, that history informs us of nothing new or strange in this particular. Its chief use is only to discover the constant and universal principles of human nature, by showing men in all varieties of circumstances and situations, and furnishing us with materials from which we may form our observations and become acquainted with the regular springs of human action and behaviour. These records of wars, intrigues, factions, and revolutions, are so many collections of experiments, by which the politician or moral philosopher fixes the principles of his science, in the same manner as the physician or natural philosopher becomes acquainted with the nature of plants, minerals, and other external objects, by the experiments which he forms concerning them."*

The Wealth of Nations

In the *Wealth of Nations* (1776) Smith shifts his focus to a different set of issues to do with the functioning of an entire economic system. This was a wholly different challenge to those tackled in *HA* and *TMS* and it included engagement with major public policy issues of the day, driven by an interest in improving the stewardship of the social 'ecosystem' in ways that would enhance the material well-being of 'Everyman' (i.e. a representative human being without major, distinguishing characteristics such as riches or power/authority).

The *WoN* nevertheless builds on Smith's earlier thinking. First, going back to *HA*, in his imaginative vision he sees the economy as what would now be labelled a complex, adaptive system. A first look engenders a sense of awe and wonder at the complexity and connectedness of it all and there are surprises and puzzles to be found all over the place in the ways in which it functions. These are the things that, in youth, he had concluded were the chief motivating factors for scientists.

It was, on the logic of the *HA*, the task of the philosopher/scientist to respond, to dampen the sense of surprise and puzzlement via the development of understandings and explanations that resolve the cognitive dissonance between simple, quotidian notions/accounts of causalities and observed realities. John Kay elegantly encapsulated one of the central Smithian questions/challenges thus: *"It is remarkable, and wildly counterintuitive, not only that the question 'Who is in charge of the supply of bread to New York?' has no answer, but that the supply of bread to New York is better managed by a system in which there is no answer than by one in which there is."* The *WoN* explains why that is the case and why everyday intuition (e.g. 'put

someone in charge') is inadequate for understanding the functioning of the ecosystem and for discharging the stewardship/management duties with which policymakers are entrusted.

Central to his own understanding, set out in the *WoN*, is what Smith referred to as a *System of Natural Liberty*, an expression coined by his old mentor at Glasgow University, Francis Hutcheson. This was a vision of what a well-functioning economic system could (realistically) look like and it served as a sort of counterfactual benchmark against which actual policy practice could be assessed. The radical nature of the *WoN* derives from the large deviations of some of the observed realities from the conjectured *System*.

Smith, though, was not a utopian ideologist and had no thought of seeking to change realities to fit the *System* to any close degree of approximation. That would have been unscientific. Rather, the counterfactual is used as a guide, not least for understanding in what ways and for what reasons reality deviates from the benchmark, so as to assist the practical development of economic policy. Thus, of freedom of trade, he wrote in the *WoN* that: *"To expect, indeed, that freedom of trade should ever be entirely restored in Great Britain, is as absurd as to expect that an Oceana or Utopia should ever be established in it."* And that is a judgment about trade within Great Britain, before getting to the more difficult challenges of increasing freedom of trade at the international level!

The reasoning behind this judgment comes from Smith's assessments of the power of the socio-economic forces ranged against freedom of trade. These forces, he argued, derived chiefly from powerful groups in society that sought to influence state policymaking in ways favourable to their own 'partial' (partisan) interests, notwithstanding any harmful effects on the well-functioning of the ecosystem as a whole. The partial interests could be motivated by financial gain, or by ideologies/doctrines, or, when most powerful in their influence, by the two combined.

These then are the identified 'enemies' of well-functioning commercial societies and, in the circumstances of his day, Smith's chief targets were merchant interests and their supporting ideology/doctrine, Mercantalism, though the general line of argument encompasses a wider range of disruptors. Recognising these social facts (the pressures of partial interests seeking to induce the use of state (monopoly) power for their own benefit) what Smith advocated, based on comparisons between the counterfactual and realities, were specific sets of reforms that would work against the disruption and which would, over time, facilitate economic progress.

The theorising has had many resonances over the centuries since, largely I think because of the enduring nature of the problem. Keynes went through a similar exercise: like Smith he developed a whole new theoretical framework to better critique perceived, dysfunctional realities and guide the way toward better stewardship of the economic system. In the field of regulation, the 'economic' theories of regulation associated with the University of Chicago, based on notions of 'regulatory capture' and undue influence, have challenged, and continue to challenge, a dominant orthodoxy that sees regulatory policy in practice as being chiefly guided by a concern to promote the public interest and/or economic efficiency. And significant parts of Marxist arguments concerning state capture by the beneficiaries of the capitalist mode of production, aided by justifying ideologies, echo this theme of the *WoN*.

Analytically, however, Marx (unlike Keynes or the Chicago theorists) deviated from Smith by not working with any developed counterfactual. Rather, he focused on a theory of how the capitalist mode of production works and diagnosed problems predicted by that theory, but provided no guide as to what an alternative system might look like. His preoccupation lay in the collapse of the existing ecosystem, not with what might follow after.

Thus, whilst giving the name communism to his preferred alternative, Marx was notoriously vague as to what it would entail. It was simply assumed that there would be sunlit uplands once the existing economic order was destroyed: *"... in communist society, where nobody has one exclusive sphere of activity but each can become accomplished in any branch he wishes, society regulates the general production* [sic] *and thus* [sic] *makes it possible for me to do one thing today and another tomorrow, to hunt in the morning, fish in the afternoon, rear cattle in the evening, criticise after dinner, just as I have a mind, without ever becoming hunter, fisherman, herdsman or critic."*

As to <u>how</u> *"society regulates the general production"* to produce the stated effects (which bear some resemblance to the preferred lifestyle of an aristocrat) there is only silence. As can be inferred from the very first sentence of Chapter 1 of the *WoN*, Smith would have regarded such a view as not only wildly utopian, but also that any approximation to its realization would be a recipe for general impoverishment: in the hypothesised, communist society, with its much more limited division of labour, productivity could be expected to be extremely low.

That Smith favoured greater economic freedom and a greater degree of personal sovereignty for Everyman stands in no contradiction to his socially embedded conception of man, and I think the (fairly widespread) tendency to think otherwise derives from a failure to understand the reasoning. Greater individual freedom can be sustained, without harm to society as a whole, *precisely because, in a System of Natural Liberty, its exercise will be subject to checks and balances from interactions with other members of society*. Thus, in the economic sphere, commercial conduct that turns out to be foolish will go unremunerated, whereas provision of goods and services of benefit to others will be rewarded. Agency lies with the individual within her/his domain of sovereignty, but use of the agency has *consequences* that are determined by social processes.

A final, notable characteristic of Smith's sensibility is its epistemic humility, first expressed in the *HA*. Considerable stress is placed on the vastness of what is not known about the ecosystem and on the importance of a recognition of where the boundaries of knowledge realistically lie. This 'knowledge problem' has been a foundation stone of liberal critiques of command-and-control economic policymaking ever since. In explaining his counterfactual, Smith says: *"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."*

The salience of the point has only increased over time as the processes of discovering, transmitting, interpreting and making valuable use of information have become an ever-larger part of much expanded (since the 18th century) economic activity. The belief that it is possible to closely control or manage these increasingly complex processes in ways that are benign for the wellbeing of the ecosystem has arguably become ever more delusional. Two centuries later Friedrich Hayek would call it *The Fatal Conceit.*

The integrity of Smith's three, major works

The intellectual integrity of the three works – *HA*, *TMS* and *WoN* – is, I think, well captured in an old entry on Smith's moral and political philosophy in the Stanford Encyclopedia of Philosophy: *"A central thread running through his work is an unusually strong commitment to the soundness of the ordinary human being's judgments, and a concern to fend off attempts, by philosophers and policy-makers, to replace those judgments with the supposedly better "systems" invented by intellectuals. In his "History of Astronomy", he characterizes philosophy as a discipline that attempts to connect and regularize the data of everyday experience; in TMS, he tries to develop moral theory out of ordinary moral judgments, rather than beginning from a philosophical vantage point above those judgments; and a central polemic of WoN is directed against the notion that government officials need to guide the economic decisions of ordinary people. Perhaps taking a cue from David Hume's skepticism about the capacity of philosophy to replace the judgments of common life, Smith is suspicious of philosophy as conducted from a foundationalist standpoint, outside the modes of thought and practice it examines. Instead, he maps common life from within, correcting it where necessary with its own tools rather than trying either to justify or to criticize it from an external standpoint. He aims indeed to break down the distinction between theoretical and ordinary thought. This intellectual project is not unconnected with his political interest in guaranteeing to ordinary individuals the "natural liberty" to act in accordance with their own judgments."*

Commentary

AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS

INTRODUCTION AND PLAN OF THE WORK

1. *The annual labour of every nation is the fund which originally supplies it with all the necessaries and conveniencies of life which it annually consumes, and which consist always either in the immediate produce of that labour, or in what is purchased with that produce from other nations.*

2. *According, therefore, as this produce, or what is purchased with it, bears a greater or smaller proportion to the number of those who are to consume it, the nation will be better or worse supplied with all the necessaries and conveniencies for which it has occasion.*

Smith characteristically starts in paragraphs (1) and (2) by making bold propositions that reveal his chief concern, which is with the supply of the *'necessaries and conveniencies'* of life for the people of the nation as a whole.

In his lectures at the University of Glasgow (from which the *WoN* was developed) he had referred to *'natural wants'*, but changed the terminology to *'necessaries and conveniencies'*, or sometimes simply to *'consumption'* (the word that has, with some loss, stuck in economics ever since) for the text of the *WoN*. Today we might think of this as a concern for the standard of living of the people.

This, for Smith, is the measure of the 'wealth' of a nation. The meaning of the word wealth here is not to be conflated with its chief, alternative meaning: a command over a stock of assets in the form of property, investments, money, etc. Rather it signifies an abundance in the supply of something desirable, as in 'this book contains a wealth of interesting information'. In the economic sphere, the words prosperity or (material) well-being could be taken as synonyms. The word commonwealth captures some of this older meaning.

To today's reader the propositions in (1) and (2) may seem trite, but the *WoN* is an 18th century work that is, in later sections, dedicated to an excoriating critique of an earlier, prevalent set of criteria for gauging a nation's wealth. These focused on the balance of trade, i.e. the difference between the value of exports and the value of imports, and on concomitant increases or decreases in a nation's financial assets (most usually with an emphasis on holdings of gold) relative to other countries. The view was that nations are more successful and powerful in proportion to the extent that their exports exceed their imports. Smith's term for public policies driven by these balance of trade criteria was the *"mercantile system"*, more widely referred to

as Mercantilism (arguably a term better reserved for the justifying arguments/ideology of the policy approach).

Any appearance of triteness is, therefore, an implicit tribute to the success of Smith and others in over-turning a prior paradigm. It was not, however, a complete intellectual victory: strands of mercantilist thinking are ever with as, as any regular follower of international trade policy in today's world will know.

The main theme is therefore a simple one: the wealth of a nation is determined by the capacity of its labour force to produce useful things (necessaries and conveniencies).

3. *But this proportion must in every nation be regulated by two different circumstances: first, by the skill, dexterity, and judgment with which its labour is generally applied; and, secondly, by the proportion between the number of those who are employed in useful labour, and that of those who are not so employed. Whatever be the soil, climate, or extent of territory of any particular nation, the abundance or scantiness of its annual supply must, in that particular situation, depend upon those two circumstances.*

The commercial success of places like Japan, Hong Kong and Singapore, which lack an abundance of natural resources, illustrates the point in the second sentence. So too, does the relative commercial failure of the Soviet Union, which was well endowed with such resources.

The elevation to high prominence of the 'skill, dexterity, and judgment' of labour reflects a central theme of the reasoning to follow, as will be elaborated below.

4. *The abundance or scantiness of this supply, too, seems to depend more upon the former of those two circumstances than upon the latter. Among non-commercialised nations of hunters and fishers, every individual who is able to work is more or less employed in useful labour, and endeavours to provide, as well as he can, the necessaries and conveniencies of life, for himself, and such of his family or tribe as are either too old, or too young, or too infirm, to go a-hunting and fishing. Such nations, however, are so miserably poor, that, from mere want, they are frequently reduced, or at least think themselves reduced, to the necessity sometimes of directly destroying, and sometimes of abandoning their infants, their old people, and those afflicted with lingering diseases, to perish with hunger, or to be devoured by wild beasts. Among civilised and thriving nations, on the contrary, though a great number of people do not labour at all, many of whom consume the produce of ten times, frequently of a hundred times, more labour than the greater part of those who work; yet the produce of the whole labour of the society is so great, that all are often abundantly supplied; and a workman, even of the lowest and poorest order, if he is frugal and industrious, may enjoy a greater share of the necessaries and conveniencies of life than it is possible for any self-sufficient persons to acquire.*

The observations that there are those who labour and those who don't, and that some of the latter consume much more heavily than the former, were central to the later development of socialist and social democratic thinking. Smith, however, adds the observation that, notwithstanding this position, those who labour also benefit from economic development. As an empiricist he will have been familiar with the views of continental travellers to Britain who reported on the higher standard of living of labourers in Britain compared with their own countries. In comparative terms at least, these labourers appeared well endowed with the necessaries and conveniencies of life.

5. *The causes of this improvement in the productive powers of labour, and the order according to which its produce is naturally distributed among the different ranks and conditions of men in the society, make the subject of the first book of this Inquiry.*

Here ends the summary of the part of the *WoN* that contains Chapters 1-4. The remaining text of the Introduction and Plan, and the brief comments on it that follow, are provided only to give some context for the chapters of interest.

6. *Whatever be the actual state of the skill, dexterity, and judgment, with which labour is applied in any nation, the abundance or scantiness of its annual supply must depend, during the continuance of that state, upon the proportion between the number of those who are annually employed in useful labour, and that of those who are not so employed. The number of useful and productive labourers, it will hereafter appear, is everywhere in proportion to the quantity of capital stock which is employed in setting them to work, and to the particular way in which it is so employed. The second book, therefore, treats of the nature of capital stock, of the manner in which it is gradually accumulated, and of the different quantities of labour which it puts into motion, according to the different ways in which it is employed.*

Smith gives primacy to the application of labour in economic development: the role of capital (the 'means of production') comes second, in Book Two. This ranking accords with his wider, historical vision, which sees in the capital stock the embodied labour of previous periods: the machinery, equipment and workshops were all made in consequence of the application of labour in earlier periods and the same can in turn be said of the means of production used in those earlier production processes. It is applied labour, inclusive of intellectual labour (e.g. ingenuity and imagination), all the way back.

7. *Nations tolerably well advanced as to skill, dexterity, and judgment, in the application of labour, have followed very different plans in the general conduct or direction of it; and those plans have not all been equally favourable to the greatness of its produce. The policy of some nations has given extraordinary encouragement to the industry of the country; that of others to the industry of towns. Scarce any nation has dealt equally*

and impartially with every sort of industry. Since the down-fall of the Roman empire, the policy of Europe has been more favourable to arts, manufactures, and commerce, the industry of towns, than to agriculture, the Industry of the country. The circumstances which seem to have introduced and established this policy are explained in the third book.

The heading for Book Three of the *WoN* is *"Of the different Progress of Opulence in different Nations"*, where opulence is used as another synonym for wealth in the Smithian sense (prosperity/well-being). The focus is on what now might be called comparative economic development, with a distinct shift to an emphasis on public policies and plans as factors that have given rise to disparities among nations: *"those plans have not all been equally favourable to the greatness of its produce"*.

8. *Though those different plans were, perhaps, first introduced by the private interests and prejudices of particular orders of men, without any regard to, or foresight of, their consequences upon the general welfare of the society; yet they have given occasion to very different theories of political economy; of which some magnify the importance of that industry which is carried on in towns, others of that which is carried on in the country. Those theories have had a considerable influence, not only upon the opinions of men of learning, but upon the public conduct of princes and sovereign states. I have endeavoured, in the fourth book, to explain as fully and distinctly as I can those different theories, and the principal effects which they have produced in different ages and nations.*

Book Four of the *WoN* (*"Of Systems of Political Economy"*) is where we find Smith's critique of Mercantilism and of other systems of thought that he believed were hindrances to the development of the wealth of a nation. In a later letter to Andreas Holt, a Danish customs official of his acquaintance, he describes the *WoN* as *"a very violent attack on the whole mercantile system of Great Britain"*, i.e. an intellectual attack on what then was the status quo position in Britain.

That the intellectual violence of the radicalism was not perceived as such by many is arguably a great tribute to Smith's skilled rhetoric (he lectured on Rhetoric and Belles Lettres as well as on subjects such as logic, moral philosophy, and jurisprudence, in addition to political economy). There is no immediate, direct attack on the status quo. He first sets out an evolutionary theory of economic development that establishes the potential feasibility of a *System of Natural Liberty*, then later examines obstacles the approximate achievement of such a *System*.

As the first sentence in paragraph 8 signals, in Smith's view the major obstacle lies with the influence on state (the Sovereign's) policymaking of *"the private interests and prejudices of particular orders of men"*. In Book Four the *WoN* has a distinct narrative arc and these 'partial' (partisan) interests are the villains of the story. Their motivations may be financial gain or simply power for its own sake, but they give rise to supporting rationalisations or ideologies,

e.g. various, different *"theories of political economy"*. Their crime is not so much that they do this (which is something we all do in relation to our interests and prejudices), but that they do *so "without any regard to, or foresight of, their consequences upon the general welfare of the society"*. The distinctive voice of a moral philosopher is clearly to be heard at this point.

The leading villains are merchants and venal politicians willing to legislate in response to the 'clamorous importunity' of merchant interests, but sections of the public whose opinions and views come to be gripped by some or other simple set of fixed ideas are also noted as threats to the well-being of the socio-economic ecosystem. Views on religion and on the organisation of agricultural production are cited in the *WoN* as examples of the latter, on the argument that many among the public tended to have intense, but unconsidered, feelings and prejudices relating to their ultimate fate as individuals and/or to the reliability of their next meal. When these influences are strong, Smith warns the reader not to expect anything resembling good public regulation. The cast list of today's importuners may be different, but the general argument remains highly relevant.

On the other side, the heroes of the narrative are the day labourers, who constitute the majority of society. In seeking to promote wealth/prosperity/opulence, it is the wealth of the day labourers that is Smith's central concern, and, as he sees it, what should be the defining concern of political economy. The 'progress of opulence' that he wants to see is 'the progress of universal opulence', i.e. the flourishing of a whole ecosystem, not just parts of it.

As noted in the Introduction to this commentary, the force of the critique of the status quo comes from a comparison of existing realities with a counterfactual, and it relies heavily on the feasibility and plausibility of that counterfactual. Smith had few historical observations available that could easily and firmly substantiate his central propositions and hence a considerable amount of effort in the *WoN* is devoted to accomplishing the task by indirect means. Today we have a much larger body of historical economic evidence available, including direct observations of massive failures that have occurred when some of the other 'systems of political economy' have been adopted and implemented.

9. *To explain in what has consisted the revenue of the great body of the people, or what has been the nature of those funds, which, in different ages and nations, have supplied their annual consumption, is the object of these four first books. The fifth and last book treats of the revenue of the sovereign, or commonwealth. In this book I have endeavoured to shew, first, what are the necessary expenses of the sovereign, or commonwealth; which of those expenses ought to be defrayed by the general contribution of the whole society, and which of them, by that of some particular part only, or of some particular members of it: secondly, what are the different methods in which the whole society may be made to contribute towards defraying the expenses incumbent on the whole society, and what are the principal advantages and inconveniencies of each of those methods; and, thirdly and lastly, what are the reasons and causes which have induced almost all modern governments to mortgage some part*

of this revenue, or to contract debts; and what have been the effects of those debts upon the real wealth, the annual produce of the land and labour of the society.

In the final book of the *WoN* Smith addresses issues of taxation and government expenditure. Important though they are, they are tangential to the matters that are the focus of this essay and hence commentary on them will be omitted. Book Five is, however, well worth a read: It contains significant amounts of 'lost legacy' material.

BOOK I. 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.

CHAPTER I. OF THE DIVISION OF LABOUR.

1. *The greatest improvements in the productive powers of labour, and the greater part of the skill, dexterity, and judgment with which it is anywhere directed or applied, seem to have been the effects of the division of labour.*

As in the Introduction to the *WoN*, Smith goes straight to his major point: there is no messing about! The 'seem' in the statement serves as a rhetorical invitation to the reader to consider the reasoning and evidence about to be presented and then make her/his own judgment. The sentiment is 'let's look at this proposition', not 'this is how things are'.

The formulation *"skill, dexterity, and judgment"* is interesting: judgment is a high-level cognitive activity and it's clear that the specialisation involved in the division of labour is conceived to be a much wider thing that just the improvement of manual skills by constant repetition, although the latter is part of it ('dexterity').

It might also be noted that the statement is couched in relative terms: the 'greatest' improvement. It is recognised that other factors influence labour productivity, but Smith's proposition is that the division of labour is the most important factor.

Having made the claim Smith turns immediately to the task of substantiating it.

2. *The effects of the division of labour, in the general business of society will be more easily understood by considering in what manner it operates in some particular manufactures. It is commonly supposed to be carried furthest in some very trifling ones; not perhaps that it really is carried further in them than in others of more importance, but in those trifling manufactures which are destined to supply the small wants of but a small number of people the whole number of workmen must necessarily be small, and those employed in every different branch of the work can often be collected into the same workhouse and placed at once under the view of the spectator. In those great manufactures, on the contrary, which are destined to supply the great wants of the great body of the people, every different branch of the work employs so great a number of workmen that it is impossible to collect them all into the same workhouse. We can seldom see more, at one time, than those employed in one single number of parts than in those of a more trifling nature, the division is not near so obvious and has accordingly been much less observed. Though in such manufactures, therefore, the work may really be divided into a much greater number of parts than in those*

of a more trifling nature, the division is not near so obvious and has accordingly been much less observed.

In the manner of the teacher, Smith will initially offer up a relatively simple case study so that the reader can focus on a few key points, without distraction by other features of the highly complex system that he will go on to analyse.

The *WoN* is an 18th century work, written at the dawn of the industrial revolution rather than at its height. The immediate focus is on manufacturing, since it was this sector of the economy where the greatest changes in the organisation of production were taking place and where the effects of changes in the division of labour could most readily be seen. The presence of 'great manufactures' is already observable, but the example to be chosen is of a more 'trifling manufacture', because it is judged more efficacious in helping the reader see the general significance of the effects of specialisation on productivity.

3. *To take an example, therefore, from a very trifling manufacture, but one in which the division of labour has been very often taken notice of, the trade of a pin-maker: a workman not educated to this business (which the division of labour has rendered a distinct trade), nor acquainted with the use of the machinery employed in it (to the invention of which the same division of labour has probably given occasion), could scarce, perhaps, with his utmost industry, make one 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 peculiar 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 the head; to make the head requires two or three distinct operations; to put it on is a peculiar business; to whiten the pins is another; it is even a trade by itself to put them into the paper. 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. That is, certainly, not the two hundred and fortieth, perhaps not the four thousand eight hundredth, part of what they*

are at present capable of performing, in consequence of a proper division and combination of their different operations.

This is the famous pin factory example, which has had the distinction of being illustrated in the design of the underside of a Bank of England £20 banknote (thanks to a former Chancellor of the Exchequer, Gordon Brown, a fellow native of Smith's birthplace, Kirkaldy). Its driving message lies in the numbers cited. Ten workers, each performing a specialised activity or two might produce upwards of 48,000 pins in a day, whereas one worker entrusted with the eighteen, identified activities involved in making a pin might manage only up to about 20 pins per day. That is a 240-fold higher level of labour productivity.

The difference is quite enormous: so enormous that the numbers are advisedly taken with a large pinch of salt whilst proceeding only on the basis that the productivity effects are 'large': that suffices for what follows.

It is not implied that the economy as a whole could benefit from this level of productivity gain via the division of labour, but we are, I think, invited to conclude that in the still small, but growing, manufacturing sector there lay very great potential for productivity increases as workers shifted into the sector from activities that were less conducive to the level of specialisation described.

The paragraph touches on the contribution of capital to the process as a factor of production. Specifically, the workplace as described is said to be 'indifferently accommodated' with the necessary machinery. The machinery could be expected to have been a significant factor affecting the productivity level, but what Smith is in effect implying is that this alone does not account for anything like the overall productivity level.

For example, if the method of production had been for a single worker to proceed sequentially, using one machine after another, the effect would be that machinery would be standing idle for most of the time. (There is an implicit assumption here that the machinery is also specialised: there is no single machine available that performs all the activities in question on an end-to-end basis, and that no doubt reflected an actual, empirical reality of the time.)

Although we can, as intended, mentally visualise the division of labour in the pin factory itself, there is no sight here of the process of specialisation that led to the production of the machines and which itself will reflect a division of labour in those upstream production activities. That point is noted at the end of the first sentence and will be considered later in the *WoN*, but, for the moment, Smith wants the reader to stay focused on the manufacture of pins.

4. *In every other art and manufacture the effects of the division of labour are similar to what they are in this very trifling one, though in many of them the labour can neither be so much subdivided, nor reduced to so great a simplicity of operation. The division of labour, however, so far as it can be introduced, occasions, in every art a proportionable increase of the productive powers of labour. The separation of different trades and employments from one another, seems to have taken place in consequence*

of this advantage. This separation, too, is generally carried furthest in those countries which enjoy the highest degree of industry and improvement: what is the work of one man, in a non-commercialised state of society, being generally that of several in a commercialised one. In every commercial society the farmer is generally nothing but a farmer; the manufacturer, nothing but a manufacturer. The labour, too, which is necessary to produce any one complete manufacture is almost always divided among a great number of hands. How many different trades are employed in each branch of the linen and woollen manufactures, from the growers of the flax and the wool, to the bleachers and smoothers of the linen, or to the dyers and dressers of the cloth! The nature of agriculture, indeed, does not admit of so many subdivisions of labour, nor of so complete a separation of one business from another, as manufactures. It is impossible to separate so entirely the business of the grazier from that of the corn-farmer, as the trade of the carpenter is commonly separated from that of the smith. The spinner is almost always a distinct person from the weaver; but the ploughman, the harrower, the sower of the seed, and the reaper of the corn, are often the same. The occasions for those different sorts of labour returning with the different seasons of the year, it is impossible that one man should be constantly employed in any one of them. This impossibility of making so complete and entire a separation of all the different branches of labour employed in agriculture is perhaps the reason why the improvement of the productive powers of labour, in this art, does not always keep pace with their improvement in manufactures. The most opulent nations, indeed, generally excel all their neighbours in agriculture as well as in manufactures; but they are commonly more distinguished by their superiority in the latter than in the former. Their lands are in general better cultivated and, having more labour and expense bestowed upon them, produce more in proportion to the extent and natural fertility of the ground. But this superiority of produce is seldom much more than in proportion to the superiority of labour and expense. In agriculture, the labour of the rich country is not always much more productive than that of the poor; or, at least, it is never so much more productive as it commonly is in manufactures. The corn of the rich country, therefore, will not always, in the same degree of goodness, come cheaper to market than that of the poor. The corn of Poland, in the same degree of goodness, is as cheap as that of France, notwithstanding the superior opulence and improvement of the latter country. The corn of France is, in the corn-provinces, fully as good, and in most years nearly about the same price with the corn of England, though, in opulence and improvement, France is perhaps inferior to England. The corn-lands of England, however, are better cultivated than those of France and the corn-lands of France are said to be much better cultivated than those of Poland. But though the poor country, notwithstanding the inferiority of its cultivation, can, in some measure, rival the rich in the cheapness and goodness of its corn, it can pretend to no such competition in its manufactures, at least if those manufactures suit the soil, climate, and situation, of the rich country. The silks of France are better and cheaper than those of England, because the silk manufacture, at least under the present high duties upon the importation of raw silk, does not so well suit the climate of England as that of France. But the hardware and the coarse woollens of England are beyond all comparison superior to those of France, and much cheaper,

too, in the same degree of goodness. In Poland there are said to be scarce any manufactures of any kind, a few of those coarser household manufactures excepted, without which no country can well subsist.

The opening argument is that, while there is opportunity for division of labour across the economy, the scope for doing so, and hence the scope for consequential productivity gains, cannot be expected to be uniform: some activities offer more potential than others.

Smith focuses on a comparison between manufacturing and agriculture, perhaps because of a major difference of opinion with the French Physiocrats, with whose work he was well familiar. The Physiocrats were also critics of Mercantilism and of all its accompanying regulations and state interventions in economic affairs. Their opposition to the latter led to adoption of the slogan 'laissez faire', signifying the removal of those regulations/ interventions. They, like Smith, stressed the primacy of labour as the creator of economic value, but argued that it was only labour applied to agricultural production that added value: all other economic activities were unproductive appendages to those of agriculture.

The earlier part of this long paragraph is straightforward enough, as is the observation that the most opulent nations (i.e. those with the highest standards of living) also tend to excel, relative to their neighbours, in agricultural productivity as well as manufacturing productivity: Britain's agricultural labour productivity significantly exceeded that of continental Europe for a period of centuries before the commencement of the industrial revolution. However, given the much greater potential for productivity gains via specialisation in manufacturing, once the expansion of the manufacturing sector took hold, it was reasonable to conclude that the opulent nations "*are commonly more distinguished by their superiority in the latter* [manufacturing] *than in the former* [agriculture]".

Having made these points, Smith could have stopped there, but instead entered into something of a digression that is much less helpful to the reader. He starts to talk about prices (Poland can rival France and Britain *"in the cheapness and goodness of its corn"*), but output prices are influenced by the prices of factors used in their production, e.g. the wages of labourers, as well as by productivities. Product pricing and wage determination issues are addressed in later chapters of the *WoN*, but we are still at a very early stage in the text here and the groundwork for price comparisons has not been laid. The result is confusion and precisely what the reader is expected to take away from this discussion is obscure.

In point of fact, Smith's theorising about the division of labour is itself a theory of what later came to be termed 'comparative advantage' in international trade theory and he would have done better to develop its implications more fully at the outset, without introducing the notion of price. Thus, focusing on domestic trade only and ignoring prices set in exchange transactions, it is straightforward to show that the total labour input required to produce any given mix of final outputs can be reduced by specialisation. Individual A may be more productive in both activity X (say a pin making activity) and Y (say a farming activity) than is B, but if he/she is much more productive than B in X than in Y, aggregate labour input can be reduced by having A specialise in X (pin making) and B specialise in Y (agriculture). It is the

relative productivities of A and B in the two activities that matters for how the labour is most advantageously divided, and this is explicitly recognised in the paragraph.

International trade, reflecting a division of labour among nations, is no different in principle. What difference there is at this level of abstraction in reasoning arises from the existence of additional constraints in the international trade context (more binding in the 18th century than they are now): factors of production can be relatively immobile between countries and this constrains the degree of specialisation that can be achieved. In Smith's time it was much easier for workers to migrate within Britain or within Poland than to migrate between Britain and Poland, just as it was easier for a British manufacturer to develop new facilities (e.g. factories) in Britain than in Poland.

For nations that are pioneers in the development of manufacturing, it is potentially beneficial for the allocation of (constrained by geography) labour to manufacturing to be carried further than is required to satisfy home demand for the outputs. The first-to-manufacturing countries can be expected to exhibit a concentration of their labour forces in those activities and to seek to exchange the surplus for imported corn by means of trade. Then, for any given levels of consumption of corn and pins in each of the two countries, less labour time would be expended in consequence of the specialisation. Or, to invert this input-output ratio, for any given amount of labour time expended the aggregate outputs of the two countries could be higher: both could be better off.

David Ricardo would later tidy up the logic in his 'Principles of Political Economy', but with hindsight it is possible to see that there was something of a loss in this historical sequence in theorising. He did so in a way that served to elevate formalised, static reasoning in the consciousness of his educated readers. What was lost thereby was the context of a dynamic, evolutionary process, which was the centre of Smith's attention. That proclivity – toward an emphasis on statics rather than on evolutionary dynamics – has persisted in economic thought ever since.

To illustrate, in the evolutionary, Smithian framework, relative productivities, and hence comparative advantage, can be expected to evolve and change over time as the division of labour progresses. Looking back, it is, for example, striking just how short the historical time period was during which Britain could reasonably be described as 'the workshop of the world'.

5. *This great increase in the quantity of work which, in consequence of the division of labour, the same number of people are capable of performing, is owing to three different circumstances; first, to the increase of dexterity in every particular workman; secondly, to the saving of the time which is commonly lost in passing from one species of work to another; and, lastly, to the invention of a great number of machines which facilitate and abridge labour and enable one man to do the work of many.*

Smith gets back on track in paragraph 5, where attention is shifted to more precise examination of how it is that the division of labour increases productivity. Dexterity, which at the level of

general argument can reasonably be read as shorthand for the wider 'skill, dexterity and judgment' expression in paragraph 1, is characteristically placed first in the short list. The reasons for that can, I think, be explained by recourse to a more modern term of art in economics, human capital.

The specialisation in a productive activity signified by the division of labour leads, via a process of learning by doing or learning through experience, to we would now call human capital: for *"the increase of dexterity in every particular workman"* read *"the increase in the human capital possessed by every workman"*. In its standard economic definition capital is any asset that has the capability of enhancing future output. A worker who has, through experience, acquired greater skill, dexterity and judgment in the performance of a task has acquired human capital: it will enhance her/his future productivity relative to a worker lacking that experience.

6. *First, the improvement of the dexterity of the workmen, necessarily increases the quantity of the work he can perform; and the division of labour, by reducing every man's business to some one simple operation, and by making this operation the sole employment of his life, necessarily increases very much the dexterity of the workman. A common smith, who, though accustomed to handle the hammer, has never been used to make nails, if upon some particular occasion he is obliged to attempt it, will scarce, I am assured, be able to make above two or three hundred nails in a day, and those, too, very bad ones. A smith who has been accustomed to make nails, but whose sole or principal business has not been that of a nailer, can seldom, with his utmost diligence, make more than eight hundred or a thousand nails in a day. I have seen several boys, under twenty years of age, who had never exercised any other trade but that of making nails, and who, when they exerted themselves, could make, each of them, upwards of two thousand three hundred nails in a day. The making of a nail, however, is by no means one of the simplest operations. The same person blows the bellows, stirs or mends the fire as there is occasion, heats the iron, and forges every part of the nail: in forging the head, too, he is obliged to change his tools. The different operations into which the making of a pin, or of a metal button, is subdivided, are all of them much more simple, and the dexterity of the person, of whose life it has been the sole business to perform them, is usually much greater. The rapidity with which some of the operations of those manufactures are performed exceeds what the human hand could, by those who had never seen them, be supposed capable of acquiring.*

The illustrative examples given are more narrowly focused on the dexterity element of the more general skill/dexterity/judgment triad, by way of a three-way comparison of (a) a smith who has never made nails, (b) a smith who has been accustomed to make nails, but not as his sole activity, and (c) boys who have never exercised any other trade but that of making nails. Having smith (b) make nails for a day (specialize for a short time period) yields productivity gains, but

these short-term gains by no means exhaust the productivity increases that are possible with greater, more sustained specialisation.

There is a process of learning from experience or learning by doing involved: the human capital is accumulated over time, and the amount of it at any given time is not simply a function of the total amount of time spent on the activity in earlier periods. The sequencing of the effort matters also: the time spent in making nails by the smith in (b) is interrupted by other activities and that inhibits the capital formation process.

To fit this into a contemporary economics template we could think of the human capital as being subject to depreciation when it is not being used, which is a sort of inversion of the standard position in respect of much (but not all) of the stock of physical machinery, i.e. that it has a 'user cost' and depreciates in value faster when it is being used than when it is not. Alternatively, Smith's points can be considered more directly by replacing his example of smiths making nails with examples of professional tennis and golf players going about their own business.

The comparison of nail making and pin making adds the further point that the learning process is affected by the precise characteristics of the activity involved. For some activities the process may proceed rapidly and go far, for others it may proceed more slowly and be more limited in its eventual magnitude.

Consistent with the general emphasis on progress in the division of labour leading to higher productivity, the reasoning is inherently dynamic. Extended to incorporate the skills and judgment elements of the triad, the implications are profound. In Smithian language, it might be said that the progression of the division of labour is, 'in the natural course of things', associated with an accumulation of human capital and that experience is the investment that drives the capital formation process.

7. *Secondly, the advantage which is gained by saving the time commonly lost in passing from one sort of work to another is much greater than we should at first view be apt to imagine it. It is impossible to pass very quickly from one kind of work to another that is carried on in a different place and with quite different tools. A country weaver who cultivates a small farm must lose a good deal of time in passing from his loom to the field and from the field to his loom. When the two trades can be carried on in the same workhouse the loss of time is, no doubt, much less. It is, even in this case however, very considerable. A man commonly saunters a little in turning his hand from one sort of employment to another. When he first begins the new work he is seldom very keen and hearty; his mind, as they say, does not go to it, and for some time he rather trifles than applies to good purpose. The habit of sauntering and of indolent careless application, which is naturally, or rather necessarily, acquired by every country workman who is obliged to change his work and his tools every half hour, and to apply his hand in twenty different ways almost every day of his life, renders him almost always slothful lazy, and incapable of any vigorous application, even on the most pressing occasions.*

Independent, therefore, of his deficiency in point of dexterity, this cause alone must always reduce considerably the quantity of work which he is capable of performing.

Although second in the list of circumstances inducing productivity growth, and although the basic argument is sound enough, there is little in the examples to suggest that the significance of the effects identified is of a major magnitude. A sign of Smith's own recognition of that can be detected in the rhetoric. Smith was familiar with the principles of rhetoric and later in the work he deployed arguably his most powerful, and certainly his most famous, metaphor – the 'invisible hand' – (once and only once) to underpin a relatively weak proposition he was making on the effects of international trade (though many later users of the metaphor, the vast majority of whom have likely never read it in context, have interpreted it rather differently).

Examine, for example, the language: the workman is seldom keen and hearty, his mind does not go to it, he trifles. The country workman gets a double dose of it: he saunters and his application is indolent and careless, he is almost always slothful, lazy and incapable of any vigorous application. It is exaggerated stereotyping.

In the same passage, Smith also misses a point that could have been developed further and is arguably empirically much more significant than the time between jobs. It flows from the comment about passing between work that is done in different places and with *"quite different tools"*. These tools are the physical capital used in production, 'the means of production'. When one tool is put down and attention turns to another, we can see that the production process is not utilising all the available capital simultaneously and hence that capital utilisation would be higher if different people were simultaneously engaged in the different tasks.

There would, though, have been difficulties in assessing the magnitude of the likely effects of the division of labour on the utilisation/productivity of physical capital, because more intensive utilisation has a 'user cost': implements wear out or get damaged more quickly. Nevertheless, the effect might have been noted. That it wasn't may reflect the fact that Smith next turns to a much bigger point.

8. *Thirdly, and lastly, everybody must be sensible how much labour is facilitated and abridged by the application of proper machinery. It is unnecessary to give any example. I shall only observe, therefore, that the invention of all those machines by which labour is so much facilitated and abridged, seems to have been originally owing to the division of labour. Men are much more likely to discover easier and readier methods of attaining any object when the whole attention of their minds is directed towards that single object than when it is dissipated among a great variety of things. But, in consequence of the division of labour, the whole of every man's attention comes naturally to be directed towards some one very simple object. It is naturally to be expected, therefore, that some one or other of those who are employed in each particular branch of labour should soon find out easier and readier methods of performing their own particular work, whenever the nature of it admits of such improvement. A great part of the machines made use of in those manufactures in which labour is most subdivided were originally*

> *the invention of common workmen who, being each of them employed in some very simple operation, naturally turned their thoughts towards finding out easier and readier methods of performing it. Whoever has been much accustomed to visit such manufactures must frequently have been shewn very pretty machines which were the inventions of such workmen, in order to facilitate and quicken their own particular part of the work. In the first steam engines, a boy was constantly employed to open and shut alternately the communication between the boiler and the cylinder, according as the piston either ascended or descended. One of those boys, who loved to play with his companions, observed that, by tying a string from the handle of the valve which opened this communication to another part of the machine, the valve would open and shut without his assistance, and leave him at liberty to divert himself with his play-fellows. One of the greatest improvements that has been made upon this machine, since it was first invented, was in this manner the discovery of a boy who wanted to save his own labour.*

Smith could in this paragraph have simply observed that the machinery used in any particular activity was itself the product of previous production activities that will themselves have benefited from a division of labour. Hence its cost, whether measured in units of labour time or units of currency, will be lower in consequence of a division of labour than it would have been otherwise: this chain of causality is therefore part of the larger story with its dominant emphasis on the contributions of labour.

Instead attention is shifted to the invention/discovery of improvements to the machinery. The argument is that invention is itself promoted by the division of labour. One factor here is the sharper focusing of human attention (which can be viewed as a scarce cognitive resource at the level of the individual human being) on the challenge of inventing new and more effective machines. Another is consequential on incentives: the payoff for the inventive boy is that he spends less time superintending the machine, and has more time for playful diversion, and the larger the amount of time spent working with a specialised machine the larger the amount of time that can potentially be liberated by a single improvement.

Again, therefore, we find a dynamic argument: Smith is theorising about processes, not about static equilibria. Specialisation increases incentives to invent/innovate and hence, in that way, promotes the accumulation of new human capital in the task of making physical capital more productive.

Importantly, the output of this element of human capital (ingenuity/inventiveness) is 'embodied' in machinery, or, more generally, in physical capital: *"One of the greatest improvements that has been made upon this machine, since it was first invented, was in this manner the discovery of a boy who wanted to save his own labour."* The fruits of the ingenuity are thereby available to all who might later benefit from use of the improved, physical capital.

Unpacking the argument a little more, Smith engages with the 'Two-Is' that, both separately and in entanglement, have preoccupied much of the micro-economic theory of my lifetime, including that part of it directed at the development of regulatory policies: Information and

Incentives. The worker entrusted with a specialist task using machinery of 18th century vintage naturally comes to acquire considerable information about the workings of the machinery, because it necessarily requires a good deal of his attention. The same worker also has incentives to discover improvements that could be made to that machinery, at least in relation to improvements that would make her/his own life easier.

Further, the incentive effect of 'an easier life' is magnified by the fact that the proportion of time spent in the presence of the machine is relatively large, precisely by virtue of the specialisation entailed by the division of labour. The 'boy and the steam engine' is a beautiful illustration of what today's economic students might be taught via usually inelegant mathematics. In summary, a relatively high payoff from ingenuity/invention, coupled with information that points to both the existence of that payoff and the potential feasibility of making improvements, attracts attention and effort to the activity of *discovery*.

9. *All the improvements in machinery, however, have by no means been the inventions of those who had occasion to use the machines. Many improvements have been made by the ingenuity of the makers of the machines, when to make them became the business of a peculiar trade; and some by that of those who are called scientists, or men of speculation, whose trade it is not to do any thing, but to observe every thing, and who, upon that account, are often capable of combining together the powers of the most distant and dissimilar objects in the progress of society, science or speculation becomes, like every other employment, the principal or sole trade and occupation of a particular class of citizens . Like every other employment, too, it is subdivided into a great number of different branches, each of which affords occupation to a peculiar tribe or class of philosophers; and this subdivision of employment in science, as well as in every other business, improves dexterity, and saves time. Each individual becomes more expert in his own peculiar branch, more work is done upon the whole, and the quantity of science is considerably increased by it.*

Having characteristically put the role of the day labourer first in his list of considerations, Smith next carries the analysis forward in a more generalised way that brings us much closer to contemporary economic conditions. Businesses specialised in the manufacture of capital equipment (the *"makers of the machines"*) emerge over time and, for such organisations, the payoffs from discoveries that improve the economic effectiveness of machines will increase, warranting much greater expenditures on efforts to find them. (Later in the *WoN* a further powerful source of incentives for improvements/innovations will be introduced and explained, namely competition.)

The next step is to observe that progression in the division of labour gives rise to the *"business of a peculiar trade"*, 'scientists', who, like those in all other employments, specialize in a particular trade or profession, itself divided into a great number of different branches. Their speciality is discovery of new knowledge of different types and their collective productivity is enhanced by a division of labour.

Once again, this is a source of accumulating human capital, and it brings to the fore a further, rather fundamental point: the division of labour is accompanied by a 'division of knowledge'. Workers 'by hand or by brain' are subject to the same process of specialization, although Smith himself may well have recoiled from the false binary introduced by the 'or' in that expression on the ground that all labourers make use of both hands and brain, albeit in different combinations.

It was not until the twentieth century that the more technical economic aspects of the 'division of knowledge' were extensively explored, although its more general implications have been a major theme in political economy from the *WoN* onwards. For example, Friedrich Hayek distinguished between universal knowledge (e.g. Newton's laws of motion) and idiosyncratic knowledge (which might relate to a very specific context). Both are forms of human capital, but the former is much more transmissible (e.g. via universities) than the latter, which might be thought of as more specific, context-heavy *'know how'*. Each has economic value, but it tends to be much more difficult for centralised decision-making structures to unlock the value of the know-how contained within a whole eco-system.

Idiosyncratic knowledge is highly dispersed and contemporary economics tends to view it as problematic, attaching to it the label 'asymmetric information'. Generations of students have been taught that asymmetric information is a cause of 'market failure' for example. Smith's perspective, however, leads to a wholly different intellectual space. Such dispersed, differentiated information is a necessary accompaniment of the division of labour/knowledge and, as such, it is a necessary characteristic of a well-functioning economy. Today's economic students are, in effect, taught to read what is generally a signal of success as a signal of failure.

> *10. 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 the society.*

The full title of the *WoN* is *An Inquiry into the Nature and Causes of the Wealth of Nations* and the preceding discussion has shown how the division of labour serves to raise the productivity of labour. The first sentence of paragraph 10 again links the two, but also strikes another note: the increased opulence is *universal*, it *"extends itself to the lowest ranks of the people"*. It is reasonable to ask: How does that come about?

What might appear to be a short-hand answer – the pin worker produces a great many pins beyond what he has occasion to use for her/his own purposes and is able to exchange that large surplus for a great quantity of the surpluses produced by workers in other trades – is

unconvincing for a number of reasons. The most obvious objection is that what the worker typically supplies is her/his own labour and human capital: ownership of the pins usually lies with the business owner. Only if the pin factory took the institutional form of an output-sharing workers' cooperative would the worker be involved in the exchange of pins for other goods, and such institutional forms are very rare in manufacturing.

A second problem is the unsubstantiated *"much the same thing"* in transitioning from quantities (a surplus of pins, surpluses of other goods) to prices. Opulence encompasses a wide range of the necessaries and conveniencies of life – man cannot live by pins alone – and the ability to acquire them will depend upon the relationship between the workers own wages (the remuneration for supplying labour services deployed in the production of pins) and the prices of those other products. Smith is getting ahead of himself again.

A sympathetic reading of the paragraph would therefore see it not as a direct, substantiated claim regarding universal opulence, but rather as a summary of the implications of reasoning to be developed later in the *WoN*, when he comes to consider price determination and the distribution of incomes and consumption.

There is, however, another more direct route from Smith's reasoning, as it has been developed up to this point, to a claim that the spread of opulence, though it may be uneven, is likely to have a universal aspect. By more direct I mean simply that it does not rest on a fully fledged analysis of price determination and of income distribution. It lies in the point that the division of labour tends to increase the skills of labourers in their tasks, i.e. tends to lead to an accumulation of human capital.

This capital is owned by the worker and it can be expected to command a premium, in practice reflected in the wage rate, over 'unimproved', unskilled labour. The size of the premium is a matter for analysis, but it is enough for the moment to establish its likely existence. It is not a 'trickle-down' effect, though Smith did have resort to a trickle-down argument in the Theory of Moral Sentiments, published seventeen years before the *WoN*. Interestingly, it is there accompanied by his second use of the invisible hand metaphor (the first being the reference to the invisible hand of Jupiter in *HA*), which is perhaps a signal that he did not think it was the strongest of his arguments and that it was in need of some rhetorical reinforcement.

Rather, it is a bottom-up, capital accumulation effect, universal because even the most basic of economic activities lend themselves to improvements in productivity by the application of greater skill, dexterity, ingenuity and judgment of an individual worker with accumulated experience. Today, the UK Office for National Statistics estimates that around 80% of the capital stock deployed in the economy is of the human variety, and the great bulk of that is consequential on the division of labour.

The critically important word 'exchange' appears for the first time in this paragraph and 'exchange' is the subject of the next Chapter. First, however, Chapter 1 is concluded with a big-picture perspective that is central to Smith's vision of the nature of a commercial or market society.

11. *Observe the accommodation of the most common artificer or day labourer in a commercialised and thriving country and you will perceive that the number of people, of whose industry a part, though but a small part, has been employed in procuring him this accommodation, exceeds all computation. The woollen coat, for example, which covers the day-labourer, as coarse and rough as it may appear, is the produce of the joint labour of a great multitude of workmen. The shepherd, the sorter of the wool, the wool-comber or carder, the dyer, the scribbler, the spinner, the weaver, the fuller, the dresser, with many others, must all join their different arts in order to complete even this homely production. How many merchants and carriers, besides, must have been employed in transporting the materials from some of those workmen to others who often live in a very distant part of the country? How much commerce and navigation in particular, how many ship-builders, sailors, sail-makers, rope-makers, must have been employed in order to bring together the different drugs made use of by the dyer, which often come from the remotest corners of the world? What a variety of labour, too, is necessary in order to produce the tools of the meanest of those workmen! To say nothing of such complicated machines as the ship of the sailor, the mill of the fuller, or even the loom of the weaver, let us consider only what a variety of labour is requisite in order to form that very simple machine, the shears with which the shepherd clips the wool. The miner, the builder of the furnace for smelting the ore, the feller of the timber, the burner of the charcoal to be made use of in the smelting-house, the brickmaker, the bricklayer, the workmen who attend the furnace, the millwright, the forger, the smith, must all of them join their different arts in order to produce them. Were we to examine, in the same manner, all the different parts of his dress and household furniture, the coarse linen shirt which he wears next his skin, the shoes which cover his feet, the bed which he lies on, and all the different parts which compose it, the kitchen-grate at which he prepares his victuals, the coals which he makes use of for that purpose, dug from the bowels of the earth, and brought to him, perhaps, by a long sea and a long land-carriage, all the other utensils of his kitchen, all the furniture of his table, the knives and forks, the earthen or pewter plates upon which he serves up and divides his victuals, the different hands employed in preparing his bread and his beer, the glass window which lets in the heat and the light, and keeps out the wind and the rain, with all the knowledge and art requisite for preparing that beautiful and happy invention, without which these northern parts of the world could scarce have afforded a very comfortable habitation, together with the tools of all the different workmen employed in producing those different conveniencies; if we examine, I say, all these things, and consider what a variety of labour is employed about each of them, we shall be sensible that, without the assistance and co-operation of many thousands, the very meanest person in a commercial country could not be provided, even according to, what we very falsely imagine, the easy and simple manner in which he is commonly accommodated. Compared, indeed, with the more extravagant luxury of the great, his accommodation must no doubt appear extremely simple and easy; and yet it may be true, perhaps, that the accommodation of an European prince does not always so much exceed that of an*

industrious and frugal peasant as the accommodation of the latter exceeds that of many an African king, the absolute masters of the lives and liberties of ten thousand people.

The general point is that, in commercial societies, the production of the necessaries and conveniencies of labourers of only modest means (judged by 18th century standards) engages the work of many thousands of other labourers, and we are invited to contemplate the great webs of economic connections that this entails. Even a quarter of a millennium ago, this was a hugely complex economic system. A sense of awe and wonder is invited. Moreover we can observe that this type of highly connected ecosystem works well, at least in the sense that it out-performs alternative political-economic systems, in terms of promoting 'the progress of universal opulence'.

The complex system is dynamic and adaptive: it is constantly changing. Progress of the division of labour is ever affecting the webs of relationships: new connectivities are established, established connectivities are broken. Some changes are the working out of an existing dynamic, others may be stimulated by changes that are largely exogenous to the economy itself (for example, wars and epidemics). This all adds to complexity and, critically, signals a later judgment that it is an ecosystem that is well beyond the full understanding and the close control of any human authority.

A political authority could plainly degrade or even destroy the effective functioning of the system – and there have been plenty of, practical demonstrations of that point in subsequent global economic history – but cannot sustainably direct its development with any degree of precision.

In addition to the broad vision, paragraph 11 also lays the groundwork for later examination of some of the consequences of a simpler, but also fundamental, aspect of the economic system. Smith lists some of the necessaries and conveniencies of the day labourer: the woollen coat, other parts of his dress, the household furniture, the linen shirt, the shoes, the bed, the kitchen grate, coal, the kitchen utensils, the table, the knives and forks, the plates, the bread, the beer, the glass window. All these different things must be acquired by processes of exchange, yet in those processes what the labourer produces/supplies is, to a good approximation, a single thing, her/his labour services. In Smith's base of example, these services are directed at the manufacture of pins.

Looking at a household account in terms of flows of goods and services, one good/service dominates that which is supplied, whereas purchases are spread across many things. Assessed in terms of a labour-time metric, one person's labour time is exchanged for the labour time of thousands or tens of thousands of others. In the absence of the numerous, supporting transactions/ exchanges involved a deep division of labour and the enhanced labour productivity to which it leads could not be sustained.

Much of the rest of the material in the opening chapters of the WoN is therefore devoted to examination of the exchange processes that are economically inseparable from the division of labour: and it suffices for the moment to point out the *fundamental exchange asymmetry* that

lies at the heart of all, developed commercial societies: *there is much greater specialisation in production than in consumption.*

The exchange asymmetry poses a number of challenges for political economy, of which Smith was acutely aware and which he goes on to address at various, later stages of the *WoN*.

CHAPTER II. OF THE PRINCIPLE WHICH GIVES OCCASION TO THE DIVISION OF LABOUR.

1. *This division of labour, from which so many advantages are derived, is not originally the effect of any human wisdom, which foresees and intends that general opulence to which it gives occasion. It is the necessary, though very slow and gradual, consequence of a certain propensity in human nature, which has in view no such extensive utility; the propensity to truck, barter, and exchange one thing for another.*

Chapter 2 is frustratingly short and is directed only at the very earliest stage of the development of commercial societies, but once again it opens, in Smith's usual fashion, with a big point: no-one sat down and designed the socio-economic processes that are central to the functioning of commercial societies. They evolved, slowly and gradually.

2. *Whether this propensity be one of those original principles in human nature of which no further account can be given, or whether, as seems more probable, it be the necessary consequence of the faculties of reason and speech, it belongs not to our present subject to inquire. It is common to all men, and to be found in no other race of animals, which seem to know neither this nor any other species of contracts. Two greyhounds, in running down the same hare have sometimes the appearance of acting in some sort of concert. Each turns her towards his companion, or endeavours to intercept her when his companion turns her towards himself. This, however, is not the effect of any contract, but of the accidental concurrence of their passions in the same object at that particular time. Nobody ever saw a dog make a fair and deliberate exchange of one bone for another with another dog. Nobody ever saw one animal, by its gestures and natural cries signify to another, this is mine, that yours; I am willing to give this for that. When an animal wants to obtain something, either of a man or of another animal, it has no other means of persuasion, but to gain the favour of those whose service it requires. A puppy fawns upon its dam and a spaniel endeavours, by a thousand attractions, to engage the attention of its master who is at dinner, when it wants to be fed by him. Man sometimes uses the same arts with his brethren, and when he has no other means of engaging them to act according to his inclinations, endeavours by every servile and fawning attention to obtain their good will. He has not time, however, to do this upon every occasion. In civilized society he stands at all times in need of the co-operation and assistance of great multitudes, while his whole life is scarce sufficient to gain the friendship of a few persons. In almost every other race of animals each individual, when it is grown up to maturity, is entirely independent, and in its natural state has occasion for the assistance of no other living creature. But man has almost constant occasion for the help of his brethren, and it is in vain for him to expect it from their benevolence only. He will be more likely to prevail if he can interest*

their self-love in his favour, and shew them that it is for their own advantage to do for him what he requires of them. Whoever offers to another a bargain of any kind, proposes to do this. Give me that which I want, and you shall have this which you want, is the meaning of every such offer; and it is in this manner that we obtain from one another the far greater part of those good offices which we stand in need of. 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 chooses to depend chiefly upon the benevolence of his fellow-citizens. Even a beggar does not depend upon it entirely. The charity of well-disposed people, indeed, supplies him with the whole fund of his subsistence. But though this principle ultimately provides him with all the necessaries of life which he has occasion for, it neither does nor can provide him with them as he has occasion for them. The greater part of his occasional wants are supplied in the same manner as those of other people, by treaty, by barter, and by purchase. With the money which one man gives him he purchases food. The old clothes which another bestows upon him he exchanges for other clothes which suit him better, or for lodging, or for food, or for money, with which he can buy either food, clothes, or lodging, as he has occasion.

Whilst both the general 'by evolution, not by design' and the wider sociability (*"in need of the co-operation and assistance of great multitudes"*) points are compelling, the illustrative examples geared towards showing the uniqueness of the human animal are much more contestable. For example, the existence of what is called direct reciprocity in other animal species remains a matter of dispute and it is to go too far to say that *"In almost every other race of animals each individual, when it is grown up to maturity, is entirely independent, and in its natural state has occasion for the assistance of no other living creature"*, even though the statement is qualified by the 'almost'. There are, however, varieties of social animals for which there is observable dependence of one member of a social group (beyond a single family) on another and for which there is some form of a division of labour. The major point is, I think, only that humankind has taken this inter-dependence to a new level.

Smith will have been familiar with de Mandeville's *Fable of the Bees*, a highly controversial text published earlier in the 18th century, which provided an example of the emergence of a division of labour that was not grounded in a proclivity to truck and barter: the beehive. By not addressing it, it may be that Smith wished to avoid the controversies that the Fable engendered: it was widely read as a hymn to selfishness and to human vices, and that would not have been a hymn that Smith would have wanted to sing.

In switching the direction of his efforts from attempting to understand the moral conduct of individual men and women to the task of attempting to understand the functioning of a whole, complex, economic system – the transition from *the Theory of Moral Sentiments* to the *Wealth of Nations* – Smith was, however, about to place a strong emphasis on self-interest as the principal motivating factor at work in exchange processes. 'Truck and barter' was, therefore, an expedient building block for the exercises to come, because its centre of attention is two parties, each of whom is likely to benefit from exchange. In that way, the focal point shifts

quickly from self-interest to mutual advantage and to an appreciation of that potential for mutual advantage by the trading parties. Thus, the paragraph includes one of the most cited passages in the *WoN*: *"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."*

Methodologically, Smith's approach is a little like the assumption made in the later development of the kinetic theory of gases, that atoms are simple structures whose collisions with each other and with the boundaries of a container are perfectly elastic. The assumption is not correct physics, but it does enable the development of a useful theory of the macroscopic properties of gases.

Paragraph 2 is a passage that has been subject to misinterpretation. For example, in German scholarship of the later 19th century there was much discussion of 'Das Adam Smith Problem', a questioning of the compatibility of the conceptions of human nature contained respectively in the *TMS* and the *WoN*. The debate is now largely forgotten, resolved in favour of compatibility: the two works are simply directed at different questions. *TMS* is a work concerned with a particular aspect of human nature, the moral senses, and opens with a chapter on 'Sympathy', followed by later examination of other moral sentiments, e.g. benevolence. In contrast, the *WoN* seeks to understand the workings of a whole commercial society, a whole ecosystem, and the force of the self-interest assumption is that this is the dominant, but not the only, motivation at work in quotidian exchange transactions.

The scholarly diversion of 'Das Adam Smith Problem' was not totally unproductive however, because it had some favourable, unintended consequences. As Keith Tribe has written: *"By the 1890s British writers, overwhelmingly ignorant of German commentary, assumed that there was little more to be said about Smith's work. Belated international familiarity with this German 'Problem' played a major role in transforming perceptions of Smith from a simple partisan of free trade into a powerful theorist of commercial society and human action."* Unfortunately, it remains the case that much of public discourse (and not a little of the discourse among economists) on Smith in the English-speaking world continues to lean to the partisan of free trade stereotype.

3. *As it is by treaty, by barter, and by purchase, that we obtain from one another the greater part of those mutual good offices which we stand in need of, so it is this same trucking disposition which originally gives occasion to the division of labour. In a tribe of hunters or shepherds, a particular person makes bows and arrows, for example, with more readiness and dexterity than any other. He frequently exchanges them for cattle or for venison, with his companions; and he finds at last that he can, in this manner, get more cattle and venison, than if he himself went to the field to catch them. From a regard to his own interest, therefore, the making of bows and arrows grows to be his chief business, and he becomes a sort of armourer. Another excels in making the frames*

and covers of their little huts or moveable houses. He is accustomed to be of use in this way to his neighbours, who reward him in the same manner with cattle and with venison, till at last he finds it his interest to dedicate himself entirely to this employment, and to become a sort of house-carpenter. In the same manner a third becomes a smith or a brazier; a fourth, a tanner or dresser of hides or skins, the principal part of the clothing of early man. And thus the certainty of being able to exchange all that surplus part of the produce of his own labour, which is over and above his own consumption, for such parts of the produce of other men's labour as he may have occasion for, encourages every man to apply himself to a particular occupation, and to cultivate and bring to perfection whatever talent of genius he may possess for that particular species of business.

The gist of the argument here is clear enough, but the illustrative examples of actual exchanges entail what is basically a commodity barter processes: bows and arrows or roofs and frames are exchanged for cattle or venison, and such a process will typically support only a very limited division of labour. Specialisation in the production and supply of bows and arrows would, if commodity barter were the dominant mode of exchange, require that a rather large amount of effort be devoted to finding counterparties willing to exchange one of the many necessaries and conveniencies of life for them.

The difficulties are not addressed in the text and there is an unsubstantiated leap to the final sentence beginning *"And thus the certainty of being able to exchange all that surplus part of the produce of his own labour …"*. But is there any basis to suppose that there can be anything close to certainty in this matter? Here we return to an implication of the fundamental exchange asymmetry: the specialisation described implies that the supplier puts rather a lot of eggs in one basket and her/his command over the acquisition of other commodities will be subject to potentially high risks in consequence. The obvious question is: by what means are these risks mitigated?

A partial answer is provided in Chapter 4 where the focus of attention is the emergence of the economic institution of 'money', but there is a major lacuna in Chapter 2 at this point: the obvious question is not asked and answered. With the great benefit of hindsight, it is an omission that has arguably had a profound, negative influence on the subsequent development of economic thought and on public discourse concerning the nature of the type of society in which we live. I will therefore come back to it later, both in the final comments on this Chapter and at the end of the comments on Chapter 4 (because that later material helps illustrate and clarify precisely what is missing at this earlier stage).

4. *The difference of natural talents in different men, is, in reality, much less than we are aware of; and the very different genius which appears to distinguish men of different professions, when grown up to maturity, is not upon many occasions so much the cause, as the effect of the division of labour. The difference between the most dissimilar characters, between a philosopher and a common street porter, for example, seems to*

arise not so much from nature, as from habit, custom, and education. When they came in to the world, and for the first six or eight years of their existence, they were, perhaps, very much alike, and neither their parents nor play-fellows could perceive any remarkable difference. About that age, or soon after, they come to be employed in very different occupations. The difference of talents comes then to be taken notice of, and widens by degrees, till at last the vanity of the philosopher is willing to acknowledge scarce any resemblance. But without the disposition to truck, barter, and exchange, every man must have procured to himself every necessary and conveniency of life which he wanted. All must have had the same duties to perform, and the same work to do, and there could have been no such difference of employment as could alone give occasion to any great difference of talents.

Instead of addressing the limitations of commodity barter, Smith goes off on a tangent that reflects parts of his underlying moral and political philosophy, which is egalitarian in nature. The differences between a philosopher and a common street porter arise largely from the skills and knowledge that they respectively acquire in performing their own tasks in the division of labour. Any notion that the street porter is engaged in 'unskilled' labour is effectively discounted: there are more skilled and less skilled street porters, just as there are more and less skilled philosophers, and, in their different ways, all the different economic activities offer opportunities for the development of skills (human capital).

5. *As it is this disposition which forms that difference of talents, so remarkable among men of different professions, so it is this same disposition which renders that difference useful. Many tribes of animals, acknowledged to be all of the same species, derive from nature a much more remarkable distinction of genius, than what, antecedent to custom and education, appears to take place among men. By nature a philosopher is not in genius and disposition half so different from a street porter, as a mastiff is from a grey-hound, or a grey-hound from a spaniel, or this last from a shepherd's dog. Those different tribes of animals, however, though all of the same species are of scarce any use to one another. The strength of the mastiff is not in the least supported either by the swiftness of the greyhound, or by the sagacity of the spaniel, or by the docility of the shepherd's dog. The effects of those different geniuses and talents, for want of the power or disposition to barter and exchange, cannot be brought into a common stock, and do not in the least contribute to the better accommodation and conveniency of the species. Each animal is still obliged to support and defend itself, separately and independently, and derives no sort of advantage from that variety of talents with which nature has distinguished its fellows. Among men, on the contrary, the most dissimilar geniuses are of use to one another; the different produces of their respective talents, by the general disposition to truck, barter, and exchange, being brought, as it were, into a common stock, where every man may purchase whatever part of the produce of other men's talents he has occasion for.*

The short chapter is closed by a return to unsatisfactory comparisons between the human animal and other animals (and all the examples given are mammalian – de Mandeville's bees do not appear). As indicated above, that leaves a gap to be filled in what is, at heart, an evolutionary set of arguments in Chapters 1-4. The argument takes us as far as commodity barter, but the labourer specialised in the manufacture of pins who emerges at a later stage of the evolutionary history does not rely on commodity barter to dispose of his product and transform it into a range of necessaries and conveniencies.

Smith was a great observer of everyday life and we could reasonably expect him to have noted that commercial societies have developed institutions to facilitate the relevant exchange transactions. The institutions are what we call 'markets' and they play a central role in addressing the fundamental exchange asymmetry between the specialisation of the individual in production and the much more diversified pattern of individual consumption. Put starkly, the *WoN* does not provide us with an explicit 'theory of markets' or, a fortiori, a theory of 'market development'.

For whatever reasons, this missing element was not addressed by Smith's most influential successors. There was, for example, no-one around to tidy up the theorising in the way that Ricardo did in relation to comparative advantage in international trade. To this day economics undergraduates around the world can obtain their degrees without being exposed, even at a basic level, to such a theory (historians and sociologists have done better). That, I think, is a great indictment, because the socio-economic institutions that we call 'markets' are, like 'money', fundamental to the functioning of commercial societies.

Looking back from today's vantage point, there might be an argument that this missing material is less important now than it once was: with online searches it is much easier to identify customers or suppliers from a mass of information brought, in front of the nose, on a screen. However, while it is certainly true that modern digital 'platforms' do not look much like, say, a medieval village or town market or a later-period high street, their functions and purposes do bear a close family resemblance: they facilitate exchange transactions between participants. Looking at things in this way, the owners of the platforms are akin to the market proprietors of earlier times who competed with one another, on a localised basis characterised by a limited number of rivals.

Maybe surprisingly, therefore, there is something to be learned about public policy toward digital platforms from economic and social history stretching back to the early medieval period, and Britain is one of the major sources of relevant material, because of its early development as a fully commercial society. By way of illustration, it is potentially interesting to look at how Sovereigns regulated market proprietors, e.g. by way of licences, and how they extracted significant revenues for the Exchequer from the proprietorial activities. A more developed 'theory of markets' could assist the learning process.

CHAPTER III. THAT THE DIVISION OF LABOUR IS LIMITED BY THE EXTENT OF THE MARKET.

1. *As it is the power of exchanging that gives occasion to the division of labour, so the extent of this division must always be limited by the extent of that power, or, in other words, by the extent of the market. When the market is very small, no person can have any encouragement to dedicate himself entirely to one employment, for want of the power to exchange all that surplus part of the produce of his own labour, which is over and above his own consumption, for such parts of the produce of other men's labour as he has occasion for.*

The first sentence of Chapter 3 immediately equates 'the market' to 'the power of exchanging', which is a rather cryptic expression and is notably different from the idea of a market as an economic institution. It appears to rely upon some notion of a social or physical space within which those wishing to sell a particular commodity and those wishing to procure that commodity can feasibly/realistically expect to be able to make contact with each other and effect mutually beneficial exchanges. For the specialised supplier, who is the immediate focus of attention, this will, in a rough and ready way, define a maximum potential demand for her/his output or services. When this demand is small the incentives to specialize in employment/production will tend to be weak: full specialization would leave the producer with a greater quantity of the product than could realistically be exchanged for the necessaries and conveniencies of life that are supplied by others. The division of labour will therefore be limited by the level of potential demand.

2. *There are some sorts of industry, even of the lowest kind, which can be carried on nowhere but in a great town. A porter, for example, can find employment and subsistence in no other place. A village is by much too narrow a sphere for him; even an ordinary market-town is scarce large enough to afford him constant occupation. In the lone houses and very small villages which are scattered about in so desert a country as the highlands of Scotland, every farmer must be butcher, baker, and brewer, for his own family. In such situations we can scarce expect to find even a smith, a carpenter, or a mason, within less than twenty miles of another of the same trade. The scattered families that live at eight or ten miles distance from the nearest of them, must learn to perform themselves a great number of little pieces of work, for which, in more populous countries, they would call in the assistance of those workmen. Country workmen are almost everywhere obliged to apply themselves to all the different branches of industry that have so much affinity to one another as to be employed about the same sort of materials. A country carpenter deals in every sort of work that is made of wood; a country smith in every sort of work that is made of iron. The former is not only a carpenter, but a joiner, a cabinet-maker, and even a carver in wood, as well as a wheel-wright, a plough-wright, a cart and waggon-maker. The employments of the latter are*

still more various. It is impossible there should be such a trade as even that of a nailer in the remote and inland parts of the highlands of Scotland. Such a workman at the rate of a thousand nails a-day, and three hundred working days in the year, will make three hundred thousand nails in the year. But in such a situation it would be impossible to dispose of one thousand, that is, of one day's work in the year.

Paragraph 2 is a characteristic giving of examples, which in this case both support the initial point and raise further questions. The emphasis is on geography, with a distinction between large and small settlements: great towns/cities, ordinary market towns and small villages. It is a first, static view, a snapshot, and, given the overall theme of economic development/progress, it suggests one or two immediate questions: If this is the position, how does economic progress occur? What are the causal factors that give rise to an increasing demand for goods/services that is sufficient to drive progress in the division of labour?

3. *As by means of water-carriage, a more extensive market is opened to every sort of industry than what land-carriage alone can afford it, so it is upon the sea-coast, and along the banks of navigable rivers, that industry of every kind naturally begins to subdivide and improve itself, and it is frequently not till a long time after that those improvements extend themselves to the inland parts of the country. A broad-wheeled waggon, attended by two men, and drawn by eight horses, in about six weeks time, carries and brings back between London and Edinburgh near four ton weight of goods. In about the same time a ship navigated by six or eight men, and sailing between the ports of London and Leith, frequently carries and brings back two hundred ton weight of goods. Six or eight men, therefore, by the help of water-carriage, can carry and bring back, in the same time, the same quantity of goods between London and Edinburgh as fifty broad-wheeled waggons, attended by a hundred men, and drawn by four hundred horses. Upon two hundred tons of goods, therefore, carried by the cheapest land-carriage from London to Edinburgh, there must be charged the maintenance of a hundred men for three weeks, and both the maintenance and what is nearly equal to maintenance the wear and tear of four hundred horses, as well as of fifty great waggons. Whereas, upon the same quantity of goods carried by water, there is to be charged only the maintenance of six or eight men, and the wear and tear of a ship of two hundred tons burthen, together with the value of the superior risk, or the difference of the insurance between land and water-carriage. Were there no other communication between those two places, therefore, but by land-carriage, as no goods could be transported from the one to the other, except such whose price was very considerable in proportion to their weight, they could carry on but a small part of that commerce which at present subsists between them, and consequently could give but a small part of that encouragement which they at present mutually afford to each other's industry. There could be little or no commerce of any kind between the distant parts of the world. What goods could bear the expense of land-carriage between London and Calcutta? Or if there were any so precious as to be able to support this expense, with what safety could they be transported through the territories of so many barbarous nations? Those*

two cities, however, at present carry on a very considerable commerce with each other, and by mutually affording a market, give a good deal of encouragement to each other's industry.

It is therefore not simply the distance between seller and buyer that matters: so too does the mode of transport. A simple 'gravity model' of trade based on distances as the crow flies does not suffice: it is transport costs that matter and distance is relevant only insofar as it affects those costs.

Smith has returned in this paragraph to the theme of economic development: *"so it is upon the sea-coast, and along the banks of navigable rivers, that industry of every kind naturally begins to subdivide and improve itself, and it is frequently not till a long time after that those improvements extend themselves to the inland parts of the country."* In consequence of lower costs of sea and river transport, it is settlements along coasts or on navigable rivers that lead in the development of commercial society, because it is suppliers based in those locations who have the capacity to engage in mutually beneficial exchange transactions in wider, and hence larger, geographic markets.

4. *Since such, therefore, are the advantages of water-carriage, it is natural that the first improvements of art and industry should be made where this conveniency opens the whole world for a market to the produce of every sort of labour, and that they should always be much later in extending themselves into the inland parts of the country. The inland parts of the country can for a long time have no other market for the greater part of their goods, but the country which lies round about them, and separates them from the sea-coast, and the great navigable rivers. The extent of the market, therefore, must for a long time be in proportion to the riches and populousness of that country, and consequently their improvement must always be posterior to the improvement of that country. In our North American colonies, the plantations have constantly followed either the sea-coast or the banks of the navigable rivers, and have scarce anywhere extended themselves to any considerable distance from both.*

Inland settlements are not all equal, however: those whose producers can profitably supply to ports, for example because of proximity, are at an advantage in that the lower costs of sea or river carriage then potentially open up a much wider market to them also, albeit facing the extra cost of the first leg of the journey. In modern jargon, they can have recourse to multi-modal transportation. Those settlements lying further inland, whose producers cannot profitably supply the nearest port are, on the other hand, limited to the *"country that lies round about them"*. Progress in the development of the expansion of the size of the market therefore proceeds in a chain-linked way: first in coastal and river ports, then into adjacent territory, and then on into more remote territory.

It is perhaps noteworthy that the example Smith gives of the sequence is taken from North America, where what was observable was an invasive settlement pattern that, of necessity,

began with coastal settlements. Had he taken the example of the commercial development of Britain, and of England in particular, the picture would, I think, have been less clear-cut.

Medieval England was characterised by an unusually dense population of formally and informally organised markets, located in towns and villages across the land, not just on coasts and navigable rivers. At these marketplaces, buyers and sellers could expect to meet up with each other for the purpose of engaging in exchange transactions. The markets were in turn chain-linked by itinerant merchants. A sheep farmer seeking to sell wool was not, therefore, limited to finding buyers in the country that lay around the farm: they could sell to a merchant who might dispose of the product in more distant parts, including at ports and beyond.

It is also by no means obvious that *"the first improvements of art and industry"* occurred in port cities. The inland wool towns, with some of their magnificent churches, might have given hint of a more complex narrative in which the widening of the market (in Smith's sense of the word) was facilitated by the institutionalisation of intermediaries in the processes of selling and buying, the specialised merchants.

Similarly, while northern coalfields extended to areas close to navigable rivers and the coast they were by no means confined to those areas and the locations of production facilities were heavily influenced by geology. Coal production in Britain developed centuries before the industrial revolution and well ahead of its larger scale development in continental Europe. Moreover, there is little to suggest that its evolution in, say, Durham and Northumberland was necessarily posterior to the development of those counties generally and of their port towns and cities in particular, rather than being concurrent with or prior to that development.

Thus, whilst the general point about the extent of the market being an important determinant of the extent of the division of labour is convincing and important, the historical sequencing arguments are much more contestable as general statements. Differing contexts appear to lead to differing sequences.

5. *The nations that, according to the best authenticated history, appear to have been first civilized, were those that dwelt round the coast of the Mediterranean sea. That sea, by far the greatest inlet that is known in the world, having no tides, nor consequently any waves, except such as are caused by the wind only, was, by the smoothness of its surface, as well as by the multitude of its islands, and the proximity of its neighbouring shores, extremely favourable to the infant navigation of the world; when, from their ignorance of the compass, men were afraid to quit the view of the coast, and from the imperfection of the art of ship-building, to abandon themselves to the boisterous waves of the ocean. To pass beyond the pillars of Hercules, that is, to sail out of the straits of Gibraltar, was, in the ancient world, long considered as a most wonderful and dangerous exploit of navigation. It was late before even the Phoenicians and Carthaginians, the most skilful navigators and ship-builders of those old times, attempted it; and they were, for a long time, the only nations that did attempt it.*

Rather than tackling questions concerning the commercial development of Britain, Smith turns to ancient history for a further illustration of the argument he is making, taking us further away from the pin factory and the early-stage industrialisation which is the focus of attention in Chapter 1. That, I think, serves only to deepen the challenge of the question concerning the sequence of economic development. That sea-trade in the Mediterranean was a significant feature of the economies of the time is not a major issue. A more challenging question would have been: why did those early civilizations not go on to organise their entire economies on the basis of the deep division of labour with which Smith was concerned. There was trade, there were markets, there were consequential 'improvements', but these things did not make a spark that fired an industrial revolution.

6. *Of all the countries on the coast of the Mediterranean sea, Egypt seems to have been the first in which either agriculture or manufactures were cultivated and improved to any considerable degree. Upper Egypt extends itself nowhere above a few miles from the Nile; and in Lower Egypt, that great river breaks itself into many different canals, which, with the assistance of a little art, seem to have afforded a communication by water-carriage, not only between all the great towns, but between all the considerable villages, and even to many farm-houses in the country, nearly in the same manner as the Rhine and the Maese do in Holland at present. The extent and easiness of this inland navigation was probably one of the principal causes of the early improvement of Egypt.*

7. *The improvements in agriculture and manufactures seem likewise to have been of very great antiquity in the provinces of Bengal, in the East Indies, and in some of the eastern provinces of China, though the great extent of this antiquity is not authenticated by any histories of whose authority we, in this part of the world, are well assured. In Bengal, the Ganges, and several other great rivers, form a great number of navigable canals, in the same manner as the Nile does in Egypt. In the eastern provinces of China, too, several great rivers form, by their different branches, a multitude of canals, and, by communicating with one another, afford an inland navigation much more extensive than that either of the Nile or the Ganges, or, perhaps, than both of them put together. It is remarkable, that neither the ancient Egyptians, nor the Indians, nor the Chinese, encouraged foreign commerce, but seem all to have derived their great opulence from this inland navigation.*

These next two paragraphs follow in the same vein and there is little call for comment until we come to the final sentence of paragraph 7. Here an element of surprise is expressed at the observation that the ancients did not encourage foreign commerce, i.e. did not actively seek to widen the market further (with all the benefits that might bring for increased productivity via a greater division of labour), but nevertheless achieved *"great opulence"*.

This, I think, is one of those asides that throws light on the mode of thinking. There are opportunities for benefits from trading to be had, but those opportunities are not taken. That

seems anomalous. Why the resistance to increasing the extent of the market? What can explain it? It is the thought pattern of the scientists wrote about in *HA*.

One possible explanation, not considered in this early, foundation-laying, early Chapter of the *WoN* is that, in the contexts cited, the extent of the market was already large enough to achieve the benefits of a substantial division of labour. Additional benefits from foreign commerce might therefore have been perceived as being relatively limited. Why then should the Egyptians, Indians or Chinese believe that there would be any great benefit from a significant expansion of trading with people they might consider, with some cause, to be risky, less civilized foreigners?

Ironically, later in the *WoN*, Smith uses the existence (in a British context) of such preferences for trading with people you know as an apologetic argument in support of trade liberalisation. Very loosely it goes like this: 'Open up to trade and the effects will be less than might be expected at first sight: British merchants will have a preference for trading with other British merchants and all the net benefits of the relevant transactions, not just a fraction of them, will be kept at home.'

It is a relatively weak argument, particularly in the context of a more general critique of the conduct of British merchants, and, as a skilled rhetorician, it is precisely at this point that Smith again pulls from the hat his most vivid and famous metaphor, the invisible hand, for its one and only outing in the *WoN*. The preference of the domestic merchants is not *intended* to increase the wealth of nation, but, so it is argued and 'as if led by an invisible hand', that is what it does. The metaphor is used to illuminate an *unintended* consequence, in a very specifically defined context, as it did in *TMS*.

Returning to the text of paragraph 7, another question arising is: why did the benefits from trading not then spread out from settlements adjacent to navigable waters to areas that lay further 'inland'? Opulence there may have been, but it remained rather limited in its geographic scope: it was not 'universal' opulence.

This returns us to the question of Britain and it is at least arguable that the evidence tends to favour a reversal of Smith's preferred, geographical sequence in commercial development, i.e. that it was expansion in demand for necessaries and conveniencies in *inland*, primarily agricultural areas that was the initial expansionary factor in increasing 'the extent of the market' in Britain. The country did, after all, achieve substantial improvements in agricultural productivity relative to other European nations in the middle ages, and the general prosperity of the countryside was noted in the accounts of their travels written of a number of visitors from overseas. Such rural prosperity would, by and of itself, expanded the demand for the necessaries and conveniencies of life, i.e. extending the markets (in the Smithian sense of the *"the power of exchanging"*) for those who could supply them.

Thus, while the principle set out in the heading of Chapter 3 may be sound, like all principles its implications can be expected to be dependent on specifics of the context to which it is applied.

8. *All the inland parts of Africa, and all that part of Asia which lies any considerable way north of the Euxine and Caspian seas, the ancient Scythia, the modern Tartary and Siberia, seem, in all ages of the world, to have been in the same uncommercialised state in which we find them at present. The sea of Tartary is the frozen ocean, which admits of no navigation; and though some of the greatest rivers in the world run through that country, they are at too great a distance from one another to carry commerce and communication through the greater part of it. There are in Africa none of those great inlets, such as the Baltic and Adriatic seas in Europe, the Mediterranean and Euxine seas in both Europe and Asia, and the gulfs of Arabia, Persia, India, Bengal, and Siam, in Asia, to carry maritime commerce into the interior parts of that great continent; and the great rivers of Africa are at too great a distance from one another to give occasion to any considerable inland navigation. The commerce, besides, which any nation can carry on by means of a river which does not break itself into any great number of branches or canals, and which runs into another territory before it reaches the sea, can never be very considerable, because it is always in the power of the nations who possess that other territory to obstruct the communication between the upper country and the sea. The navigation of the Danube is of very little use to the different states of Bavaria, Austria, and Hungary, in comparison of what it would be, if any of them possessed the whole of its course, till it falls into the Black Sea.*

Smith continues with his detour into what comes close to 'geographic determinism', but then suddenly, in the final two sentences that close Chapter 3, introduces a wholly different factor into the equation, politics. The navigable river may flow slowly, deeply and gently to the sea, but different possessors of power and authority over its banks can erect barriers to trade where nature has endowed only a highway.

The reasons why they might want to do so are left unexplored at this point in the book, but will become a major theme of later sections of the *WoN* (they are a particular aspect of Smith's critique of Mercantilism), but it is clear from the little said here that the existence of jurisdictional boundaries can serve to 'segment' the market, such that demand for a particular supplier's product(s) will be more limited. From the central thesis of the chapter set down in its heading – the division of labour is limited by the extent of the market – and from the arguments of Chapter 1, it follows that such market segmentation will not be favourable for higher productivity and economic progress.

CHAPTER IV. OF THE ORIGIN AND USE OF MONEY.

1. *When the division of labour has been once thoroughly established, it is but a very small part of a man's wants which the produce of his own labour can supply. He supplies the far greater part of them by exchanging that surplus part of the produce of his own labour, which is over and above his own consumption, for such parts of the produce of other men's labour as he has occasion for. Every man thus lives by exchanging, or becomes, in some measure, a merchant, and the society itself grows to be what is properly a commercial society.*

Chapter 4 is concerned with the evolution of the economic institution of 'money', but it opens with a summary of earlier arguments and ends with a sentence that is strikingly relevant to the subsequent development of political economy and to matters that are highly salient in economic discussions today. Here Smith gives an explicit name to, and precisely characterises, the kind of society in which he lived and in which we live now. It is a *"commercial society"*. Its defining characteristic is that every man *"lives by exchanging"*.

Going back to the illustrations from antiquity in Chapter 3, it can be observed that the cities on navigable waterways and coasts can be characterised as being commercial, but, heading off into their hinterlands, in much of the surrounding territory the ubiquity aspect – the engagement of everyone in exchange transactions that are *essential* for life – will typically be absent. Smith would therefore not characterise them as *"properly"* commercial. As in the earlier chapters, his centre of attention is the day labourer, his Everyman, and the test is whether he/she *"lives by exchanging"*.

Today the typical word used to characterise the economic system of a country like Britain is 'capitalist'. The difference in terminology, which does not reflect well on post-Smithian intellectual development, is much more than the substitution of one word for another. Capitalism is a vaguely defined concept. It is easy to find advocates of it and easy to find opponents, often at vigorous odds with one another, but without any shared understanding of what precisely it is that they are arguing about.

De facto, and whatever its original meaning may have been, capitalism has become an ideograph, a term defined by Michael Calvin McGee as *"an ordinary-language term found in political discourse. It is a high order abstraction representing commitment to a particular but equivocal and ill-defined normative goal."*

As to its origins, its first appearance in English occurred in a Thackeray novel and it was only used very sparingly by Marx, who generally referred to the capitalist mode of production. A mode of production is, however, a rather different thing from a whole society. In Britain the manufacturing sector, with which Marx was most concerned (and then only with its factory components, not its small workshops), was only the dominant of the three major economic sectors – agriculture, manufacturing and services – for a very brief period around the middle

of the 19th century. Before and after that short period, services accounted for the largest slice of gross domestic product.

Assessed as a term of art in political economy, the superiority of Smith's characterisation of the nature of our societies can be illustrated by asking two questions. First, is modern China a capitalist economy? As befits an ideograph, that will likely generate much heated debate – it might launch a new set of sects, each populated with its own zealots – but little light. Then ask: is modern China a commercial society? The appropriate answer is, I think, a simple 'Yes'. The answer doesn't cast much immediate light on other characteristics of Chinese society, but it does at least provide the base for more fruitful exchanges on economic matters, based on a common understanding of the meaning of a word.

2. *But when the division of labour first began to take place, this power of exchanging must frequently have been very much clogged and embarrassed in its operations. One man, we shall suppose, has more of a certain commodity than he himself has occasion for, while another has less. The former, consequently, would be glad to dispose of; and the latter to purchase, a part of this superfluity. But if this latter should chance to have nothing that the former stands in need of, no exchange can be made between them. The butcher has more meat in his shop than he himself can consume, and the brewer and the baker would each of them be willing to purchase a part of it. But they have nothing to offer in exchange, except the different productions of their respective trades, and the butcher is already provided with all the bread and beer which he has immediate occasion for. No exchange can, in this case, be made between them. He cannot be their merchant, nor they his customers; and they are all of them thus mutually less serviceable to one another. In order to avoid the inconveniency of such situations, every prudent man in every period of society, after the first establishment of the division of labour, must naturally have endeavoured to manage his affairs in such a manner, as to have at all times by him, besides the peculiar produce of his own industry, a certain quantity of some one commodity or other, such as he imagined few people would be likely to refuse in exchange for the produce of their industry.*

Now Smith gets to grips with the limitations of commodity barter, making points that could have led towards the filling of the lacuna left in Chapter 2. Indeed this paragraph, stripped of its final sentence, could have appeared in that chapter, followed by an account of the development of markets (just as it is followed here in Chapter 4 by an account of the development of money).

If Everyman lives by exchanging goods and services, the efficacy with which these transactions are made becomes a matter of utmost importance. In modern terminology the costs associated with making exchanges are generically referred to as 'transactions costs'. Their exact nature and their levels vary from context to context. It was not until the mid 20th century that Ronald Coase opened up lines of thinking that addressed the relevant questions and issues at a Smithian level of analysis.

In re-connecting with the truck and barter points in Chapter 2, Smith's argument can now be reinforced by the extent-of-the-market points in Chapter 3. If exchange transactions costs are high, that will tend to limit the volume of trading that is profitably feasible for any one supplier, hence tend to limit the division of labour and thereby constrain the level of productivity that is achievable.

Smith explains that the direct exchange of one good or service with another good or service (commodity barter), is a difficult and costly process, because of the lack of what is called a double coincidence of wants: I run into someone who just happens to have what I want to buy, and it just happens that the other party wants to buy something I want to sell. Given the costs involved in the mutual search process required for the relevant buyers and sellers to find and engage with one another, he speculates that people will come to value holding a stock of some commodity which other parties will always be willing to accept in exchange for their goods or services (by implication because they might initially hold a stock of the item for their own, individual purposes).

That there are general economic benefits to be had from this happening is in little doubt, but it is not a straightforward process. There is an evolutionary step to be made, and it is a social step. I may be willing to accept a particular commodity for my services, but for that to be of significant value to me, over and above my own specific consumption of it, the same commodity has to be acceptable to others too (so that I can use it as a means of payment in acquiring the necessaries and conveniencies suppled by others). There is therefore scope for an institutional innovation, where the word institution is to be construed in its social science sense: a stable, valued, recurring pattern of conduct in a group, community or society. The institution in question, money, is a general acceptance (the relevant pattern of conduct) of a particular commodity as a means of payment in an exchange transaction.

3. *Many different commodities, it is probable, were successively both thought of and employed for this purpose. In the rude ages of society, cattle are said to have been the common instrument of commerce; and, though they must have been a most inconvenient one, yet, in old times, we find things were frequently valued according to the number of cattle which had been given in exchange for them. The armour of Diomede, says Homer, cost only nine oxen; but that of Glaucus cost a hundred oxen. Salt is said to be the common instrument of commerce and exchanges in Abyssinia; a species of shells in some parts of the coast of India; dried cod at Newfoundland; tobacco in Virginia; sugar in some of our West India colonies; hides or dressed leather in some other countries; and there is at this day a village in Scotland, where it is not uncommon, I am told, for a workman to carry nails instead of money to the baker's shop or the ale-house.*

The evolutionary process as described starts with some commodity that has a direct value not only to an individual, but also to significant numbers of other members of a local group or community. If we take the case of salt for example, it is easy to see why, on top of a household's requirements of salt for their own use, the relevant family might choose to hold

some excess stocks, knowing that salt is one of the conveniencies of life for many others too and that there will always be a possibility that others will accept it in exchange for whatever the household is offering (because others have a quotidian demand for it). The first step might be initiated by one household, then copied by others and evolve into a social convention. The institution that emerges is the wider acceptance of salt as a means of exchange, as something that is generally acceptable as payment in an exchange transaction, i.e. a shared social norm, whereby salt becomes 'money'.

4. *In all countries, however, men seem at last to have been determined by irresistible reasons to give the preference, for this employment, to metals above every other commodity. Metals can not only be kept with as little loss as any other commodity, scarce any thing being less perishable than they are, but they can likewise, without any loss, be divided into any number of parts, as by fusion those parts can easily be re-united again; a quality which no other equally durable commodities possess, and which, more than any other quality, renders them fit to be the instruments of commerce and circulation. The man who wanted to buy salt, for example, and had nothing but cattle to give in exchange for it, must have been obliged to buy salt to the value of a whole ox, or a whole sheep, at a time. He could seldom buy less than this, because what he was to give for it could seldom be divided without loss; and if he had a mind to buy more, he must, for the same reasons, have been obliged to buy double or triple the quantity, the value, to wit, of two or three oxen, or of two or three sheep. If, on the contrary, instead of sheep or oxen, he had metals to give in exchange for it, he could easily proportion the quantity of the metal to the precise quantity of the commodity which he had immediate occasion for.*

So use of salt may serve to reduce transactions costs to some extent, but superior possibilities exist which can carry the cost-reduction process further, notably metals, for reasons given. The general principle at work is simply that lower costs of effecting exchange transactions serve to increase the number of transactions made (increase the extent of the market), which in turn promotes a deeper division of labour and hence increases productivity.

5. *Different metals have been made use of by different nations for this purpose. Iron was the common instrument of commerce among the ancient Spartans, copper among the ancient Romans, and gold and silver among all rich and commercial nations.*

6. *Those metals seem originally to have been made use of for this purpose in rude bars, without any stamp or coinage. Thus we are told by Pliny (Plin. Hist Nat. lib. 33, cap. 3), upon the authority of Timaeus, an ancient historian, that, till the time of Servius Tullius, the Romans had no coined money, but made use of unstamped bars of copper, to purchase whatever they had occasion for. These rude bars, therefore, performed at this time the function of money.*

7. *The use of metals in this rude state was attended with two very considerable inconveniences; first, with the trouble of weighing, and secondly, with that of assaying them. In the precious metals, where a small difference in the quantity makes a great difference in the value, even the business of weighing, with proper exactness, requires at least very accurate weights and scales. The weighing of gold, in particular, is an operation of some nicety in the coarser metals, indeed, where a small error would be of little consequence, less accuracy would, no doubt, be necessary. Yet we should find it excessively troublesome if every time a poor man had occasion either to buy or sell a farthing's worth of goods, he was obliged to weigh the farthing. The operation of assaying is still more difficult, still more tedious; and, unless a part of the metal is fairly melted in the crucible, with proper dissolvents, any conclusion that can be drawn from it is extremely uncertain. Before the institution of coined money, however, unless they went through this tedious and difficult operation, people must always have been liable to the grossest frauds and impositions; and instead of a pound weight of pure silver, or pure copper, might receive, in exchange for their goods, an adulterated composition of the coarsest and cheapest materials, which had, however, in their outward appearance, been made to resemble those metals. To prevent such abuses, to facilitate exchanges, and thereby to encourage all sorts of industry and commerce, it has been found necessary, in all countries that have made any considerable advances towards improvement, to affix a public stamp upon certain quantities of such particular metals, as were in those countries commonly made use of to purchase goods. Hence the origin of coined money, and of those public offices called mints; institutions exactly of the same nature with those of the aulnagers and stamp-masters of woollen and linen cloth. All of them are equally meant to ascertain, by means of a public stamp, the quantity and uniform goodness of those different commodities when brought to market.*

Use of metals helps then, but still has limitations: there are further reductions in transactions costs to be had in the form of coinage. At this point we are obviously at a later stage of economic and political development where a collective authority exists and the argument glides into the advantages of a public stamp as a certification of the value of the metal being used. Here we see the first example of a public authority playing a role in an exchange transaction process, motivated by a desire to prevent fraudulent trading, fraud being a type of conduct that serves to raise the costs of effecting exchange transactions. Fraudulent dealing is viewed as a source of constraints on the 'extent of the market', thereby impeding progress in the deepening of the division of labour and improving productivity.

Smith is careful not to imply that the function of a public mint is something that can <u>only</u> be performed by a political authority. These are *"institutions exactly of the same nature with those of the aulnagers* [inspectors of the quality and measurement of woollen cloth] *and stamp-masters of woollen and linen cloth"*. Nevertheless, it is a first example of the kind of economic policy that Smith welcomes. Its distinctive feature is that it seeks to work 'with the grain' of an evolutionary process originating in civic society, assisting, rather than constraining, the process of market development.

8. *The first public stamps of this kind that were affixed to the current metals, seem in many cases to have been intended to ascertain, what it was both most difficult and most important to ascertain, the goodness or fineness of the metal, and to have resembled the sterling mark which is at present affixed to plate and bars of silver, or the Spanish mark which is sometimes affixed to ingots of gold, and which, being struck only upon one side of the piece, and not covering the whole surface, ascertains the fineness, but not the weight of the metal. Abraham weighs to Ephron the four hundred shekels of silver which he had agreed to pay for the field of Machpelah. They are said, however, to be the current money of the merchant, and yet are received by weight, and not by tale [meaning by number], in the same manner as ingots of gold and bars of silver are at present. The revenues of the ancient Saxon kings of England are said to have been paid, not in money, but in kind, that is, in victuals and provisions of all sorts. William the Conqueror introduced the custom of paying them in money. This money, however, was for a long time, received at the exchequer, by weight, and not by tale.*

9. *The inconveniency and difficulty of weighing those metals with exactness, gave occasion to the institution of coins, of which the stamp, covering entirely both sides of the piece, and sometimes the edges too, was supposed to ascertain not only the fineness, but the weight of the metal. Such coins, therefore, were received by tale, as at present, without the trouble of weighing.*

"Without the trouble of weighing" indicates the achievement of a further reduction in the costs of effecting exchange transactions. The general picture is again one of gradual institutional development driven by a desire to increase the (mutual) benefits of exchange transactions by reducing their costs.

10. *The denominations of those coins seem originally to have expressed the weight or quantity of metal contained in them. In the time of Servius Tullius, who first coined money at Rome, the Roman as or pondo contained a Roman pound of good copper. It was divided, in the same manner as our Troyes pound, into twelve ounces, each of which contained a real ounce of good copper. The English pound sterling, in the time of Edward I. contained a pound, Tower weight, of silver of a known fineness. The Tower pound seems to have been something more than the Roman pound, and something less than the Troyes pound. This last was not introduced into the mint of England till the 18th of Henry the VIII. The French livre contained, in the time of Charlemagne, a pound, Troyes weight, of silver of a known fineness. The fair of Troyes in Champaign was at that time frequented by all the nations of Europe, and the weights and measures of so famous a market were generally known and esteemed. The Scots money pound contained, from the time of Alexander the First to that of Robert Bruce, a pound of silver of the same weight and fineness with the English pound sterling. English, French, and Scots pennies, too, contained all of them originally a real penny-weight of silver, the twentieth part of an ounce, and the two hundred-and-fortieth part of a pound. The shilling, too, seems originally to have been the denomination of a weight. 'When wheat*

is at twelve shillings the quarter', says an ancient statute of Henry III, 'then wastel bread of a farthing shall weigh eleven shillings and fourpence'. The proportion, however, between the shilling, and either the penny on the one hand, or the pound on the other, seems not to have been so constant and uniform as that between the penny and the pound. During the first race of the kings of France, the French sou or shilling appears upon different occasions to have contained five, twelve, twenty, and forty pennies. Among the ancient Saxons, a shilling appears at one time to have contained only five pennies, and it is not improbable that it may have been as variable among them as among their neighbours, the ancient Franks. From the time of Charlemagne among the French, and from that of William the Conqueror among the English, the proportion between the pound, the shilling, and the penny, seems to have been uniformly the same as at present, though the value of each has been very different; for in every country of the world, I believe, the avarice and injustice of princes and sovereign states, abusing the confidence of their subjects, have by degrees diminished the real quantity of metal, which had been originally contained in their coins. The Roman as, in the latter ages of the republic, was reduced to the twenty-fourth part of its original value, and, instead of weighing a pound, came to weigh only half an ounce. The English pound and penny contain at present about a third only; the Scots pound and penny about a thirty-sixth; and the French pound and penny about a sixty-sixth part of their original value. By means of those operations, the princes and sovereign states which performed them were enabled, in appearance, to pay their debts and fulfil their engagements with a smaller quantity of silver than would otherwise have been requisite. It was indeed in appearance only; for their creditors were really defrauded of a part of what was due to them. All other debtors in the state were allowed the same privilege, and might pay with the same nominal sum of the new and debased coin whatever they had borrowed in the old. Such operations, therefore, have always proved favourable to the debtor, and ruinous to the creditor, and have sometimes produced a greater and more universal revolution in the fortunes of private persons, than could have been occasioned by a very great public calamity.

Smith does not go on to consider paper money here, but he does so later in Chapter 2 of Book 2. In these first chapters of the *WoN* he is painting a picture of the development process that had led up to the kind of commercial society to be found in the Britain, and particularly in the Scotland, of his day. At the time of writing of the *WoN*, banknotes had been a relatively recent innovation, the first Bank of Scotland notes having been issued in 1695.

Those first notes were of very high denominations, intended to be used in high value transactions, for example between merchants. Smith's focus, however, was ever on Everyman, on the day labourer, whose wealth (material wellbeing) was his central concern, and for such people coins were the means of payment in everyday exchange transactions.

He does, however, take the opportunity to express strong disapproval of the practice of 'debasement of the coinage', as performed by avaricious and unjust princes and sovereign states in every country of the world, thereby abusing the confidence of their subjects and defrauding them. In such a short passage, however, he almost inevitably oversimplifies things.

As Smith has explained, money is a term that can be applied to anything that is accepted, by convention, as a means of payment. Anything that satisfies that condition can serve: it is the convention/institution that matters. A penny coin made from metal of a lower value can serve equally as well as one made with metal of higher value. Indeed, it can be argued that it is more efficient to make use of a metal of little value, e.g. to release metal of high value for other, more productive purposes. There is no substantive objection to a shift to paper money or to electronic signals per se. Doing so does not necessarily amount to a fraud on the public. If metallic pound coins are replaced by more convenient paper pounds on a one-for-one basis, the effect will only be to reduce the costs of exchange transactions, which is generally positive for economic development.

The potential problems come when the sovereign authority takes the opportunity to increase the total number of currency units in circulation, for example by using newly minted money to acquire additional goods and services for itself or to discharge some of its debt, rather than simply swapping a new coin for an old one, holding the total number of units of currency intact. This increases the demand for goods and services and tends to lead to higher prices. If the exercise is continuously repeated, the result is inflation.

Empirically, though, Smith was right: sovereigns did often reduce the metallic value contained in coins *precisely in order to create more coins* that they could put into circulation by using them to acquire greater amounts of goods and services for themselves, not simply replacing one existing coin with a new one. It is a form of implicit taxation, because it transfers spending power from the holders of money balances to the state. It is a another very contemporary issue.

11. *It is in this manner that money has become, in all civilized nations, the universal instrument of commerce, by the intervention of which goods of all kinds are bought and sold, or exchanged for one another.*

So ends Chapter 4, with Smith following the essay advice given by teachers to students preparing for examinations: summarise what you are going to say, say it more extensively, summarise the main points of what you have said.

There is further material that follows paragraph 11, but it is concerned with spelling out what is to come in the next three chapters, which form a new unit of their own in the overall structure of the *WoN*. It is reproduced here for the sake of completeness, but requires no comment. I will, however, make some extended comments on the contrast, noted earlier, between Chapters 2 and 4.

12. *What are the rules which men naturally observe, in exchanging them either for money, or for one another, I shall now proceed to examine. These rules determine what may be called the relative or exchangeable value of goods.*

13. *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. In order to investigate the principles which regulate the exchangeable value of commodities, I shall endeavour to shew,*

14. *First, what is the real measure of this exchangeable value; or wherein consists the real price of all commodities.*

15. *Secondly, what are the different parts of which this real price is composed or made up.*

16. *And, lastly, what are the different circumstances which sometimes raise some or all of these different parts of price above, and sometimes sink them below, their natural or ordinary rate; or, what are the causes which sometimes hinder the market price, that is, the actual price of commodities, from coinciding exactly with what may be called their natural price.*

17. *I shall endeavour to explain, as fully and distinctly as I can, those three subjects in the three following chapters, for which I must very earnestly entreat both the patience and attention of the reader: his patience, in order to examine a detail which may, perhaps, in some places, appear unnecessarily tedious; and his attention, in order to understand what may perhaps, after the fullest explication which I am capable of giving it, appear still in some degree obscure. I am always willing to run some hazard of being tedious, in order to be sure that I am perspicuous; and, after taking the utmost pains that I can to be perspicuous, some obscurity may still appear to remain upon a subject, in its own nature extremely abstracted.*

Concluding comments, with particular reference to the missing history of market development in Chapter 2.

Smith's basic line of reasoning in the first four chapters of the *WoN* is clear. Progress in the division of labour (specialization in production) will increase productivity; the process is triggered by a propensity to truck and barter (A sees something B has that would be of particular value to A and vice versa, so they each see benefit in an exchange); progress in the division of labour is limited by the extent of the 'market' (specialization will be hindered if it is perceived that there is limited demand for the specialized product or service, and hence that specialization will be risky); the institution of money, a commonly acceptable means of payment, serves to expand the market by reducing the cost of effecting exchange transactions.

There is, however, a basic imbalance in the reasoning, to which attention has been drawn above in the comments on Chapter 2. Chapter 4 is important, because in tracking through the observations on the development of money we can see the inter-play of evolutionary dynamics. By reducing transactions costs, institutional innovations, such as the shift to metals and then to coins as the means of payment, expand trading volumes and promote further deepening of the division of labour. The latter in turn not only contributes to further expansion in trading volumes, but also increases the payoffs from further innovations in the institution of money. There is more benefit to be had from, say, a shift from weighing and assessing a metal to an accredited coinage if the volume of trade is higher. In a nutshell, there is a positive feedback loop here.

Such a loop is not found in Chapter 2, which lacks a market development narrative. An assumed propensity to truck and barter triggers some division of labour, but there is no identified feedback from the higher output so enabled to the trucking and bartering process itself, as there is in the case of money.

To pursue the issue, imagine a society in which there is a shared coinage, so the double coincidence of wants challenge has been overcome. There still remains the problem that, although I may carry coins that I know will be acceptable to a supplier of one of the necessaries and conveniencies of life I seek to purchase, I still have to find a supplier, preferably a supplier who will offer me a better deal than would others.

If that sounds easy to do, it is likely because of a prior presumption/expectation that there will exist a socio-economic institution available to assist in the process. The proper name for that type of institution is a *market*: not the abstract market calibrated by the level of demand for a particular commodity or service, as Smith used the term in Chapter 2, but a market closer to the meaning of the word attributed to it by historians, sociologists and, indeed, Everyman.

It can only be speculation, but it may be that Smith neglected to provide a market development narrative in Chapter 2 because he took the existence of markets to be such an obvious given. They had, after all, been a presence in his native land for centuries before his own time and, unlike in relation to money (where paper money had been a relatively recent development), may have appeared to be in no want of a detailed explanation. Whatever the reason, however, no sense of wonder had been triggered in the scientist's breast on this matter.

Today the position is different. As with arguments about capitalism, there are both pro- and anti-market zealots at loggerheads over a word that has become an ideograph. Very frequently, neither side can offer a clear and adequately precise characterisation of what it is that these arguments are about.

Let me end, therefore, by sketching out, in bullet form, my own view of some of the points that might have appeared in a Chapter 2 evolutionary narrative that could have been driven by the same dynamic as that set out in Chapter 4 when examining the development of money, i.e. the search for lower transactions costs.

- Over time, it is discovered that there is a better chance of meeting a potential counterparty to a desired transaction, if the intending buyer or seller turns up at a particular place at a certain time, for example an occasional local festival, an inn/tavern on a particular weekday evening, adjacent to a church after a Sunday service, or an established village/town meeting point.

- This becomes more widely shared knowledge and more and more intending buyers/sellers congregate at that spot at the relevant time. Initial shared understandings among a few become conventional knowledge in a wider community and a socio-economic institution is born.

- The higher trading volumes consequent on the reduction in transactions costs deepen the local division of labour, increase labour productivity, and increase trading volumes.

- New specialisations at significant scale emerge. These include the merchant, who buys in one market and sells in another, and the market organiser or proprietor, who may, for example, provide or hire a particularly favourable site and/or provide stalls for the displaying of wares (market infrastructure), for the use of which stalls a rental charge is levied.

- More formalised rule-books for trading are developed, which, for example, might assist visiting merchants and market participants in resolving disputes. These serve to increase the attractiveness of trading in the locations that make use of them, expanding volumes traded there.

- As in relation to money, fraudulent trading can inhibit the willingness of buyers and sellers to rely on a particular market. Since that runs counter to the interests of market proprietors (assuming that they are not themselves party to the fraud), rules directed at unwanted trading practices are developed.

Putting Chapter 2 on a par with Chapter 4 would have established a firmer base for the policy critique to which the *WoN* builds, Smith's *"very violent attack on the whole mercantile system of Great Britain"*. He was, in effect, attacking the institutional structures of the relevant markets as they existed in his day, but also (crucially) pointing to institutional reforms that could render them functionally more effective. The assault is radical, but the sentiment is

conservative: to protect the functional integrity of an indispensable, institutional pillar of a commercial society in the face of identified, disruptive forces.

A much more explicit examination of markets as institutions could have helped tip the subsequent evolution of economic thought on to a different path, one which could have served as a more powerful counterweight to the surface-skimming, cherry-picking of that thought so characteristic of much of contemporary discourse. See, for example, some of today's sterile debates about false binaries such as 'regulation vs deregulation', which implicitly bundles all manner of regulatory measures together as if they were all of the same nature. They are not, and the differences matter.

Taking a more *functional* view of things it can be said that:

A) Public policy can assist with market development and economic progress when it *aligns* itself with the purpose or function of 'markets as institutions', which is *to facilitate, by reducing their costs, mutually beneficial exchange transactions*. Standardisation of weights and measures across a jurisdiction is an early example of this type of policy. Thus, in England, the legislation of Edgar the Peaceful (c943-975 AD) served (albeit with time lags, measured in centuries) to reduce the costs incurred by iterant merchants who traded in differently located markets and who contributed to market integration by chain-linking local markets. In Smithian terms, this would amount to increasing 'the extent of the market' available to sellers and buyers alike, with all the consequences that follow from that.

B) Public policy can also hinder, as when it seeks to use state monopoly power to establish market rule-books that are re-purposed in ways designed to serve particular partial/partisan interests (not simply to facilitate mutually beneficial exchange transactions). This was Smith's indictment of the market rule-books for the North Atlantic and East Indies trades, which were designed to favour the interests of British merchants engaged in those trades and which were rhetorically justified by the ideology of Mercantilism. (In Smith's view, although the Mercantile System of his time enriched British merchants, it diminished the 'wealth of the nation'. Day labourers – whether located in Britain or, a fortiori, in the North American Colonies and India – suffered from the restrictions in trade that were involved.)

Smith, then, tended to favour Type A policy/regulation (closer approximations to the rule-books of a *System of Natural Liberty*) and was a vigorous opponent of Type B policy/regulation (the mercantile rule-books of his day, rigged to favour partial/partisan interests).

That the notion of alignment of public policy with the dynamics of the socio-economic ecosystem to which it to be applied is a cornerstone of Smith's thinking on political economy is illustrated by a much cited passage in *The Theory of Moral Sentiments*. It is concerned with what he called a 'man of system', meaning a sovereign of a familiar type who is inclined to try to bend the functioning of the economic system to his will: *"The man of system, on the contrary, is apt to be very wise in his own conceit; and is often so enamoured with the supposed beauty of his own ideal plan of government, that he cannot suffer the smallest deviation from any part of it. He goes on to establish it completely and in all its parts, without any regard*

either to the great interests, or to the strong prejudices which may oppose it. He seems to imagine that he can arrange the different members of a great society with as much ease as the hand arranges the different pieces upon a chess-board. He does not consider that the pieces upon the chess-board have no other principle of motion besides that which the hand impresses upon them; but that, in the great chess-board of human society, every single piece has a principle of motion of its own, altogether different from that which the legislature might chuse to impress upon it. If those two principles coincide and act in the same direction, the game of human society will go on easily and harmoniously, and is very likely to be happy and successful. If they are opposite or different, the game will go on miserably, and the society must be at all times in the highest degree of disorder."

There is obvious, rhetorical exaggeration in the final four words, but it is not, perhaps, so great an exaggeration as it may appear when stripped of historical context. The *TMS* (1759) was published seventeen years before the *WoN*, the latter in a year that also witnessed the American Declaration of Independence, in the lead up to which one of Smith's bêtes noires, an East India Company trade monopoly, played a significant role. A high degree of disorder did eventuate, for a long while at least. (A similar critique of the institution of slavery is also to be found in the *WoN* and in Smith's other work: in cold, analytic terms, it too rests on re-purposed market rule-books.)

This, then, is not laissez faire as we have come to know it: the first of the above two policy categories (Type A), which encompasses a rather large set of possibilities, sees to that. What is important is that state action be *aligned* with the natural (un-coerced) principles of motion of civic society (*"acting in the same direction"*), thereby complementing, supporting and reinforcing the latter, and that it should not seek to impose coerced substitutes for them.

If a very short label is to be applied to Smith's general sensibility, my own candidate suggestion would be the ancient Chinese concept of *wu wei*, as developed in parts of the Daoist tradition. It is a concept that is difficult to translate, but it has been rendered as *effortless action* in English. 'Effortless' is perhaps too strong a word, but, in the cited *TMS* passage, Smith did say *"go on easily and harmoniously".*

To achieve any such, desired alignment it is, of course, first necessary to discover and to understand what the relevant principles are, and the first four chapters of the *WoN* seek to carry out some of the most important groundwork required for that task. My suggestions are that the missing narrative on market development was uncompleted groundwork and that the omission has had unfortunate consequences for the subsequent evolution of economic thought and of economic policy practice.