

## **Adam Smith: The Philosopher and the Porter**

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### **ABSTRACT**

One of the intriguing aspects of Smith's developing analysis of the division of labour is the presence throughout of the example of the philosopher and the porter. Few readers will forget Smith's well-known dictum to the effect that in any developed society there are those:

'whose trade it is, not to do anything, but to observe everything; 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, philosophy or speculation becomes, like every other employment, the principal and 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 philosophy, as well as in every other business improves dexterity, and saves time. Each individual becomes more expert in his own particular branch, and more work is done upon the whole, and the quantity of science is improved by it' (WN, I.ii.9; LJ, 347, 470).

Smith also suggested that:

'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 diffusion 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' (WN.I.ii.4).

It is the task of this paper to consider Smith's views as to the way in which philosophers, ie, scientists, behave by reference, not only to the essay on **Astronomy**, but also to the **Theory of Moral Sentiments**, the **Lectures on Rhetoric**, and the **Wealth of Nations**.

The argument is divided into the following parts:

**Section 1** considers a broadly 'sociological' theme in examining Smith's views with regard to the philosopher's pursuit of status and reputation.

**Section II** elaborates upon the link between reputation and the power to persuade. In this section we consider Smith's rules for the organisation of discourse, including didactic discourse, placing emphasis on the attractions of the Newtonian method of exposition. It was in this context that Smith drew attention to the possibility that the Newtonian (and Cartesian) method may be employed by philosophers **because** it is more ingenious, and therefore more attractive to the mind.

**Section III** extends the essentially psychological aspect of the discussion in addressing the 'principles which lead and direct' philosophical enquiry by reference to the **Astronomy** where Smith considered the role of **sentiments**, such as surprise, wonder and admiration. Philosophy in all its forms emerges as the 'science of the connecting principles of nature' (II.12) whose ultimate end is the 'repose and tranquillity of the imagination' (IV.13).

**Section IV** widens the argument by addressing the historical dimension of the essay. This section was used by Smith to illustrate the process of development, modification, and replacement of different systems. But in the present context the emphasis is on the problems of communication which exist between the proponents of different systems and

upon the associated problems which arise a consequence of the division of labour in science; a division which increases the quantity of science and decreases our capacity to communicate across disciplines.

**Section V** summarises the argument so far before going on to examine Smith's views as to the performance of the philosopher when operating within a given **institutional** environment. It is in this context that we examine Smith's contention that the efficiency of the teacher can only be relied upon when he or she operates within an environment which **induces** them to do their duty.

This argument is important in its own right. But it would also seem to be somewhat inconsistent with Smith's theory of knowledge and with his emphasis upon the point that men desire not only praise but **praiseworthiness**. These passages in the **Wealth of Nations** were among the last which Smith wrote on the subject of the behaviour of the philosopher and would appear to represent a considered view as to the performance of the academic **teacher**. Perhaps the contrast is between the 'solitary philosopher' and the teacher who is a member of an academic community. If so, it is not a flattering comparison. More was to come. Smith's conclusion was that if the academic community proved incapable of self-regulation, then the alternative was external regulation with all its attendant dangers.

## **Adam Smith: The Philosopher (and the Porter)\***

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### **I**

While there is a debate regarding the origins of the modern analysis of the division of labour, it is plausible to suggest that Smith may have first encountered the problem as a result of hearing Francis Hutcheson's lectures when a student in Glasgow between 1737 and 1740.

Hutcheson's work on economic topics has its own history. It is evident that he admired the contribution of his immediate predecessor in the Chair of Moral Philosophy - Gershom Carmichael (1672-1729), and especially his translation of, and commentary on the works of, Samuel Pufendorf. In Hutcheson's address to the 'students in Universities' (Taylor, 1965, p 25) the **Introduction to Moral Philosophy** (1742) is described thus:

'The learned will at once discern how much of this compound is taken from the writing of others, from Cicero and Aristotle, and to name no other moderns, from Pufendorf's smaller work, **De Officio Hominis et Civis Juxta Legem Naturalem** which that worthy and ingenious man the late Professor Gerschom Carmichael of Glasgow, by far the best commentator on that book, has so supplied and corrected that the notes are of much more value than the text.'

The order and the content of the analyses of economic subjects is indeed strikingly similar. Both Pufendorf and Hutcheson gave a great deal of emphasis to the division of labour as the source of increased productivity in modern times, and as the means of maximising the disposable surpluses which individuals could command. Both confirm the importance of the security of property thus generated, and paid a great deal of attention to the problem of value in exchange. It was in this context that Hutcheson considered the importance of

subjective judgment with regard to the valuation of commodities to be **acquired** and to the valuation of the disutility of effort involved in the creation of the commodities to be **used in exchange**. For these reasons Edwin Cannan suggested that the 'germ of the **Wealth of Nations** is to be found in Hutcheson's treatment of value' (1896, p xxvi; Skinner, 1995).

Smith's **Lectures on Jurisprudence** show the extent to which he had advanced beyond his teacher. Most obviously, Smith's lectures confirm that he had placed the discussion of economic topics in a discourse, which, while linked to the discussion of jurisprudence was to be seen as separate from it. The discussion of the sources of increased productivity was also much more elaborate; a fact further confirmed by the content of chapter 2 of the **Early Draft**. There are, of course, differences between these documents (cf Meek and Skinner, 1973). For example, the link between the division of labour and the extent of the market, mentioned in LJ, does not figure in ED but was to be given the dignity of a separate chapter in WN (I.iii). The WN does not give prominence to the 'oppressive inequality' of the modern state (ED, 563; LJ, 340-1), but transformed the significance of the earlier discussion by placing it in the context of a capital-using system, characterised by the use of distinct factors of production and categories of return. It is only the words on the page that remain the same.

But one of the most intriguing features of all these documents is the attention given to the philosopher and the porter. To begin with, Smith makes the obvious point that: 'Among men...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' (WN, I.iii.5).

Secondly, he noted that in any developed society there are those:

'whose trade it is, not to do anything, but to observe everything; 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, philosophy or speculation becomes, like every other employment, the principal and 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 philosophy, as well as in every other business improves dexterity, and saves time. Each individual becomes more expert in his own particular branch, and more work is done upon the whole, and the quantity of science is improved by it' (WN.I.ii.9; LJ, 347, 570).

Thirdly, Smith suggested:

'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' (WN.I.ii.4).

Smith accepted Hume's thesis that 'there is a great uniformity among the actions of men, in all nations and ages, and that human nature remains still the same, in its principles and operations' (**Inquiry Concerning Human Understanding** (VII.7)). Yet it is equally clear, not least in the TMS, that the constant principles of human nature are consistent with a wide range of behaviour. Looked at in this way, the significant difference between the philosopher and others is to be found, in part, in his powers of perception. For example,

Smith cites the case of artisans such as dyers, brewers, and distillers, who handle processes which strike the skilled observer as complex, but which do not seem so to the artisan himself 'who has been for many years familiar with the consequences of all the operations of his art'. In a passage which may reflect his own experience, Smith records the amusement which such questions often excite, since the artisan 'cannot conceive what occasion there is for any connecting events to unite those appearances, which seem to him to succeed each other vary naturally. It is their nature, he tells us, to follow one another in this order, and that accordingly they always do so' (**Astronomy**, II.11). Similarly, Smith remarked that 'After a little use and experience...looking-glasses cease to be wonders altogether; and even the ignorant become so familiar with them, as not to think that their effects require any explication' (**Imitative Arts**, I.17). But just as the botanist differs from the casual gardener, or the musician from his auditor, so philosopher acquires 'if one may say so, a nicer ear...' (**Astronomy**, II.11). It is Smith's views as to the behaviour of the philosopher (ie, scientist) with which this paper will be concerned.

## II

First we should note the presence of a broadly sociological dimension in Smith's discussion.

'To excel in any profession, in which but few arrive at mediocrity, is the most decisive mark of what is called genius or superior talents. The public admiration which attends upon such distinguished abilities makes always a part of their reward' (WN, I.x.b.24).

Public admiration may be taken to refer to literary or scientific reputation and here Smith had some interesting observations to make in the **Theory of Moral Sentiments**:

'We may judge of the propriety or impropriety of the sentiments of another person by their correspondence or disagreement with our own, upon two different occasions; either first, when the objects which excite them are considered without any peculiar relation, either to ourselves or to the person whose sentiments we judge of or, secondly, when they are considered as peculiarly affecting one or other of us' (TMS, I.i.4.1).

Objects which lack a **peculiar** relation include 'the expression of a picture, the composition of a discourse...all the general subjects of science and taste'. For Smith, the characteristic feature of such judgement is that we look at "a picture, a poem, or a system of philosophy' from the 'same station' (TMS, 1,i.4.5):

'We look at them from the same point of view, and we have no occasion for sympathy, or for that imaginary change of situations from which it arises, in order to produce, with regard to these, the most perfect harmony of sentiments and affections' (TMS, I.i.4.2).

Yet at the same time he noted a similarity with the nature of **moral** judgment, arising from the fact that to 'approve of another man's opinions is to adopt those opinions, and to adopt them is to approve of them' (TMS, I.i.3.2).

Smith further observed that:

'There are some very noble and beautiful arts, in which the degree of excellence can be determined only by a certain nicety of taste, of which the decisions, however, appear always, in some measure, uncertain. There are others, in which the success admits, either of clear demonstration, or very unsatisfactory proof. Among the candidates for excellence in those different arts, the anxiety about public opinion is always much greater in the former than in the latter' (TMS, III.2.18).

Smith had earlier remarked that some philosophers, notably mathematicians, 'are frequently very indifferent' about the reception which they may meet with from the public, enjoying as they do the 'most perfect assurance, both of the truth and of the importance of their discoveries'. He added:

'The great work of Sir Isaac Newton, his **Mathematical Principles of Natural Philosophy**, I have been told, was for several years neglected by the public. The tranquillity of that great man, it is probable, never suffered, upon that account, the interruption of a single quarter of an hour. Natural philosophers, in their independency upon the public opinion, approach nearly to mathematicians, and, in their judgments concerning the merit of their own discoveries and observations, enjoy some degree of the same security and tranquillity' (TMS III.2.20).

The contrast is between the philosopher sure of his results but uncertain of his reception and the great mathematician who is confident of his contribution. Yet both are 'candidates for excellence' and both are likely to be conscious of literary or scientific reputation as a source of distinction. As Smith remarked, when the opinions of another person:

'not only coincide with our own, but lead and direct our own; when in forming them he appears to have attended to many things which we had overlooked, and to have adjusted them to all the various circumstances of their objects; we not only approve of them, but wonder and are surprised at their uncommon and unexpected acuteness and comprehensiveness, and he appears to deserve a very high degree of admiration and applause. For approbation heightened by wonder and surprise, constitutes the sentiment which is properly called admiration, and of which applause is the natural expression' (TMS, I.i.4.3).

We may note in passing that Smith was not insensible to the benefits of reputation even if he was aware of the dangers of ambition. Few readers of the TMS will fail to remember his ironic reference to the poor man 'whom heaven in its anger has visited with ambition' (IV.1.8) or his reference to 'place, the great object which divides the wives of aldermen' as being the 'end of half the labours of human life' (TMS.I.iii.2.8). Perhaps these ironic passages prompted Hume to write to Smith, following the publication of the TMS in 1759 in the following terms. Having commented on every conceivable subject other than that which Smith wanted to hear, **le bon** David concluded:

'My Dear Mr Smith, have Patience; Compose yourself to Tranquillity: Show yourself a Philosopher in Practice as well as Profession: Think on the Emptiness, and Rashness, and Futility of the common Judgements of Men: How little they are regulated by Reason in any Subject, much more in philosophical Subjects, which so far exceed the Comprehension of the Vulgar...A wise man's Kingdom is his own Breast; Or, if he ever looks farther, it will only be to the Judgement of a select few, who are free from Prejudices, and capable of examining his work. Nothing indeed can be a stronger presumption of Falshood than the Approbation of the Multitude; and Phocion, you know, always suspected himself of some Blunder, when he was attended with the Applauses of the Populace.

Supposing, therefore, that you have duely prepared yourself for the worst by all these Reflections: I proceed to tell you the melancholy News that your Book has been very unfortunate: For the Public seem disposed to applaud it extremely' (Corr, letter 31, dated 12 April).

While these themes are **incidental** to the main drift of the **Moral Sentiments**, Smith's students would be well aware that they were **central** to the **Lectures of Rhetoric** with their attendant emphasis on the theory of **communication**.

Looked at in this way, reputation depends to a significant extent on the power to **persuade**. Indeed, Smith had noted in his **Lectures on Rhetoric**, that three elements are needed in a sound author:

'1<sup>st</sup> - That he have a complete knowledge of his Subjects; 2ndly That he should arrange all the parts of his Subject in their proper order; 3rdly, That he paint or describe the Ideas he has of these severall in the most proper and expressive manner; this is the art of painting or imitation' (LRBL, i.104-105).

In LRBL, Smith considered the forms of discourse which were employed in the **communication of ideas** through the medium of the spoken or written word. In Smith's view all examples of the written word could be reduced to four broad types: the poetical, where the purpose is to entertain; the historical, which is intended to relate some fact or facts; the didactic, where the purpose is to prove some proposition; and the oratorical. These different types of discourse, in Smith's view, shared common elements although differing in purpose and therefore in organisation. Thus for example he suggested that the rules of narrative (ie, historical) discourse were the same for the poetical even though the purpose of poetical discourse was entertainment while historical discourse aimed to instruct. In the same way he suggested that while both didactic (ie, scientific) and rhetorical discourses were intended to prove some proposition they differ in that the former 'proposes to put before us the arguments on both sides of the question in their true light, giving each its proper degree of influence, and has it in view to perswade no further than the arguments

themselves appear convincing'. That is, he suggests that didactical discourse seeks to persuade 'only so far as the strength of the argument is convincing' (LRBL, i.150).

Smith addressed the question of didactic (scientific) writing in a lecture dated 24 January 1763, apparently delivered 'sine libro, except what he read from Livy'. In this lecture he suggested that didactic writing could have one of two aims: either to 'Lay Down a proposition and prove this by the different arguments which lead to that conclusion', or to deliver a system in any science (LRBL, II.125). In the first case the writer may seek to prove a single proposition or present a complex proposition which requires proof of several subordinate ones. In this context, Smith recommended that 'these subordinate propositions should not be above 5 at most. When they exceed this number the mind cannot easily comprehend them at one view; and the whole runs into confusion. Three, or there-about, is a very proper number' (LRBL, ii.,126).

The second function of didactic discourse, namely the delivery of a system in any science, also presents the writer with a choice. As Smith put it:

'in Naturall Philosophy, or any other Science of that Sort, we may either like Aristotle go over the Different branches in the order they happen to cast up to us, giving a principle commonly a new one for every phaenomenon; or, in the manner of Sir Isaac Newton, we may lay down certain principles known or proved in the beginning, from whence we account for the severall Phenomenon, connecting all together by the same Chain. This Latter, which we may call the Newtonian method is undoubtedly the most Philosophical, and in every science, whether of Moralls or Naturall Philosophy, etc, is vastly more ingenious, and for that reason more engaging than the other' (LRBL, ii.133).

Smith went on to assert that:

'It gives us a pleasure to see the phaenomena which we reckoned the most unaccountable all deduced from some principle (commonly a well-known one) and all united in one chain, far superior to what we feel from the unconnected method where everything is accounted for by itself without any reference to the others. We need not be surprised then that the Cartesian philosophy (for Descartes was in reality the first who attempted this method), though it does not perhaps contain a word of truth, and to us who live in a more enlighten'd age and have more enquired into these matters, it appears very Dubious, should nevertheless have been so universally received by all the Learned in Europe at that time. The Great Superiority of the method over that of Aristotle, the only one then known, and the little enquiry that was then made into those matters, made them greedily receive a work which we justly esteem one of the most entertaining Romances that has ever been wrote' (LRBL, ii.134).

There are perhaps two points arising from this statement which deserve more than a passing mention. First, it will be observed that Smith credits both Newton and Descartes with the same method of **exposition**, even although a more 'enlightened' age had now perceived that the Cartesian system of **physics** was no more than an entertaining, romance. Smith was well aware of the point that the principles governing the **organisation** of didactic of scientific discourse are distinct from those rules of procedure which constitute scientific method properly so called.

Secondly, Smith drew attention to the possibility that the Newtonian (or Cartesian) 'method' may be employed by the philosopher **because** it is more engaging than the Aristotelian. It is also interesting to note that Smith should have referred elsewhere to a **propensity**, natural to all men, 'to account for all appearances from as few principles as possible' (TMS, VII.ii.2.14).

#### IV

These (essentially psychological) issues were further explored in the **Essays on Philosophical Subjects**, most notably in the **Astronomy**, where Smith considered the 'principles which lead and direct' philosophical enquiry.

The psychological assumptions which Smith employed in the essays under discussion are fundamentally simple: he assumes that man is endowed with certain faculties and propensities such as reason, reflection, and imagination, and that he is motivated by a desire to acquire (or to avoid) the sources of pleasure (or pain). In this context pleasure relates to a state of the imagination, or 'What may be called the natural state of the mind, the state in which we are neither elated nor dejected, the state of sedateness, tranquility, and composure...' (**Imitative Arts**, 11. 20). Such a state may be attained where we contemplate objects which satisfy certain conditions; conditions which are quite well expressed in a passage from the **Theory of Moral Sentiments** where it is pointed out that 'Connected variety, in which each new appearance seems to be introduced by what went before it, and in which all the adjoining parts seem to have some natural relation to one another, is more agreeable than a disjointed and disorderly assemblage of unconnected objects' (V. 1. 9). We derive a feeling of pleasure Smith argues, from the contemplation of relation, similarity, or order; from a certain association of ideas. As Smith remarked in a passage which clearly shows the influence of Hume:

'When two objects, however unlike, have often been observed to follow each other, and have constantly presented themselves to the senses in that order, they come to be so connected together in the fancy, that the idea of the one seems, of its own accord, to call up and introduce that of the other. If the objects are still observed to succeed each other as

before, this connection, or, as it has been called, this association of their ideas, becomes stricter and stricter, and the habit of the imagination to pass from the conception of the one to that of the other, grows more and more rivetted and confirmed' (**Astronomy**, II.7).

He added that under such circumstances 'There is no break, no stop, no gap, no interval. The ideas excited by so coherent a chain of things seem, as it were, to float through the mind of their own accord, without obliging it to exert itself, or to make any effort in order to pass from one of them to another' (11.7). While emphasising that the imagination **is** indolent and that men find no stimulus to thought under such conditions, Smith struck a more original note in going on to argue that this would not be the case where the 'appearances' were in any way irregular or unexpected:

'But if this customary connection be interrupted, if one or more objects appear in an order quite different from that to which the imagination has been accustomed, and for which it is prepared, the contrary of all this happens. We are at first surprised by the unexpectedness of the new appearance, and when that momentary emotion is over, we still wonder how it came to occur in that place' (11.3).

In other words we feel **surprise** when some object (or number, of objects) is drawn to our attention which does not fall into an expected pattern; a sentiment quickly followed by that of **wonder**, where the latter is defined in these terms: 'The stop which is thereby given to the career of the imagination, the difficulty which it finds in passing along such disjointed objects, and the feeling of something like a gap or interval betwixt them, constitute the whole essence of this emotion' (II.9).

In the sphere of philosophy Smith argued that the perception of a 'gap' between phenomena leads directly to an attempt to explain it thus contributing to relieve the mind from a state of

disequilibrium. As he put it, the mind 'endeavours to find out something which may fill up the gap, which, like a bridge may so far at least unite those seemingly disjointed objects, as to render the passage of the thought between them smooth, and natural, and easy' (II.8). The intellectual 'bridge' is a telling metaphor.

It will be noted that man is impelled to seek an explanation for observed appearances as a result of some **subjective** feeling of discomfort, and that the resulting explanation is therefore designed to meet some **psychological** need. Smith also argues that the explanation offered can only satisfy the mind if it is coherent, capable of accounting for observed appearances, and stated in terms of 'familiar' or plausible principles.

Philosophy in all its forms, thus emerges as 'the science of the connecting principles of nature' (II.12), with, as its ultimate end, 'the repose and tranquility of the imagination' (IV.13). Although these motives are of universal application, the purposes of philosophy are made especially clear in Smith's discussion of astronomy, where he argues that the task of theory is to introduce 'order into this chaos of jarring and discordant appearances, to ally this tumult of the imagination, and to restore it, when it surveys the great revolutions of the universe, to that tone of tranquility and composure, which is both most agreeable in itself, and most suitable to its nature' (II.12).

This position anticipated G L S Shackle's view that the 'scientist's ultimate aim is to see everything as an illustration of a very few basic principles incapable of further unification'. There is an even more dramatic parallel in the following statement, which could well serve as a summary of Smith's whole thesis:

'The chief service rendered by a theory is the setting of minds at rest. So long as we have a satisfying conceptual structure, a model or a taxonomy which provides for the filing of all

facts in a scheme of order, we are absolved from the tiresome labour of thought, and the uneasy consciousness of mystery and a threatening unknown Theory services deep needs of the human spirit: it subordinates nature to man, imposes a beautiful simplicity on the unbearable multiplicity of fact, gives comfort in the face of the unknown and the unexperienced, stops the teasing of mystery and doubt which, though salutary and life-preserving, is uncomfortable, so that we seek by theory to sort out the justified from the unjustified fear. Theories by their nature and purpose, their role of administering to 'a good state of mind' are things to be held and cherished. Theories are altered or discarded only when they fail us' (Shackle, 1967, 288-9).

## V

The **historical** dimension of the essay on **Astronomy** is important in its own right and provides further valuable testimony as to Smith's wide range of knowledge. But the essay is also significant in that Smith was able further to illustrate the operation of the 'principles' of human nature in terms of an argument which was concerned with the origins, development, and replacement of thought systems. In this connection he suggested that the normal pattern of events would follow a certain sequence: first, the development of a system, secondly its gradual modification as new observation had to be taken account of, and third, the rejection of the system when the degree of theoretical complexity eventually rendered it unacceptable to the human **mind**. The anticipation of Kuhn is, if not obvious, provocative.

A classic case is provided by the theory of concentric spheres; a theory which began by accounting for observed phenomena in terms of eight spheres, but which was gradually modified as new information became available until some 56 (Aristotle) became necessary. As Smith put it 'This system had now become as intricate and complex as those appearances themselves, which it had been invented to render uniform and coherent. The

imagination, therefore, found itself but little relieved from that embarrassment, into which those appearances had thrown it, by so perplexed an account of things' (**Astronomy**, IV.8).

It is this perception which prompts, in part, the attempt to formulate an acceptable alternative. The analysis of the processes of development and change led Smith to offer some telling points with regard to scientific behaviour. A few examples may suffice for the present purpose. To begin with, he offered an interesting assessment of the theory of Concentric Spheres in suggesting that the initial statement had ascribed to each sphere a circular and regular motion. He advanced two reasons: first, that a 'circle, as the degree of its curvature is always the same, is of all curve lines the simplest, and the most easily conceived'; secondly he suggested that the equality of the motions of the spheres 'was supposed by all the founders of astronomical systems. For an equal motion can be more easily attended to, than one which is continually either accelerated or retarded' (IV. 52). In the same way he drew attention to the importance of the ingenious 'equalizing circle' in the system of Eccentric Spheres, which succeeded the Aristotelian system, on the ground that nothing 'can more evidently show, how much the repose and tranquility of the imagination is the ultimate end of philosophy' (IV.13). Later he commented on the ease with which the 'learned give up the evidence of their senses to preserve the coherence of the ideas of the imagination' (IV.35).

It was also in this connection that Smith recognised the importance of **analogy** in suggesting that philosophers, in attempting to explain unusual 'appearances', often did so in terms of knowledge gained in **unrelated** fields. In this way Smith suggested that reasoning by analogy might affect the nature of the work done, in the manner of the Pythagoreans who first studied arithmetic and then explained 'all things by the properties of numbers' - or the modern physician who 'lately gave a system of moral philosophy upon the Principles of his own art' (**Astronomy**, II.12). 'In the same manner also, others have written parallels of

painting and poetry, of poetry and music, of music and architecture, of beauty and virtue, of all the fine arts; systems which have universally owed their origin to the lucubrations of those who were acquainted with the one art, but ignorant of the other.' Indeed, Smith went further in noting that in some cases the analogy chosen could become not just a source of 'ingenious similitudes' but even 'the great hinge upon which every thing turned' (ibid).

This in turn leads on to the discussion of another side of the problem, again illustrated by the **Astronomy**, namely that different types of philosopher may produce conflicting accounts of the same thing, without any real possibility of communication. Smith noted that at a certain stage of development a system 'might continue to amuse the learned in other sciences, but could no longer satisfy those that were skilled in **Astronomy**' (IV. 67); that the Copernican system had been adopted by astronomers even though inconsistent with the laws of physics as then known (IV.35); that the system of eccentric spheres had been accepted by astronomers and mathematicians, but not by philosophers in general: 'Each party of them too, had...completed their peculiar system or theory of the universe, and no human consideration could then have induced them to give up any part of it' (IV.18).

As this implies, there may be a certain unwillingness to accept ideas formulated in a particular way, and even resistance to the reception of new ones as a result of certain 'prejudices'. Some of these prejudices are obvious: for example, the 'natural prejudices of the imagination' (IV.52) which partly explained the original resistance to the idea of a moving earth.

Others are more complex, especially those which Smith (following Hume) described as prejudices of education. For example, Smith pointed out that resistance to the acceptance of Copernican ideas was partly explained by the 'Peripatetic Philosophy, the only philosophy then known in the world' (IV. 38), and added, with reference to the system as a whole, that

'When it appeared in the world, it was almost universally disapproved of, by the learned as well as by the ignorant. The natural prejudices of sense confirmed by education, prevailed too much with both, to allow, them to give it a fair examination' (IV.35). In the same way, the immediate followers of Copernicus were held to have faced objections which were 'necessarily connected with that way of conceiving things, which then prevailed universally in the learned world' (IV.39).

As Smith reminded his students, 'philosophers having each there (sic) peculiar business do more work upon the whole and in each branch than formerly'. But it now appears that while the division of labour increases the quantity of science it may diminish the opportunities for communication. This was a matter of some moment since the 'various provinces' of philosophy include 'a mechanical, a chymical, an astronomical, a metaphysical, a theological and an ethical' dimension (LJ(A), p 347; LJ(B), p 492).

## VI

The arguments which we have just received are interesting in the sense that they are all concerned with the way in which philosophers **behave**. The idea of pursuing academic reputation as a source of distinction is quite striking and also consistent with Smith's point that achievements in mathematics or in the natural sciences often seem more secure than in some other areas. On the other hand the natural and moral sciences present contrasting problems of verification:

'A system of natural philosophy may appear very plausible, and be for a long time very generally received in the world, and yet have no foundation in nature, nor nay sort of resemblance to the truth...But it is otherwise with systems of moral philosophy and an author

who pretends to account for the origin of our moral sentiments, cannot deceive us so grossly, nor depart so very far from all resemblance to the truth' (TMS, VII.ii.4.14).

More striking still, is Smith's analysis of the 'principles which lead and direct' philosophical enquiry where he considered the stimulus given to the mind by the sentiments of **surprise**, **wonder**, and **admiration**; sentiments 'whose influence is of far wider extent that we should be apt upon a careless view, to imagine' (Introd 7). It was in this context that Smith developed his thesis regarding the creation of intellectual 'bridges' in order to relieve the mind from the inconvenience of a perceived 'gap' in knowledge.

The idea of a gap or interval was widely deployed by Smith, notably in the discussion of forensic discourse and in the context of historical writing. In the first case, Smith argued that the author of forensic discourse should create, so far as possible, an argument which may be made up of a number of parts, but so organised as to provide an **apparently** seamless fabric.

'By this means tho he can bring proof of very few particulars, yet the connection there makes them easily comprehended and consequently agreeable, so that when the adversary tries to contradict any of these particulars it is pulling down a fabric with which we are greatly pleased and are very unwilling to give up' (LRBL, ii.197).

In the case of historical discourse, which has many similarities with other forms of scientific work, he noted that:

'We should never leave any chasm or gap in the narration even tho there are no remarkable facts to fill up that space. The very notion of a gap makes us uneasy' (LRBL, ii.36).

In the case of scientific discourse Smith suggests that speculation is prompted by the need for coherence and that the mind is best satisfied when the explanation is offered in terms of a small number of basic principles which are plausible and familiar.

For Smith, these pre-occupations are also associated with the concept of the intellectual **system**, which he likened, tellingly, to the analogy of the machine:

'Systems in many respects resemble machines. A machine is a little system, created to perform, as well as to connect together, in reality, those different movements and effects which the artist has occasion for. A system is an imaginary machine invented to connect together in the fancy those different movements and effects which are already in reality performed' (**Astronomy**, IV.19).

It will be recalled that Smith likened the pleasure to be derived from the contemplation of great systems of thought to that acquired from listening to a 'well composed concerto of instrumental music' (**Imitative Arts**, II.30). In WN, Smith also revealed his appreciation of the 'beauty of a systematical arrangement of different observations connected by a few common principles' (V.i.f.25).

The LRBL adds a further dimension to the discussion in drawing attention to the distinction between the way in which ideas **originate** and the manner in which they are **transmitted** to an audience. In effect Smith argues that the rules of organisation, which refer to the number of variables which the mind can comprehend, and to the use of the Newtonian method of **exposition**, will reflect the psychology of the thinker **and** the appreciation which the **expositor** should have for the characteristics of the auditor and of the reader. The issues relate to the **conception**, **transmission** and **reception** of ideas, together with the subjective judgments which lie behind them.

The arguments advanced in LRBL also serve to remind us that the philosopher may use a variety of forms of discourse within the confines of a single work; that the scientist is capable of seeking to convince by deploying arguments whose **logic** is attractive but also of seeking to deploy the **arts** of persuasion. I have argued elsewhere that Smith's treatment of the American Question may illustrate his **forensic** skills (Skinner, 1996).

A final point to be noted in this context is that Smith's treatment of the different, yet inter-connected, areas of speculation which we have reviewed may have an important biographical value by throwing light upon the working of his own mind, and therefore upon the structure of his major works.

## VII

The distinction drawn (towards the end of the previous section) between the thinker who **creates** a system (eg, Newton) and those who **expound** it, introduces a further set of issues.

As we have seen, Smith gave a great deal of prominence (and thought) to the ways in which **individual** philosophers as **scientists** behave. Although he gave much attention to the sentiments of surprise, wonder and admiration he did not suggest that they were the sole motives to scientific work, and did not discount the role of a genuine desire for 'truth'. He also emphasised the pleasure to be derived from intellectual activity, and from the **creation** and **comprehension** of the contributions of the philosopher.

If he did remind us of the desire for status which partially supports the scientist in his endeavours, he also insisted upon the point that **individual** men are moved by a desire not merely for praise but **praiseworthiness**.

Smith did not qualify these points, but he did add some interesting reflections with regard to the performance of the **generality** of **academic teachers** (expositors) whose business it is to **deliver** accounts of systems of philosophy to an audience where both teacher and student worked **within a particular institutional** environment. Since these remarks are among the last which Smith offered on the topic of academic behaviour, they are worthy of more than a passing reference, especially since they apply to the performance, not so much of the **individual** philosopher, as to the members of an academic **community**.

Even when universities can attract professors of quality, Smith argued that it will be necessary to provide appropriate stimuli on the ground that it 'is the interest of every man to live as much at his ease as he can' (WN, V.i.f.7). It was in this context that Smith drew attention to a principle which he applied widely in his discussion of public services, namely that 'the exertion of the greater part of those who exercise it, is always in proportion to the necessity they are under of making the exertion' (WN, V.i.f.4).

Smith objected to a situation where high salaries might be paid irrespective of competence or industry. As he observed, in some universities 'the salary makes but a part, frequently but a small part, of the emoluments of the teacher, of which the greater part arises from the honoraries or fees of his pupils' (WN, V.i.f.6).

'In other universities the teacher is prohibited from receiving any honorary or fee from his pupils, and his salary constitutes the whole of the revenue which he derives from his office. His interest is, in this case, set as directly in opposition to his duty as it is possible to set it' (WN, V.i.f.7).

While even in this situation the authority of the university could be exercised in such a way as to ensure attention to duty, Smith was aware of another problem, namely, the dangers of self-government:

'If the authority to which he is subject resides in the body corporate, the college, or university of which he himself is a member and in which the greater part of the other members are, like himself, persons who either are, or ought to be, teachers; they are likely to make a common cause, to be all very indulgent to one another, and every man to consent that his neighbour may neglect his duty, provided he himself is allowed to neglect his own. In the

university of Oxford, the greater part of the public professors have, for these many years, given up altogether even the pretence of teaching' (WN, V.i.f.8).

There were other problems which could affect academic efficiency. Smith objected to the fact that the privileges of graduation 'necessarily force a certain number of students to attend some universities, independent of the merit or reputation of the teachers' while in addition specific endowments often force students to attend particular colleges. He added that:

'If in each college the tutor or teacher, who was to instruct each student in all arts and sciences, should not be voluntarily chosen by the student but appointed by the head of the college; and, if in case of neglect, inability or bad usage, the student should not be allowed to change him for another, without leave first asked and obtained; such a regulation would not only tend very much to extinguish all emulation among the different tutors of the same college, but diminish very much in all of them the necessity of diligence and of attention to their respective pupils' (WN, V.i.f.13).

**Institutional structures** which did not provide adequate stimuli to the academic could, Smith argued, also have adverse effects on the quality of research and the content of what was taught:

'several of these learned societies have chosen to remain, for a long time, the sanctuaries in which exploded systems and obsolete prejudices found shelter and protection, after they had been hunted out from every other corner of the world. In general, the richest and best endowed universities have been the slowest in adopting...improvements, and the most averse to permit any change in the established plan of education...improvements were more easily introduced into some of the poorer universities, in which the teachers, depending

upon their reputation for the greater part of their subsistence, were obliged to pay more attention to the current opinions of the world' (WN, V.i.f.34).

The whole tenor of this discussion seems to suggest that the performance of the **teacher** can only be **relied** upon when he operates within an appropriate **environment**.

From some points of view these sections of the WN may simply represent a **logical** extension of Smith's treatment of public finance with its attendant emphasis on induced efficiency (cf Rosenberg, 1960; Peacock, 1975).

But it should be noted that Smith seems to have arrived at his conclusion after careful consideration. As Smith remarked to William Cullen, if the Scottish Universities were among the best at the time of writing, this was to be attributed to broadly **economic** causes: 'the salaries of the professors are insignificant. There are few or no bursaries and exhibitions, and their monopoly of degrees is broken in upon by all other universities, foreign or domestic' (Corr, letter 143, dated September 174). In the same letter Smith recorded that he had 'thought a great deal upon this subject; and had 'enquired very carefully in to the constitution and history of several of the principal universities of Europe'. Smith's mature reflections on the subject of education may well have been prompted by his correspondence with Cullen.

Smith added yet another point which will be of interest to the modern reader. If the 'efficiency criteria' which he identified cannot be met through self-regulation or the discipline of the 'market', then the alternative is the involvement of what Smith called 'extraneous jurisdictions' , which present the academic with yet a further problem;

'The person subject to such jurisdiction is necessarily degraded by it, and instead of being one of the most respectable, is rendered one of the meanest and most contemptible persons in the society. It is by powerful protection only that he can effectually guard himself against the bad usage to which he is at all times exposed; and this protection he is most likely to gain, not by ability and diligence in his profession, but by obsequiousness to the will of his superiors, and by being ready, at all times, to sacrifice to that will the rights, the interest and the honour of the body corporate of which he is a member' (WN, V.i.f.9).

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\* Materials used in this paper are drawn from Chapters 1, 2, 3 and 8 of the author's **System of Social Science** (2<sup>nd</sup> ed, 1996, OUP), although their use differs in purpose.

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