

Ethics and Economics in Adam Smith's Very Early Works, Lectures, and Correspondence

Part I

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ABSTRACT

This paper utilizes the ethics and economics framework developed elsewhere (Alvey 2014 forthcoming; Alvey 2011; Alvey 2005). It is part of a sequence of papers re-examining Adam Smith *oeuvre*.

The ethics and economic framework is presented in summary fashion in the first substantive section. The framework has eight themes: an ethics-related view of motivation; functionings and capabilities; social achievement; agency; freedom; rights; "just price"; and ethical methodology.

This framework is then put to use in re-examining Smith's early works, lectures, and correspondence (which are arranged in roughly chronological order). It seems reasonable to call the 1740s and early 1750s the very early period of his life (Smith published the *Theory of Moral Sentiments* in 1759). This period provides useful foundations for his mature works.

The structure of the paper is as follows. After some introductory comments, Section 2 sets out the ethics and economics framework. This framework is then put to use in examining four early works by Adam Smith. Section 3 examines "Of the External Senses" (1740-44). Section 4 reviews his famous essay on the "History of Astronomy" (1746). Section 5 scrutinizes the two other historical essays which were designed as companions to the astronomy essay (1746-51). These were on 1) physics and 2) logic and metaphysics: "History of Ancient Physics," and the "History of Ancient Logics and Metaphysics." Section 6 provides some concluding remarks.

Keywords: Adam Smith; ethics and economics; Amartya Sen; functionings; social achievement.

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1. INTRODUCTION

This paper utilizes the ethics and economics framework developed elsewhere (Alvey 2014 forthcoming; Alvey 2011; Alvey 2005). It is part of a sequence of papers re-examining Adam Smith *oeuvre*.²

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This framework is then put to use in re-examining Smith’s early works, lectures, and correspondence (which are arranged in roughly chronological order).³ It seems reasonable to call the 1740s and early 1750s the very early period of his life (Smith published the *Theory of Moral Sentiments* in 1759). This period provides useful foundations for his mature works. This paper considers four early works: “Of the External Senses,” the “History of Astronomy,” the “History of Ancient Physics,” and the “History of Ancient Logics and Metaphysics.” These were all posthumously published essays.

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2. THE ETHICS AND ECONOMICS FRAMEWORK

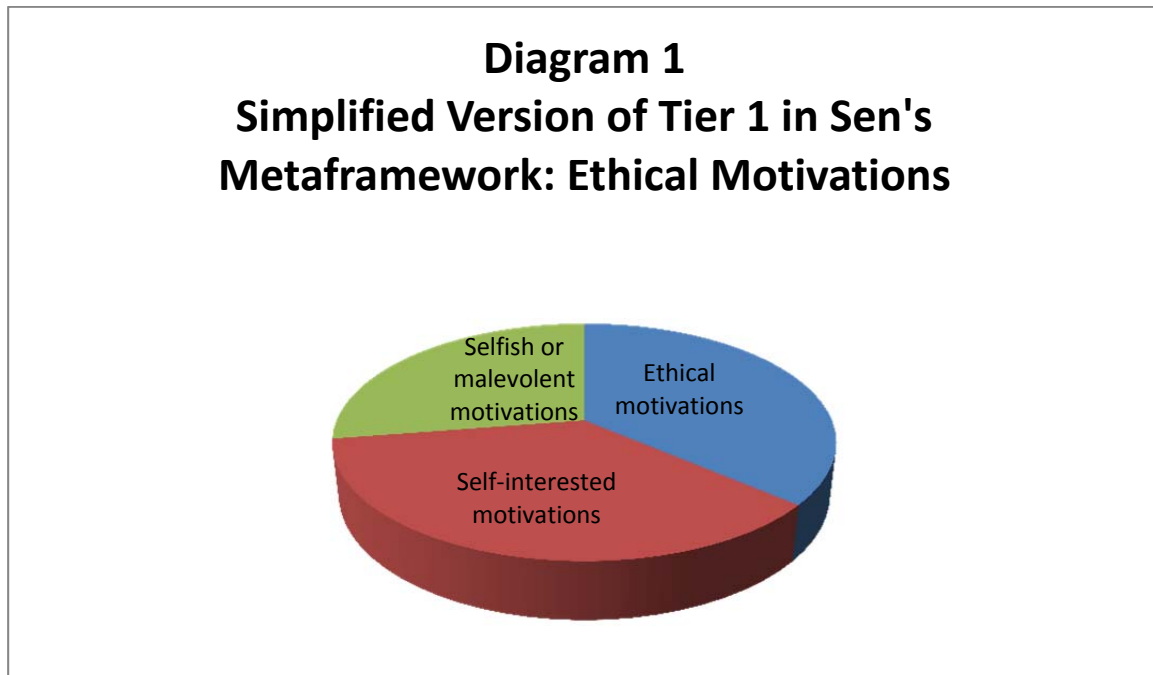
The framework for ethics and economics for this paper builds on the work of Amartya Sen. The next sub-section develops Sen’s framework. The following sub-section describes my expanded framework.

² Abbreviations from primary sources are as follows: Smith’s *The Correspondence of Adam Smith* = *Corr*; Smith’s *Essays on Philosophical Subjects* = *EPS*; Smith’s “History of Astronomy” in *EPS* = *HA*; Smith’s “History of the Ancient Logics and Metaphysics” in *EPS* = *HALM*; Smith’s “History of the Ancient Physics” in *EPS* = *HAP*; Smith’s “Considerations Concerning the First Formation of Languages” in *LRBL* (see below) = *Languages*; Smith’s *Lectures on Rhetoric and Belles Lettres* = *LRBL*; Smith’s “Of the External Senses” in *EPS* = *ES*; Smith’s *Theory of Moral Sentiments* = *TMS*; Smith’s *Wealth of Nations* = *WN*; Stewart’s “Account of the Life and Writings of Adam Smith, LL.D.” = *Life*. Citations from Smith follow the practice adopted by the editors of the *Glasgow Edition of the Works and Correspondence of Adam Smith*, followed by the relevant page number (i.e. *The Wealth of Nations* Bk. I, Chap. X, sect b, para 2 = *WN* I.x.b.2, p. 117). In the references to other primary sources the usual citation conventions are adopted followed by the relevant page number. For Smith’s correspondence, the letter in the *Corr* will be cited followed by the relevant page number. Spelling and punctuation have been revised/modernized in many cases.

³ For the chronology, I have used a number of sources. I have used my own judgment in some cases.

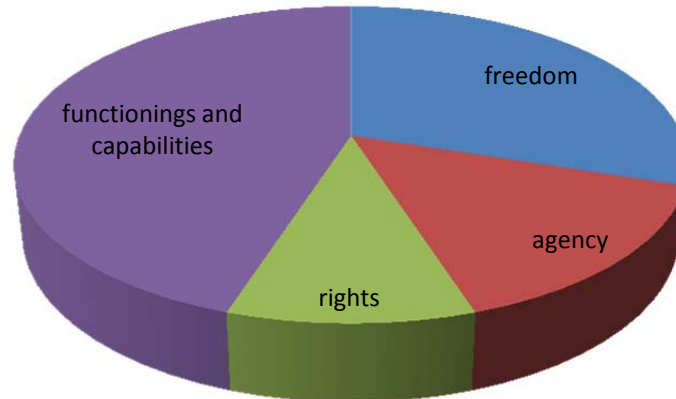
2.1 Sen's Framework

Sen's approach is clearly plural. Depicting Sen's work diagrammatically is difficult but any representation of it would need to include at least the following frameworks: ethical motivations; functionings and capabilities; social achievement; freedom; agency; and rights. In addition, a wider view of human motivation is assumed than is standard in economics: ethical motivations are admitted. Indeed, ethical motivations are the basic foundation of the whole metaframework. In what follows, I depict Sen's metaframework of ethics and economics in three tiers.



The first tier of Sen's metaframework (see Diagram 1) refers to the motivations of individuals. The starting point here is Sen's rejection of the mainstream economic view that all motivations can be reduced to self-interest. Sen says that earlier thinkers, such as Aristotle, were on the right track: ethical motivations, such as "duty, loyalty and goodwill," do exist (Sen 1987, p. 18; 1997, p. 13). Sen concludes that: "ethical deliberations cannot be totally inconsequential to actual human behaviour" (1987, p. 4). Although it is not explicit in Sen's work, we can distinguish between several broad categories of motivations: "the ethics-related view of motivations," self-interested motivations, and malevolent motivations.

Diagram 2
Simplified Version of Tier 2 in Sen's
Metaframework



In the second tier of Sen's metaframework there are a diverse range of considerations. In some works Sen emphasizes one item and in other works he focusses on another. Let us comment briefly on the most important ones.

a) Functionings and Capabilities

Sen's first clear statement of functionings and capabilities is provided in Sen 1980. Sen explains that his concept of functionings is a development from the work of Aristotle, Adam Smith and Karl Marx. Functionings "can vary from the most elementary ones, such as being well-nourished, avoiding escapable morbidity and premature mortality, etc., to quite complex and sophisticated achievements, such as having self-respect, being able to take part in the life of the community, and so on" (Sen 1992, p. 5; see 1993, p. 36-7).

"A functioning is an achievement, whereas a capability is the ability to achieve" (Sen 1986, p. 48). Fasting is the standard example that Sen gives to bring out his distinction between functionings and capabilities (1986, p. 49; see 1993, p. 45). Even if the "achieved functionings" of "the rich person fasting" is the same as the poor person starving, they "differ in their capabilities" (Sen 1993, p. 45).

b) Agency

For Sen, the agent is the individual but viewed from a wide perspective. He states that "An agent does things and also views actions and outcomes" (Sen 1982, p. 21). Agency includes "valuing the various things he or she would want to happen, and the ability to form such objectives and to have them realized" (Sen 1987, p. 59). The agent forms "goals, commitments, values, etc" and acts to fulfil them (Sen 1987, p. 41). The latter is also part of agency; it includes responsibility for one's own actions (Sen 1985, p. 183). When we recognize and respect the person's ability to form such goals and take action commensurate with them, we see the person through the lens of agency.

c) Freedom

For Sen, freedom is “valued” not merely because it contributes to “achievements,” such as well-being, but “because of its own importance” (1987, p. 60; 1993, p. 39; 2009, p. 18). He focusses on positive freedom (the freedom to achieve certain things) rather than negative freedom (freedom from constraints). Because Sen concentrates on positive freedom, it makes sense for him to claim that “human capabilities constitute an important part of individual freedom” (1993, p. 33).

While freedom can be viewed in this broad homogeneous manner, it can also be viewed as a plural concept. It turns out that there are many types or aspects of freedom; it is “an irreducibly plural concept” (Sen 2002, p. 585 see p. 658). Sen refers to personal liberty; political freedom; the process aspect of freedom; and the opportunity aspect of freedom.

d) Rights

Sen also sees a need to recognise rights to some degree. Once again this forms part of his critique of mainstream economics. Sen claims that rights may have an instrumental value but they also have importance for their own sake. In assessing states of affairs, “the value of right fulfilment and the disvalue of right violation” has to be taken into account (Sen 1987, p. 73).

As shown in Diagram 2 above, Sen primarily adopts the functionings/capabilities framework but modifies this with things such as freedom, rights, and human agency. Even though the functionings/capabilities framework is inherently a plural one, by admitting the relevance of other things, Sen multiplies this plurality. While this tier of the metaframework is dominated by functionings and capabilities, freedom makes a large contribution (as shown in the diagram).



Social achievement may be considered as the top tier of Sen's metaframework (see Diagram 3 above). Social achievement is an evaluation of "the good" which is broader and "more fully ethical than just efficiency" (Sen 1987, p. 4). For Sen, it represents some benchmark of acceptable performance for the society in terms of delivery of functioning achievements. In *On Ethics and Economics* the concept refers to distributive justice.

It may be better, however, to refer to social achievement as a mosaic representing how society as a whole is doing in the light of the achievements, freedoms, and rights of various individuals within the society. As there are many individuals to be considered, and multiple types of evaluation, we would expect to see a sort of patchwork, as show above. A set of ethical judgments is implicit here. Consider the choice of items evaluated and the weighting given to the items. In addition, ethical judgments are required concerning the proportion of the population required for success in the evaluation of any item.

2.2 The Expanded Framework

Here I present my expanded framework for ethics and economics. In addition to the six themes from Sen's metaframework presented above, I have added two themes that were included in Alvey 2011.

a) Ethical Methodology

There are two traditions in economics: the ethical tradition and engineering. In modern economics the engineering tradition is dominant. This makes heavy use of mathematics, which is indifferent to ethical ends. An ethical methodology has two characteristics. First, a "moral science" adopts a method which is consistent with moral or human concerns, distinct from the natural sciences. The engineering approach seems to fit better with the natural rather than the moral science methodology. Second, a "moral science" is concerned that the study contribute to moral ends.

b) Just Price

The final theme is a notion of a "just price." The ancient Greeks were among the first to investigate notions of market justice, notably in the just price doctrine. Such doctrines continued through the Scholastics and others for one and a half millennia. Even though the position of the Scholastics was in decline by the time of the Scottish Enlightenment, we need to keep in mind that economists may have developed a view, at least implicitly, in the just price tradition.

We now put the framework to use in examining some early works of Adam Smith. Seven of Smith's essays were preserved by his literary editors and published in the *EPS* in 1795. The four essays considered below were all published for the first time in that book.

3. OF THE EXTERNAL SENSES (1740-44)

Let us begin by considering “Of the External Senses” (*ES*). Raphael and Skinner (1980, p. 16) assume that it was written very early, before Smith started reading Hume. We know that he was reading Hume at Oxford (1740-46). Wightman says that it is “probable that he [Smith] wrote the essay before digesting Hume’s *Treatise* ... or even before becoming closely associated with Hume,” which was prior to 1752 (Wightman 1980, p. 133; see Stewart I.13, 1980, p. 273). Long (2009) suggests that the essay should be attributed to the period 1740-44.

Starting with touch, Smith discusses the five senses. He considers the situation in which two parts of the body (i.e. the hand and the foot) touch each other. Smith says that the person concerned feels them “as parts of himself” and consequently “for his own happiness and comfort, it is necessary that he should take some care of” them (*ES* 5, p. 136).

Next, Smith turns to the touch of one’s hand on another human or animal. In this context, he makes a number of important statements. Smith refers to the “fellow-feeling which Nature has, for the wisest purposes, implanted in man, not only towards all other men, but (though ... in a much weaker degree) towards all other animals” (*ES* 7, p. 136).⁴ He immediately adds that “Having destined him [i.e. man] to be the governing animal” on Earth, “it seems to have been her [i.e. Nature’s] benevolent intention to inspire him [i.e. man] with some degree of respect, even for the meanest and weakest of his subjects” (*ES* 7, p. 136). Human beings respect all sentient beings but presumably have greater fellow-feeling for other humans than animals. Here we see one of the foundations for Smith’s ethical view of motivations. (Although Mandeville and Rousseau accept that pity is natural, Smith’s understanding of it differs.)

Smith distinguishes between two sets of people who observe and make theories about causes: “the vulgar” and the “philosophers”; later he seems to refer to “the most ignorant and illiterate” as a sub-set of the vulgar (*ES* 24, 35, pp. 144, 146). Hence, Smith appears to have a very elitist distinction between the ignorant and the knowers, yet he also gives us examples where, despite developing clever theories, the philosophers have no greater understanding than the vulgar (*ES* 21, 24, 35, pp. 141-6). Nevertheless, we will have to keep an eye on his statements over time suggesting elitism or egalitarianism.

Let us return to the senses. According to Smith, the sense of touch is “essential to, and inseparable from, the nature of animal life and existence” (*ES* 49, p. 150). He says that it is unnecessary to consider arguments and conjectures about the effects of “an impossible supposition” i.e. the lack of touch (*ES* 49, p. 150). Smith’s orientation is very much towards the world as it is (a possible exception is his discussion of the solitary in the *TMS* III.1.3, pp. 110-1).

Next, Smith considers the sense of seeing. The size of objects near to us we can judge with great accuracy. This ability is “of utmost importance to us” (*ES* 51, p. 151). By contrast, as the distance from us increases, the accuracy of our judgment gradually declines (*ES* 51, p.

⁴ On Smith’s teleology, see Alvey 2003.

151). It is “seldom of much importance” to be able judge moderate distances correctly (*ES* 51, p. 151). With regard to the precise knowledge of objects at a “very great distance”, precise knowledge only satisfies “the most unnecessary curiosity” (*ES* 51, p. 151). This may suggest a Philistine view of astronomy but Smith shows great interest in this topic (as we will see in Section 4 below).

In elaborating on the sense of seeing, Smith turns directly to the ability to judge distances accurately. There are great differences in this human ability. While birth may occasionally determine the ability to judge distances, he says that the difference in the ability of individuals *frequently* arises “altogether from the different customs and habits which their respective occupations have led them to contract” (*ES* 52, p. 151). Smith immediately distinguishes between the far-sightedness of the mariner and the “men of letters” (*ES* 52, p. 151). Here we see the other side to his elitism (seen above): the great role that Smith attributes to employment/habituation in producing inequalities between human beings. Over the next decade, Smith gradually expands his understanding of, and the role given to, the division of labour in his thought (see Meek 1976; *WN* I.ii.4, p. 29). Nevertheless, even at this embryonic stage, we can see a deeply egalitarian strain in Smith.

The “sense of seeing,” notably knowledge of “distance and situation” about tangible objects surrounding us that the sense provides to us, is essential for “the whole conduct of human life” (*ES* 60, p. 156). The same applies to animals: they would “hurt themselves” without precise knowledge of objects surrounding them and potentially colliding with them (*ES* 70, p. 161). Without the sense of sight “we could neither move, nor even sit still, with complete security” (*ES* 60, p. 156). It is nothing less than “[t]he benevolent purpose of nature” which is at the root of humans happening to have this sense (*ES* 60, p. 156).

Toward the end of the essay, Smith brings together some interesting observations on 1) various senses (the senses of touch, taste, and smell), 2) certain passions/appetites, and 3) pleasure and pain. All of the bodily appetites (e.g. for food and sex) “seem to suggest the means of their own gratification” (*ES* 79, p. 165). Pleasure accompanies the gratification of the appetite and we seem to innately anticipate or preconceive “the pleasure which attends that gratification” long before experiencing it by the senses (*ES* 79, p. 165).

Smith then returns to an earlier discussion on touch, concerning what we now call the sensory system and how it responds to varying temperatures (sensations of heat and cold).⁵ The degree of hotness or coldness may be agreeable or disagreeable to our bodies. Instinctively we move towards the agreeable sensation and away from the opposite. Once again, consistent with his teleology, Smith says that the agreeable has been found to be healthful and the disagreeable otherwise. If either the hotness or coldness “is so disagreeable as to be painful, it is generally destructive [of life] ... in a very short period of time” (*ES* 86, p. 167). This seems to be another aspect of the providential care of Nature.

In summary, we have seen several examples of Smith’s sustained argument about the providential care of Nature. We have also seen some evidence that Smith views humans as

⁵ Of course, the study of thermoreceptors has advanced well beyond what Smith had to say.

conforming to the Hobbesian view of humans as pleasure machines (see Cropsey 1957, p. viii, 2-4, 14). Nevertheless, we also see Smith's foundation for an ethical view of motivations: the innate fellow-feeling for other humans.

4. THE HISTORY OF ASTRONOMY (1746)

Near the end of his life, when Smith ordered the burning of his manuscripts he made a few clear exceptions. One exception was "The Principles which lead and direct philosophical enquiries; Illustrated by the History of Astronomy" (*HA*).⁶ It was of considerable importance to him.⁷ Smith intended it to be part of a series of historical pieces which were to be gathered together, presumably as a book. The *HA*, along with two other related essays, was preserved by his literary editors and published in the *EPS*. Of the three essays, it is the only one which is of "considerable length" (Wightman 1980, p. 5).

Raphael and Skinner suggest that the *HA* was written after the "External Senses" (1980, p. 16). The editor of three of the essays in the *Glasgow Edition of the Works and Correspondence of Adam Smith* (Wightman 1980, pp. 6-7) suggests that the foundations of "The History of Astronomy" were written at Oxford (1740-46) and the remainder completed "before 1758." Long (2009, p. xxiii) claims that the majority of the work was completed by 1746.

4.1 Philosophy of Science

The *HA* is primarily a contribution to sociology of knowledge and the philosophy of science. Today, it is primarily of interest because 1) it developed an argument along the lines developed by Thomas Kuhn in *The Structure of Scientific Revolutions*;⁸ 2) it offered a psychological account for philosophical/scientific⁹ research; and 3) it gives us some insights into Smith's view of human nature (Raphael and Skinner 1980, p. 15; Wightman 1980, p. 7). It is the second and third points that are of interest for us but before turning to these we should clarify some things relevant to the first point.

The appearances in the external world are complex. Philosophy is "the science of the connecting principles of nature"; it endeavours to give coherent explanations for the appearances of nature (II.12, p. 45; see *HALM* 1, p. 119). The search for principles explaining the appearances in nature reaches its zenith in the establishment of a "system." A "system" is the most sophisticated attempt to explain the appearances in nature (something that everyone has to do to some extent as a matter of course). With respect to astronomy, Smith refers to, amongst others, the systems of Aristotle, Apollonius, Hipparchus, Ptolemy, Copernicus, and Newton (IV.8, 27, 30, 38, 41-3, 46, 72, pp. 59, 71, 73, 79-82, 101).

⁶ In this section of the paper all references are to the *HA* unless stated otherwise.

⁷ He even requested that, in the event of his early death, Hume preserve this essay (*Corr* Letter 137, p. 168).

⁸ Smith says that the *HA* is a "short account of the revolutions in philosophy" (IV.18, p. 66).

⁹ Wightman is critical of Smith's indiscriminate use of the term "philosophy" (1980, pp. 12-4).

Systems, Smith says, “resemble machines” (IV.19, p. 66).¹⁰ “A system is an imaginary machine invented to connect together in the fancy those different movements and effects which are already in reality performed” (IV.19, p. 66). In the beginning the machines are complex but later it is discovered that, “with fewer wheels and with fewer principles of motion, than had originally been employed, the same effects may be more easily produced (IV.19, p. 66; c.f. *Languages* 41, p. 223). The same pattern occurs in the development of systems.

Ultimately, and “often,” it is discovered that “one great connecting principle ... [is] sufficient to bind together all the discordant phenomena that occur in a whole species of things” (IV.19, p. 66; see IV.65-6, pp. 96-7). It is this goal of finding a *single* connecting principle to unite all of the phenomena together that is often attributed to Smith when he wrote each of his books (i.e. sympathy and self-interest). Shortly before Smith’s day, Newton gave gravity the central role in his system of astronomy and it explained all of the regular and irregular motions of the heavens then known (IV.67-76, pp. 97-105). It is not surprising that Smith concluded his history of astronomy with a eulogy of Newton: the latter made “the greatest and most admirable improvement that was ever made in philosophy” (IV.67, p. 98). This assessment of Smith’s, which was almost universally shared by others, was based on aesthetic grounds, as well as the more narrowly scientific reasons.

Let us now return to the psychological aspects of Smith’s philosophy of science. The essay proposes some psychological hypotheses about how science originates and develops (or, as Smith put it in the title of his *HA*, “the principles which lead and direct philosophical enquiries”). Because of the complexity of the appearances of nature (mentioned above), we can be left with a sense of confusion or anxiety. To a greater or lesser extent, in our imagination, we seek explanation for the appearances around us. Philosophy, he says, endeavours to give coherent explanation for the appearances of the external world (it is the first step towards creating a “system”). Philosophy, or “the science of the connecting principles of nature”, is “one of those arts which address themselves to the imagination” (II.12, pp. 45-6; see *HALM* 1, p. 119). In this essay Smith returns to the role of imagination¹¹ again and again.¹² Of course, imagination plays a major role in moral judgment in the *TMS*.

In philosophical explanation we are particularly attracted to simple explanations for a wide variety of phenomena. If a theory, or “system” of thought, provides a simple yet reasonably complete account of the phenomena, we may see it as *beautiful* and *admire* it (IV.5, p. 56). Once we begin to observe discrepancies from what we would have expected, however, we experience *surprise* and then *wonder*. It is at this point that we experience *pain* and the need to seek a new, better explanation. This will lead to the development of new theory, or “system” of thought, which will overcome wonder and restore *tranquillity* to our mind. It is “repose and tranquillity of the imagination [which] is the ultimate end of philosophy” (IV.13, p. 61; see II.12; IV.19, 25, 33, pp. 46, 67, 70, 75).

¹⁰ Smith makes extensive use of mechanical analogies. For an early attempt to explain mechanical analogies in Smith, see Alvey 2002.

¹¹ Smith also refers to “the fancy,” which seems to have the same meaning as imagination for him (II.7, IV.7, 13, 15, pp. 40, 58, 62, 64).

¹² II.7-11; III.1; IV.4-5, 7-8, 12-3, 15, 19, 22, 25, 28, 33, 35, 38, 40, 43-4, 51-3, 56-7, 60-1, 65, 67, 74, 76, pp. 41-5, 48, 56, 58-9, 61-2, 64, 66-8, 70-1, 75, 77-80, 82,-3, 86-7, 89, 91-2, 96-8, 103-5.

It would seem that the *pain* of confusion (surprise and wonder) leads us to act.¹³ We continue to act until we have an explanation which reduces or eliminates our pain (i.e. it restores tranquillity). In short, it seems that the acquisition of knowledge is another version of stimulus by pleasure and pain. On the other hand, we can also see Smith's account as a story about the human need for order (Olsen 1975, p. 123). Contrary to what we might expect from the psychology assumed by modern economists, Smith says that what prompts human beings to study philosophy is wonder, "not any expectation of advantage" (III.3, p. 51).

In summary, Smith posits certain psychological characteristics of a common human nature. We are attracted by pleasure and avoid pain. In philosophical explanation we seek aesthetic/psychological features and scientific features. With regard to the former, the "natural taste of mankind," we look for beauty, proportion, perfection, regularity, constancy, harmony, simplicity, uniformity, order, coherence, familiarity (or what is agreeable to experience), and ease of conception.¹⁴ Note that the last two mentioned features have to do with "the effort of the imagination in conceiving" the thing (IV.57, p. 89; see IV.67, p. 98). Most of these features (including harmony and order) are sources of pleasure. With regard to the more scientific criteria, we seek correspondence with appearances and predictive success (IV.16, 27, 30, 43, 54, 69, 72-6, pp. 64-5, 71, 73, 82, 87, 100-5).

4.2 Two Types of Observers

We have seen that philosophy tries to explain the appearances of natural phenomena. The first step, therefore, is observation. Let us return to the theme of elitism that was mentioned in Section 3. In the *HA* Smith says that observers fall into two categories: precise observers and those who ignore minor details. He gives both the expected elitist account, and a very surprising Kuhnian account, of those who ignore minor problems with their understanding of things (Kuhn 1970).

With respect to the elitist account, Smith distinguishes between the philosopher and the "greater part of mankind" (IV.6, p. 57). The latter is associated with mass opinion and is satisfied if a general account of things (e.g. the movement of the stars) is provided (IV.6, p. 57). Most people "slur over" and "take little notice of" flaws or complexities (IV.6, p. 57; see IV.53, p. 87). The philosopher, however, is less easily satisfied and is led to inquire into even minor flaws in an account of the appearances of nature.

Smith gives a second account of those who "slur over," or even failed to notice, certain difficulties with their understanding of nature. He gives several examples which show that it is actually the learned who "slur over" difficulties (IV.53, p. 87; see IV.43, 66, pp. 82, 97) or refuse to even consider evidence that might make them give up their "system" of thought (IV.18, p. 65). This is because they are committed to an existing "system" (i.e. what Kuhn

¹³ Elsewhere, somewhat contradicting the above account, Smith says that philosophy is pursued "for its own sake, as an *original pleasure*" without regard to any instrumental role that discoveries may have in procuring other pleasures (III.3 emphasis added, p. 51 emphasis added).

¹⁴ IV.56; p. 89; see III.6; IV. 5, 7-8, 13, 15, 25, 27-8, 30, 32-3, 35, 43, 50-2, 54-7, 65, 67-8, 75-6, pp. 52, 56-9, 61-3, 70-1, 73-6, 82, 85-9, 96, 98, 103-4.

[1970] calls a “paradigm”) and “prejudices” prevent them from breaking out of it (IV.55, p. 88; see IV.18, 20, 22-3, 35, 41, 54-5, pp. 65, 67-9, 76-7, 80-1, 87-9). Evidence contrary to what would be expected in one “system” of thought may lead to revision of the existing “system” (or sometimes the merging of this “system” with another existing “system”) but rarely to replacing that “system” with a new alternative (IV.5, 7, 25, 42-3, 55, 73, pp. 56-9, 69-70, 81-2, 87-9).¹⁵ Nevertheless, completely new “systems” do emerge occasionally (IV.4, 8, 14, 27, 67, pp. 55, 59, 62, 71, 98). These episodes Smith calls “revolutions of philosophy” (IV.18, p. 66). In the 1960s/1970s Kuhn popularized the notion that a scientific “revolution” established a “paradigm” within which later research was conducted but this idea was clearly anticipated by Smith.

4.3 The Origins of Philosophy/Science

Smith also presents a fascinating story of the origins of philosophy. It is here that Smith incidentally gives us some insights into his larger view of human history.¹⁶ “[T]he first ages of society” were prior to “the establishment of law, order, and security” (III.1, p. 48). Not only is “subsistence ... precarious” for the “savage” but the latter is “exposed and defenceless” in the face of daily threats to life and limb; he or she is in a constant state of fear (III.1, p. 48). In this context it is hardly surprising that these early humans have little curiosity in philosophy (i.e. rendering “the theatre of nature a more connected spectacle to his imagination” [III.1, p. 48]). Indeed, Smith refers to the “impotence of mind” of the savages (III.2, p. 48). In other words, whatever advantages there are in the first ages of the world, these must be offset by strongly negative features. (This view is in clear opposition to that of Rousseau in the *Second Discourse*, as we hope to show on another occasion).

While many of the “irregularities of nature” are frightening, some are “beautiful and agreeable” (III.2, p. 48). The latter would be beheld with “love” (III.2, p. 48). It is this context that Smith makes the more general claim that “whatever is the cause of *pleasure* naturally excites our gratitude” (III.2, p. 48 emphasis added). There is a spontaneous desire for *reciprocity*. The savage is “guided ... by wild nature and passion” without any knowledge or reflection on whether the things causing pleasure “are the proper objects of reverence and gratitude” (III.2, p. 49). Some irregularities in nature produce gratitude but others produce fear. These primal emotions, Smith suggests, are the origin of polytheism. “[S]uperstition supplied the place of philosophy” (III.2, p. 50). This is the context for life in the first ages of the world but there is an escape path from it.

If certain conditions are met, superstition and ignorance can be challenged by knowledge and the mind can begin to develop, along with philosophy. First, it is law which establishes “order and security” and these, in turn, allow subsistence to become more abundant (III.3, p. 50). In this environment “fears are diminished” and leisure is possible (III.3, p. 50; see IV.21, p. 67). Together, these improved circumstances awaken curiosity, in particular, a

¹⁵ In the case of Descartes, Smith says that the former did not pay attention to small details even when he created his new system (IV.66, p. 97). In the case of Newton, however, his system paid attention to “all the constant irregularities which astronomers had ever observed” in the motions of the heavenly bodies (IV.67, pp. 97-8; see IV.68-76, pp. 99-105). Newton’s system has introduced “complete coherence into the motions of the heavenly bodies” (IV.74, p. 103).

¹⁶ On Smith’s view of history, see Alvey 2003, Chapters 3 and 6.

greater desire to know how things fit together (i.e. people begin to philosophize). In “civilized societies,” all those with “generous natures” acquire “*magnanimity* and cheerfulness”; the greater “strength and security” of their condition renders them less likely to attribute the connecting chain between “seemingly disjointed phenomena” to capricious “invisible beings” (III.3, p. 50 emphasis added). Hence, Smith assumes that economic development produces moral improvement and a more patient, sober and cautious approach to offering explanations for unexpected phenomena.

Second, philosophy requires freedom. Despotism, Smith says, is “more destructive of security and leisure than anarchy itself” (III.4, p. 51). The context suggests that anarchy applied in the early ages of the world. Later, he refers to the collapse of the Roman empire and the “subversion of all law and order” (IV.21, p. 67). Anarchy led to the termination of the “cultivation of the sciences.” Despotism, therefore, must be an even greater impediment to the maintenance and development of the sciences. Maintaining the sciences seems to require a sort of freedom (but certainly not anarchy).

Third, Smith also says that extreme poverty leaves “no room for any evident distinction of ranks” (III.5, p. 51). Wherever there is the absence of “regular subordination,” there is “confusion and misrule” (III.5, p. 51). The absence of a class system is a type of anarchy (with the same negative effects on the sciences). In other words, there must be some degree of inequality, along with some system of classes, before philosophy can flourish.

In this part of the essay, Smith is building a case for two things. First, an “improved human mind” must be included in any list of human functionings. Second, this functioning was entirely missing in the early days of the world; it develops over time as certain preconditions are met (order, security, distinction of ranks) and other impediments are removed (poverty, despotism, and anarchy). Creating a suitable environment for the development of the human mind must be a priority. Overall this part of Smith’s essay is compatible with the ethics and economics framework. Nevertheless, Smith’s argument is not as egalitarian as Sen would wish (especially Smith’s view of the class system). Smith places more weight on order than Sen does in his writing.

4.4 Development of Philosophy/Science

Having seen a little of Smith’s view of the origins of philosophy, let us turn to its development over time. Smith gives two sorts of accounts of the development of philosophy/science. First, he gives an account of the development of astronomy (and in two other essays, as we will see in Section 5 below, he discusses the development of two other fields). The main point to note here is Smith’s panegyric of Newton and the development of the Newtonian system (IV.67, 72, 74-6, pp. 97-9, 101, 103-5). Second, he gives an account of the overall development of philosophy. The latter is our primary concern.

As a Christian training for the Ministry at Oxford,¹⁷ Smith is surprisingly generous in his assessment of the Arab Empires in the Medieval period (IV.21-2, pp. 67-8). The Caliphs provided the conditions that allowed the translation and study of the ancient Greek philosophers. Not only did the Arabs preserve the ancient Greek philosophy (notably Aristotle's) but, as a result of their conquest of Spain (beginning in 711 AD), that philosophy was returned to Europe after it had died out there (IV.23, p. 69). Smith referred to the Caliphs (presumably the Abbasid Caliphate [IV.22, p. 68]) as "generous and magnificent" and the government of "their vast empire" as "mild, just, and religious" (IV.21, p. 67). The overthrow of the Caliphs led to the collapse of the sciences in those lands (IV.22, p. 68). While "mild" may have been a hasty judgement of the Caliphs (particularly on religious toleration), it does fit with Smith's view that despotism also crushes philosophy (see above).

4.5 Miscellaneous Points

After three preliminary Parts, in the final Part of the essay (i.e. Part IV) Smith finally turns to the history of astronomy itself. This Part was a sort of case study based on the earlier discussion but it did add some extra points. Here we focus on five points, which occur in various Parts of the *HA*.

First, the early philosophers who gave an account of astronomy presented their theories in "secrecy" because their mechanical accounts of nature ran counter to the mass religious opinion of the people (IV.4, p. 56). The philosophers feared the accusation of "impiety" which would follow from denying the gods direct control over the movements of the Sun, the Moon, and the stars (IV.4, p. 56). Any charge of impiety would be quickly followed by "the fury of the people" (IV.4, p. 56; see IV.34, p. 76). Here we see a very early indication of Smith's awareness of the dangers of offending popular opinions on religion.

Second, in this essay Smith makes his first known reference to the "invisible hand." Actually, it is peculiar reference to the "invisible hand of Jupiter," the king of Roman gods (III.2, p. 49).¹⁸ It occurs in the context of polytheism. In the ancient religion, only "irregular events of nature ... are ascribed to the agency and power of the gods" (III.2, p. 49). It is the "irregular events," such as thunder and lightning, storms and sunshine" that were attributed to his favour or his anger (III.2, p. 49). This feature of the Roman god bears no relationship to Smith's later versions of the "invisible hand" in the *TMS* and *WN*. I will not comment on it further because it does not bear on our theme of ethics and economics.

Third, Smith goes part of the way towards Sen's position (Sen 1987, pp. 45-7) about the inequity of the metric of pleasure (it discriminates against those who desire little because they are used to having little). He says that "Those who have been unfortunate throughout the whole course of their lives are often indeed habitually melancholy" (I.9, p. 37). Habit and

¹⁷ Smith certainly lost interest in becoming an ordained priest but his commitment to Christianity is more complex. Consider his closeness to his pious mother, his religious obligations at Glasgow University, and his friendship with Hume.

¹⁸ For further discussion of this version of the "invisible hand," see Macfie 1971, Persky 1989.

custom have important effects. “Custom deadens the effects of both pain and pleasure” (I.10, p. 37). “[C]ustom and frequent repetition ... form and bend the mind ... to that habitual mood” which fits it to receive the event “without undergoing any violent change” (I.10, p. 37). The “fortunate and successful,” however, experience much greater variations in emotions (rage and grief) (I.9, p. 37). As we hope to show on another occasion, Smith rejects utilitarianism but does not develop the point discussed above into an argument against utilitarianism; Sen can be seen as extending Smith’s argument here.

Fourth, we are also told about the “security and sublimity” of the “moral doctrines” of the Stoics (IV.14, p. 62). Smith’s strong sympathies for the Stoics become clearer in the *TMS*. Finally, several points are mentioned with regard to love. For example, when lovers quarrel there is extreme resentment; when they reconcile love is passionate (I.7; p. 36). This is part of his larger argument for the importance of love as a human functioning.

4.6 Conclusion

What are we to conclude from this essay? First, even in this account of the chief principles which “lead and direct philosophical enquiries” we can see an early example of the stress typically placed by Smith on the “sentiments” or “passions.”¹⁹ Second, we can find some evidence here for a sort of hedonic theory (see Raphael and Skinner 1980, pp. 3, 6). Nevertheless, this is not the dominant theme of the essay. Third, Smith gives us clear evidence of his view of human functioning and social achievement. Attaining some degree of knowledge is an important step towards improving the human mind. The gross ignorance of individuals in the first ages correlates with 1) the “impotence” of the human mind and 2) ready acceptance of superstitions. Clearly there was a massive functioning shortfall at this time. The fully-fledged philosopher is one who has an inquiring mind and brought his knowledge to a high level. The development of the mind in the philosopher represents a high level of achievement in this functioning. Fourth, in their gross ignorance, superstition and lack of mental development, societies of the first ages were profound failures (at least in terms of these three fundamental aspects of social achievement). Fifth, there is evidence of Smith’s stress on freedom, at least as a means.

5. THE HISTORY OF ANCIENT PHYSICS; AND THE HISTORY OF ANCIENT LOGICS AND METAPHYSICS (1746-51)

The “History of Astronomy” was clearly intended to be the first in a series of historical essays on “the Principles which lead and direct philosophical enquiries.” We now turn to two essays that were part of the set and clearly designed to accompany the astronomy essay: “The History of Ancient Physics” (*HAP*) and “The History of Ancient Logics and Metaphysics” (*HALM*). According to Wightman, “any precise dating” of these essays is impossible (Wightman 1980, p. 9). Long (2009), however, places both works in the period 1746-51.

¹⁹ The focus of the *HA* is on the sentiments but this is not the complete account of scientific explanation; Smith says that he is largely abstracting from the explanation’s “absurdity or probability, [or] their agreement or inconsistency with truth and reality” (II.12, p. 46; see intro.7, p. 34).

Unlike the “history of astronomy,” each of these essays is very brief and limited to the ancient world.

Let us consider the *HAP* first. What is most relevant here is Smith’s remarks extending the *HA* comments on the origins of philosophy/science. He repeats the view that “the first ages of the world” were characterized by “ignorance and confusion of thought” (*HAP* 9, p. 112). “[P]usillanimous superstition” ascribed virtually all unexpected events “to the arbitrary will of some designing though invisible beings” who acted for their own inscrutable reasons (*HAP* 9, p. 112). It was only gradually that a more sober, rational account emerged of a “universal mind, of a God of all, who originally formed the whole, and who governs the whole by general laws, directed to the conservation and prosperity of the whole, without regard to that of any private individual” (*HAP* 9, p. 113). Anaxagoras (510-428 BC) was the first philosopher “who supposed that mind and understanding were requisite to account for the first origin of the world” (*HAP* 9, p. 113).²⁰ God or gods came to be seen as embodying reason rather than capricious passion. There are two paths available at different stages of history: 1) at the early stage of history “ignorance begat superstition” but 2) at a much later time, “science gave birth to the first theism” (*HAP* 9, p. 114). The development of theism, a more rational account of things, was more consistent with sound functioning of the human mind (*HAP* 9, p. 114). Good development of the mind is a fundamental functioning of individuals and Smith uses this as a benchmark in grading the first ages of the world as failures in terms of social achievement.

Now let us turn to the *HALM*. In discussing what science is, Smith reveals some fundamental aspects of his understanding of science and human nature. Things of a “fleeting” nature cannot be “the objects of science” (*HALM* 2, p. 121). To put it another way, “The objects of science, and of all the steady judgments of the understanding, must be permanent, unchangeable, always existent, and liable neither to generation nor corruption, nor alteration of any kind” (*HALM* 2, p. 121). Where does this leave the study of human beings? Smith answers as follows:

Man is perpetually changing every particle of his body; and every thought of his mind is in continual flux and succession. But humanity, or *human nature*, is always existent, *is always the same*, is never generated, and is never corrupted. (*HALM* 2 emphasis added, p. 121 emphasis added)

Two conclusions follow. First, human nature is fixed and a suitable “object of science, reason, and understanding” (*HALM* 2, p. 121). At this stage of his life, Smith rejects theories of human plasticity or evolution (e.g. evident in contemporaries such as Rousseau and Monboddo but fully developed later by Darwin). We will have to keep an eye on whether he adopts a quasi-evolutionary social theory in later works (notably the *WN*). Second, Smith never suggests that men and women are fundamentally different versions of human nature (Gray 1992).

²⁰ Elsewhere, Smith says that Plato (427-347 BC) was writing at “the very first dawning of science” (*HALM* 5, p. 125).

Overall, in these essays, we see reinforcement of the themes in the *HA*. We also see that Smith accepts that there is a fixed human nature and good human functioning includes development of the human mind. Further, theism is more consistent with good human functioning than polytheism.

6. CONCLUSION

In this paper I have used my framework for ethics and economics (developed previously) to re-examine four of Smith's very early works. What are we to conclude from these essays that were considered above?

Smith repeatedly argues that there is evidence for the providential care of Nature. He accepts that there is a fixed human nature. Once one adopts this view of human nature, one must accept that there instincts and that they play an important role. In addition, a fixed human nature gives weight to the view that Smith accepts that there are a set of human functionings which exist and can be used in evaluation of how well individuals and societies are doing.

What type of human motivations does Smith discuss? We have seen some evidence that Smith views humans as conforming to the Hobbesian view of humans as pleasure machines. Nevertheless, we also see Smith's foundation for an ethical view of motivations: the innate fellow-feeling for other humans.

What does Smith tell us about human functioning and social achievement. First, attaining some degree of knowledge is an important step towards improving the human mind. The gross ignorance of individuals in the first ages correlates with the "impotence" of the human mind and ready acceptance of superstitions. Clearly there was a massive functioning shortfall at this time. The fully-fledged philosopher is one who has an inquiring mind and brought his knowledge to a high level. The development of the mind in the philosopher represents a high level of achievement in this functioning. Second, theism is more consistent with good human functioning than polytheism. Third, in their gross ignorance, superstition and lack of mental development, societies of the first ages were profound failures (at least in terms of these three fundamental aspects of social achievement).

Finally, we have some early evidence of Smith's stress on freedom. At this stage, however, the focus is on freedom as a very important means.

In a future paper (i.e. Part II of the sequence of papers on Smith's early works), I propose using the ethics and economics framework to deal with several more early works of Smith plus his early correspondence.

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