

ADAM SMITH, NEWTONIANISM AND POLITICAL ECONOMY

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I

Adam Smith's contribution to the political economy has received several different interpretations. A significant point in every interpretation of Smith's work has been assessing the method he followed. To avoid the shortcomings and arbitrariness existing in the literature, it is necessary to examine Adam Smith's social theories and compare them with the scientific method held by Smith himself and by his intellectual milieu.

Before examining his ideas on method and his actual practice, Let us recall the different views on the meaning of his work. According to the critical literature of the 19th century, *The Wealth of Nations* is considered to be a system in which the attempt is made to deduce facts from certain principles held to be absolute, first of all from a Hobbesian-Mandevillian idea of human nature, according to which everyone seeks only his private benefit and yet by a kind of providential determinism collective welfare is produced as an unintended result.

On the contrary, the literature of the 20th century has created the image of Adam Smith as an "empirical scientist", at first in *The Wealth of Nations* only, and then in *The Theory of Moral Sentiments* as well, considered to be social psychology more than ethical theory¹. The latest organic interpretation of Smith's work, that of Ralph Lindgren, tries to rescue Smith

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¹ On the history of Adam Smith's interpretation, see D.D. Raphael & A.L. Macfie 1976. The classical example of an empiricist interpretation is H.J. Bittermann, 1940. Some more recent literature has contributed to a better interpretation of Smith's work by stressing the importance of Smith's writings on method. See H.P. Thompson 1965; J.R. Lindgren 1973, ch. 1; A.D. Megill 1975.

from undue modernisation. According to this interpretation, his theoretical attitude is the same in both works. It is not an empiricist attitude but rather a “value-laden” and “critical” one: Smith, as an economist, was trying to formulate – rather than a theoretical system to be contrasted with others, a systematic critique of the economic systems of his time, similar to the Marxian critique of political economy. This critique relied on certain ethical principles. Smith’s theoretical aim was to show how an organisation of economic life based on historically given rules of justice was possible and beneficial for a more efficient functioning of economic life. Smith’s work is “social philosophy” rather than “social science”².

The problem with Lindgren’s interpretation is that it is too much a forced modernisation like the preceding ones. As far as it contrasts “science” with “philosophy,” it is bound to leave aside central evidence, such as that about Smith’s Newtonianism.

This paper will support an alternative interpretation:

1) Smith’s theory of Method is explicitly Humean-Newtonian. According to this conception, theories are “imaginary machines”.

2) His methodological theory enables him to develop various autonomous theories inside the field of Moral Philosophy, i.e., a theory of morality, a theory of government, and a theory of economic life. In these theories, the theoretical effort focuses on reducing the complex to the simple rather than on the search for the ultimate principles of reality.

3) His theoretical practice in Economics goes beyond what Smith’s statements on Method can account for. The Newtonian tenets, and more generally, the common presuppositions of “new science,” both Cartesian and Newtonian, play a negative role by obscuring the active constitutive role of the theory concerning the subject matter.

4) Economic theory’s subject matter has an ultimately problematic relationship with human nature, consisting of the whole range of human passions interacting among them.

II

Thanks to his early philosophical writings, particularly *The History of Astronomy*, we can gain an understanding of Adam Smith’s methodological and epistemological doctrines. Smith’s original life project was to write three works: a “philosophical history” of sciences and arts, a theory of ethical rules and judgements, and a theory of State and Law.

The first project was never accomplished, so we only have several preparatory materials. The most interesting is *The Principles which Lead and Direct Philosophical Enquiries* illustrated by the *History of Astronomy*. Two other

² J.R. Lindgren 1973. For the relationship between moral philosophy and specialised social theories in Smith and his contemporaries, see S. Cremaschi 1981.

essays on the history of ancient physics and ancient logic and metaphysics are also available.

The essays originated mainly from lectures at Edinburgh's Clubs during the 1740s. The debate that these lectures belong to extends through the 30s and 40s in Edinburgh. Hume's *Treatise* had recently appeared. Smith became a close friend of Hume, and there is evidence that his philosophical views were deeply influenced by the "old true Humean philosophy"³. Even though Smith's essays are not comparable with Hume's philosophical writings, they are interesting for the study of Smith's later works in social theory in so far as they lead us to revise the traditional image of him as a dogmatic, metaphysical and deductive social theorist found in the literature of the 19th century. The essays aim at shaping a kind of history or genealogy of the doctrines in various branches of learning, following a path that Locke had already walked. This reconstruction eventually accounts for the leading principles of "scientific discovery" to build a metatheory of Natural Philosophy and First Philosophy (*i.e.*, in a Lockean spirit, of logic and metaphysics together). Following Locke and Hume, the "science of human nature" is regarded as the discourse that provides the ultimate foundation for both the validation of theories and the research method in every branch of knowledge. The essay on the history of astronomy is composed of a first part showing how Philosophy, *i.e.*, the science of the connecting principles of nature", is "one of those arts which address themselves to the imagination"⁴, because explanation means filling in the gaps perceived by the imagination between phenomena so that the imagination is relieved of the unpleasant passions excited by the perception of these gaps in the flow of phenomena.

A second part of the essay consists of the actual history of Astronomy: it is a reconstruction of the process by which different systems have tried to account for the heavenly motions, up to the Newtonian system. The Newtonian system is declared the best imaginary machine ever created by the human mind to fill in the gaps between phenomena that puzzle our imagination with a maximum degree of simplicity, coherence, comprehensiveness and familiarity.

From this essay, we can reconstruct the following main theses on Method:

1) Theories or systems of natural and moral philosophy are "imaginary machines" hypothetically existing behind the phenomena. These imaginary machines provide the chain connecting the phenomena that appear to us as disjointed and thus enable the imagination to visualise reality as a coherent whole.

2) In building imaginary machines, we introduce, by way of analogical procedure, *principles* which we had a chance to see working in one instance or another, where we could observe the agent working rather than the mere effects of the agent's action. Such instances belong to the domain of *human activity*: on the one hand, technology for natural philosophy, and on the other hand, *mental life* for moral philosophy. Both in the field of

³ See D.D. Raphael & A. S. Skinner 1980.

⁴ HA II.12.

technology and mental life, we are the ones who are doing what is being done: when we formulate an explanation, we imagine an agent, similar to ourselves, at work behind the phenomena⁵.

3) Theorizing both presupposes the existence of similarities between different fields of reality and tries to show new similarities. Theorising must rely on the postulate of the “analogy of Nature”, according to which nature acts in all areas according to the same principles.

When a new field of disconnected phenomena is explained, a new imaginary machine must be built up. In constructing the machine, another field, a more familiar one, acts as a “model” of the given field of phenomena⁶. The chain of “models” must eventually lead to some area of human activity, which – much in Giambattista Vico’s spirit – is where the principles are not hidden but immediately given. In other words, as far as we are led to the areas of technology and of mental life as the ultimate keys for understanding reality, the explanation has some anthropomorphic character.

4) Some anthropomorphic characteristics of explanation are implied in the requirement of coherence as well: the connecting chain between phenomena is an imaginary machine, i.e., an apparatus conceived in such a way as to be able to produce some particular result. In this way, unity is conferred upon the explanandum, which previously appeared as a chaos of disjointed phenomena. The final cause has a role to be played in this preliminary stage of explanation as the “imaginary machine” requires an imaginary craftsman who has built the machine to produce some results⁷. The final cause has thus a heuristic function. In the following stage, every single connection will be explained in terms of efficient cause.

A final assessment of Smith’s epistemological tenets should refrain from making any rash modernization: he is not a conventionalist in the 20th-century sense and his philosophy of science is not particularly close to Thomas Kuhn⁸. Smith was born – not just in a chronological sense – before Kant: for Smith, like for most philosophers of the 17th and 18th centuries, the truth of the theories can be interpreted in two alternative ways. On the one hand, it can be interpreted as an “internal” truth, consisting of the capability of establishing some correlations between phenomena, thanks to hypotheses which are not necessarily true in an ultimate sense, that is, to hypotheses which do not describe “true causes”. On the other hand, the truth of stories could be interpreted as a description of true causes; the possibility of attaining this second kind of truth is problematic. It is because of the coexistence of these two ideas of truth that the cognitive status of theories becomes – in Hume’s and Smith’s eyes – eventually aporetic. Nevertheless, psychological and practical needs imply some order between phenomena, which is why philosophers try to work out theories meeting the previously mentioned requirements. The philosopher needs merely to refrain from shaping hypotheses about the nature of the principles that are supposed to account for

⁵ See HA IV.19; FL, pp 248-249; HA II.9; LJ (A) vi.43; WN I.i.8-9; TMS VII.ii.4.14.

⁶ See HAP 2; HA. IV.47-49; IV.67

⁷ See TMS II.ii.3.5.

⁸ J.R. Lindgren 1973, p.18

the phenomena. These eventually aporetic epistemological theories seem however to support some more clearly defined methodological trends:

1) An anti-essentialist trend: one recognizing some kind of order inside the examined set of phenomena without having recourse to first causes.

2) An anti-systematic trend is one that gives home rule to every theory without trying to force it into the framework of a more comprehensive and powerful system.

3) There is a certain kind of scepticism about the possibility of applying systems to the real world because of the open question of the nature of principles.

According to this general position, Smith's main polemic target in moral philosophy in general and politics, or rather "Policy" in particular, is the "spirit of system". Those who want to reorganize society according to a ready-made system forget that human reality is endowed with its own motions, preceding the artificial motions impressed by the legislator⁹. In a similar vein, Smith's work in political economy aims at contrasting existing systems of political economy with his own proposal: the anti-system of "natural liberty".

III

To understand the relevance of the theories on method in natural philosophy for moral philosophy, we need to recall Smith's understanding of the terms "natural history" and "system". Adam Smith has made a major contribution to the "Four Stages Theory"¹⁰, which is one of the main contributions of the Scottish Enlightenment as a whole to a historical and sociological study of society. According to this theory, every phenomenon in social life is bound to some other phenomenon in a cause-and-effect relationship. The key factor in social development is the mode of subsistence.

Historical reconstructions carried out according to the Four Stages paradigm have the status of "natural history." Natural history should account for institutions, laws, and customs, starting with Locke's and Hume's "human nature," considered something invariable, and from its responses to the challenge of different stimuli. No state of nature is required: human nature exists nowhere in a distilled form. It is rather an abstraction enabling the construction of general laws and explanations.

In moral philosophy, it is possible to do something different and something more than natural history, namely, to build systems. A "system" is in moral philosophy as well as in natural philosophy – an imaginary construction producing a high degree of connection between phenomena¹¹. In comparison with natural history, it exemplifies a more powerful kind of

⁹ TMS VI.ii. On the spirit of system in natural philosophy, see TMS VII.ii.4. On "systems" in political economy, see WN IV.ix. On the meaning of the "system of natural liberty", see D. Winch 1978.

¹⁰ See R.L. Meeks 1967; 1976; 1977.

¹¹ HA IV.19; TMS VI.ii; WN V.i.f.25-26; see also A. Skinner 1967.

knowledge since, in a system, principles are reduced in number and the complex is more fully reduced to the simple.

Adam Smith can approach economic phenomena in two ways. On the one hand, he can write a “natural history of opulence”; that is, he clarifies how human history has led to the present mode of producing wealth. This approach is to be found in *Lectures on Jurisprudence*. In *The Wealth of Nations*, on the other hand, he resorts to the alternative approach: he tries to build a “system of wealth”, taking society as it is at a given stage of historical evolution and trying to show it as connected phenomena previously appearing as disconnected. The disconnected phenomena are bound together by an imaginary machine supposed to cause the observed motions in the field of phenomena.

The imaginary machine is built following the pattern of a physical metaphor: first, society is seen or imagined as a Newtonian cosmos; then, it is possible to reconstruct this cosmos in terms of human behaviours interacting through the principle of “unintended results”. The system Adam Smith wants to build in political economy is a “system” in the Newtonian sense, as opposed to the Cartesian sense. The Cartesian “spirit of system” is the deductive attitude, preferring a fascinating explanation to a more complex and less coherent one, paying more respect to the facts.

In *The Wealth of Nations*, the Cartesian spirit is exemplified by the systems criticized by Smith: the physiocratic and the mercantilist systems. The alternative system of political economy proposed by Adam Smith offers a definition of wealth as the annual produce of the nation’s labour, something less “clear and distinct” and of lesser empirical immediacy than the preceding definitions of wealth as “bullion” or as “agricultural produce”. This redefinition of wealth may be considered closer to the Newtonian attitude which refuses to define the nature of forces and only pays attention to the capability of the theory to account for the whole range of observed phenomena.

IV

Although *The Wealth of Nations* lacks methodological statements, the influence of Newtonian methodology on the plan and structure of the work can be recognized.

One of Adam Smith’s contemporaries, Governor Pownall, while criticising his work, assumed that it consisted of an “Analysis” that attempts to establish the principles of the knowledge of the human community “that might become *principia* to the knowledge of politick Sciences”, and of a “Synthesis”, that “by application of these principles to fact, experience, and the institutions of men” should endeavour to deduce the doctrines “of politick operations”¹². It is doubtless that – apart from the editorial format, which is that of a work intended, more than for an academic audience, for a public

¹² A letter from Governor Pownall, in Corr, p. 337.

engaged in “active life” – the Newtonian *Principia* are a model for *The Wealth of Nations*. In the latter work, as in moral philosophy in general, the first step of explanation – according to the Newtonian orthodoxy – should be understood as composed of an analysis that attempts to establish the principles of human nature and society. These principles should be established through the collection and comparison of given facts to isolate those characteristics of man that are constant in quite different situations. The second step should be a synthesis that attempts to interpret the functioning and the pattern of evolution of historically given states of affairs and institutions, establishing deductive links between principles and observed facts¹³.

Let us examine how both steps, *i.e.* establishing the principles and deducing the phenomena, work in *The Wealth of Nations*. I will suggest the conclusion that Smith’s Humean-Newtonianism leads him, as a social theorist, further than anybody else before him; that in the meantime the inductivist dogma downplays the theorist’s active role in constituting the domain of objects of the discourse and that this “censorship” plays a major role in originating all the shortcomings existing in his work and eventually allowing the possible “ideological” use of his scientific work.

V

The first two books of *The Wealth of Nations* could be interpreted as an attempt to establish the principles of human nature and of society. We can recognize two distinct sets of principles: those expressing specific characteristics of individual psychology and those expressing specific characteristics of the motions of society, or better the motions of wealth in society.

The first set of principles includes the following: 1) Humans have natural wants for food and shelter and refined wants which stem out of pleasure experienced by human imagination when confronted with diverse colours, sounds and images. 2) *Interest* in satisfying one’s own needs is the cause of *labour*. This interest can lead, between men as contrasted with animals to cooperate with one another. 3) The propensity to “truck and barter” is a typical human characteristic that makes it possible for men to cooperate in satisfying their needs¹⁴.

The principles of human nature cited here are not investigated in such a way as to establish their ultimate foundation, and Smith does not pretend to discuss every characteristic of human nature¹⁵. The ones mentioned are chosen because they can produce the postulated effects and are supposed to be true in the given situation because they may produce these effects. The second set of principles is different in its very nature. It expresses some kind of order between the motions of wealth rather than a few characteristics of human

¹³ See PNP III, *Regulae Philosophandi*; O III.i.31; THN *Introduction*; I.i.4; HA IV.67-68. See also Skinner 1974.

¹⁴ See LJ (A) II.ii; WN I.i-ii.

¹⁵ See WN I.ii.1-2.

nature which might be related with the motions of wealth. The guide in the search for order seems to be a kind of mechanistic metaphor: society is perceived in its resemblance to machines, to the Newtonian cosmos, and to some extent, also to animal organisms¹⁶.

The result of this search could be summarised as follows: the magnitudes considered (*values, prices*) are connected to each other according to specific laws. These laws are not “philosophical” or “physical” but are instead “mathematical” (that is, laws trying to show correlations rather than trying to discover “causes”)¹⁷. Wealth works as an autonomous whole. This whole works according to *Nature* rather than to *Reason*¹⁸.

In the following books, Smith intended to take the second step: synthesis. that is, “deducing the phenomena” from the principles. Here, a problem arises concerning the nature of “phenomena”. In the account of the Newtonian natural philosophy in *The History of Astronomy* the nature of “phenomena” was, at least at first sight, clear: they were a set of. propositions stating the positions of the stars in the heavens. In *The Wealth of Nations*, as well as in *The Theory of Moral Sentiments*, the situation is more complex: what is needed is a criterion for classifying normal behaviour as contrasted with aberrations for which it is not possible to offer an explanation. What Smith deduced from the functioning of an ideal economic society established through the analysis is, first, an ideal “natural” evolution of human society from the “rude and early” state to the “improved” state, having no correspondent in the actual historical evolution¹⁹. The economic history of Europe is accounted for only to the extent that certain ad hoc principles are introduced to explain why the real evolution was quite contrary to the ideal one. Secondly, he deduced a society’s ideal way of functioning. This ideal functioning of society, which provided both economic growth and the respect of rights and freedoms, was considered as virtually already there in 18th century Britain, just waiting to be restored, the “system of natural liberty”²⁰. This “system” and the described evolution have the privileged status of being both descriptive and prescriptive. The “phenomena” are that portion of the historically given facts which do not deviate too far from the ideal picture.

The synthesis, consisting of disproving the alternative systems, making a diagnosis of the present economic situation, and proposing a

¹⁶ TMS VII.iii.Introduction; WN I.vii.15; IV.vii.c.43; IV.v.a.19; IV.ix.28. Even the “invisible hand” used as a proof of Smith’s deistic providentialism probably has a Newtonian rather than a deistic origin and stresses the analogy between social behaviours and physical motions. The phrase is used by Roger Cotes to describe the observable effects of gravitation: “suppose two Globes A & B placed at a distance from each other upon a table, & that whilst A remains at rest B is moved towards it by an invisible Hand A by-stander who observes this motion but not the cause of it will say that B does certainly tend to the centre of A, & thereupon he may call the force of the invisible hand the centripetal force of B, or the attraction of A since ye effect appears the same as if it did truly proceed from a proper & real Attraction of A”, 985, *Cotes to Newton*, 18 March 1712/13, in CIN, vol. 5, p. 392.

¹⁷ See PNM 1. *Definitions* iv.

¹⁸ See D. Forbes 1953.

¹⁹ WN III.i.

²⁰ WN IV.ix.51.

program for future policies, does not provide a basis for the pyramid on the top of which the principles are supposed to rest. It instead adds more details to the sketch provided by the idealized model, transforming it into a much more detailed, even if not perfect, model of the “machine” hidden “behind the scenes” of commercial society²¹.

VI

The methodological attitude underlying Adam Smith’s economic work is different from a “metaphysical” and deductive attitude as well as from an eclectic attitude and from the nomological-deductive model of the Empiricism of the 20th century. It is an application of the “Moral Newtonianism” program enounced in Hume’s *Treatise*²². This program is far from being coherent and consistent. Trying to account too much in detail for Smith’s theoretical practice based on this program is pointless. It is possible, however, to explain what kind of intuitions led his theoretical practice in one direction rather than another.

Adam Smith’s Newtonianism enables him to build a more comprehensive, coherent and powerful theory than his predecessors. Two main aspects of his Newtonianism have this kind of positive role. First, he feels free to shape any kind of hypotheses (to choose any kind of “principia”) without being limited by the obligation to choose principles which have a real existence, and as a consequence, he can introduce more powerful hypotheses whose fruitfulness in establishing correlations will be tested at a later stage. Secondly, he understands explanation, in an anti-Cartesian spirit, as accounting for the phenomena; that is, he understands the inquiry carried out in *The Wealth of Nations* as a specific kind of inquiry aimed at establishing correlations between some features of reality rather than at discovering the essence of the examined reality. This Galilean self-limitation of the scope of the inquiry establishes the conditions for giving that amount of autonomy to political economy – as contrasted with politics, ethics and even natural theology - that a Cartesian deductive attitude would have been bound to deny. We have a reasonable ground for believing that a link exists between this shifting in the methodological attitude and certain theoretical achievements in economic theory. These achievements may be summarized as follows:

- 1) The economy is seen as a process; that is, Smith rejects the idea of wealth as identical to some material object, *e.g.* agricultural goods or gold reserves, and in this way, a much more abstract and complex point of view is reached.
- 2) The subject matter of political economy is a specific domain of objects, definable only in connection with the theory. His predecessors could not think of political economy as referring to a specifically economic subject matter, radically distinguished from objects described by everyday language. They were bound to an idea of wealth as something that can be directly and empirically experienced. Smith can emancipate himself from naive

²¹ For a similar point concerning Hume’s economic writings, see R. Kuntz 1978.

²² See THN I.iii.15. See also J.A. Passmore 1952.

immediacy and chooses labour command and division of labour as the factors upon which economic phenomena depend. These comparatively abstract factors can bind together facts much more powerfully.

3) One further “internal” result is the fact that economic phenomena may be seen for the first time as, in one sense, coextensive with society as a whole: wealth is no more “bullion” or “agricultural produce” but rather “labour command”. The ultimate result should be that everything in society is, in a sense, economic, or that the Economy is society considered as it contributes to producing wealth, with the proviso that society might also be considered under other alternative perspectives. Smith was unable to be fully aware of this achievement: while, according to his “system” of wealth, everything in society seems to be economic, according to his philosophy of history, the Economy seems to contribute - thanks to the Heterogenesis of Ends - to some more profound process, namely to the progress of mankind towards perfection²³. Reality in itself seems to be – from Smith’s point of view – the social order, which is probably an order in the making. The economic order should be somehow a reflection of the social order such. But the relationship between these two entities – reality *in itself* and reality as the subject matter of a particular theory – seems problematic. On this point we shall return in the concluding paragraphs.

Let now us consider those aspects of Adam Smith’s Newtonianism that are in contradiction with his actual practice and may, on some occasions, hinder it from becoming fully self-aware and consistent. The principle of analogy plays – like in Hume – a major role in creating explanatory hypotheses for a particular field²⁴. What cannot be fully recognized by Smith is the role that analogy plays not only in formulating hypotheses but in redescribing the phenomena as well. Interpreting the theory as an imaginary machine built up according to the principle of “Analogy of Nature”²⁵ implies accepting not only a vertical movement from observation to theory and vice versa but also a cross-movement from one field of discourse to another one: what the analysis establishes is a model reproducing in a rough way to explanandum. This model is produced through a metaphorical process: the explanandum is looked at through the spectacles of a presupposed resemblance with some other field of experience. What is similar to what was perceived as central in the other field is classified as belonging to the principles. Synthesis cannot be a deduction of the phenomena as such, being rather a redescription of the field of phenomena trying to connect to the model (that is to the phenomena assumed to be central) everything that can be connected while labelling as deviation everything that can be explained by the model added with various ad hoc principles, and leaving aside what does not fit in.

According to Smith’s reconstruction of the Newtonian discovery in *The History of Astronomy*, theory building is a process by which a term is taken out of one discourse (gravity as a phenomenon of the sphere of the “sublunar”); it is partially modified in its meaning; and it is finally fitted into

²³ See J. Cropsey 1957.

²⁴ See J.P. Monteiro 1978.

²⁵ HA IV.19; IV.67; IV.33-34; IV.57.

another discourse (the theory of the heavenly motions) so that another system is produced. In this new system, the modified element is ranked alongside the preexisting elements of the second field of discourse. Smith is unaware that this procedure is bound to modify, to an extent, the meanings of the preexisting elements as well. In *The Wealth of Nations*, establishing the principles means, in fact “seeing” a new *Gestalt* inside the field of social phenomena previously described in a given way. This new *Gestalt* is produced by superimposing on this field of phenomena the idea of machine, cosmos, and organism partially modified in their meanings to apply to a broader range of cases, in which the given case (*i.e.*, society as a producer of wealth) may be included.

The description of society, or rather the basis statements inherited from previous kinds of discourse on society, are adapted to the new system and thus partially modified. What is excluded by the *Gestalt* projected on the field of phenomena is not redescribed in the same way. It is, however, modified in its meaning: it becomes what is unconnected and marginal. What Smith does when he constructs a theory of a particular subject matter as “the Economical” is to produce an interpretation of statements belonging to already existing discourses. The hermeneutical criterion is that same theory which is supposed to explain later the new set of basis statements produced in the way previously described. The degree of truth of the theory cannot be the extent to which the theory can describe the “real causes” of the phenomena but is instead the extent to which the theory can fit into its own net a considerable number of statements already known to be relevant. Being relevant is something pre-given to the theory: it means being relevant to people who have experience of trade or government through “tacit knowledge”.

I have already suggested that “observation” in *The Wealth of Nations* differs from a mere collection of facts. The behaviour of entrepreneurs competing with one another and contributing to the bringing of the offered goods back to their natural price or to encouraging investment where it is insufficient seems to belong to reality in a stronger sense than the behaviour of the landlord who because of his ignorance is satisfied with something less than the natural rent of his land, or on the other hand, because of his rapacity and the renter’s ignorance can extract a higher rent²⁶. There is a criterion for choosing between normal and relevant facts, and those facts are to be considered only to the extent that they approximate standard facts, but this criterion is never spelt out. Smith is forced to maintain that he is speaking about reality in an immediate sense. His claim for direct access to reality has two main consequences.

First, the two “realities”, that of the “philosophy of history” and that of the system of wealth, seem to be separated from one another and there seems to be no hope of establishing a translation of one reality into the other. Apart from the general principle of the Heterogenesis of Ends that should make it possible for economic growth to aid eventually spiritual growth, it is not clear how the contradiction is solved in detail between the economic order of commercial society that seems to be ordered as if by fiat, and progress towards perfection that should supersede commercial society in its present form.

²⁶ WN I.ix.a.1.

Secondly, as the relevance of the theoretical conclusions to action is concerned, two opposite outcomes seem to be possible: first, an overall scepticism about the possibility of rational action, limiting itself to drastic criticism of *esprit de système*; second, an overall optimistic faith in *Laissez-faire* with all the cynical itself to drastic criticism of the applications of the *esprit de système*; consequences that one can derive from this faith. The followers of Adam Smith made the second choice and pretended that it was Smith's choice as well. But this aporetic state of affairs can be resolved in this direction only by eliminating evolution and assuming order to be absolute and final, as well as by eliminating man as the subject matter of ethics and politics and turning the economic man into "man in itself"²⁷. But in Adam Smith's global view, both order and evolution are essential principles of explanation, even though in tension with each other, and man is assumed to be led by many passions, and the selfish passions leading the economic man are only some of them.

VII

Adam Smith's idea of Method is Humean-Newtonian. An examination of his theory of Method can cast a light on his theoretical practice in moral philosophy, legal and political theory and political economy. His epistemological tenets have both an enabling effect and a hindering one on his theoretical practice.

So far as the enabling effect is concerned, it is to be sought on the one hand in the abandonment of the attempt to establish the ultimate principles of reality, substituted with an attempt to establish correlations between some aspects of phenomena. On the other, it is to be sought in the abandonment of the project of formulating a unified theory of human nature, giving place instead to formulating various theories of distinct domains of objects "discovered" inside the field of human reality. In other words, Smith accepts the anti-Cartesian thesis that the principles of explanation are only principles of order rather than descriptions of "true causes" with real existence, as well as the "Spinozist" thesis that a theory can be formulated for any field of reality apart from its higher or lower ontological status. The result is a decentralization of the Cartesian domain of "mind" as contrasted with "matter", or *res cogitans* vs. *res extensa*, into the domains of Wealth, Government, Morality, and Kinship, Religion, and so on. As far as political economy is concerned, it is interpreted as a "mathematics of wealth" rather than as a Cartesian "physics of man"²⁸. Its hindering effect may be found perhaps in an underestimate of the theorist's "active" role, a role that the whole "new science", both in its Cartesian trend and in its Galileo-Newtonian trend, was not able to acknowledge. Adam Smith tries to account for the linkage

²⁷ See G.R. Morrow 1923.

²⁸ V. Foley considers Smith's social theory to be a kind of "social physics". But he starts from the strange assumption that Smith was more Cartesian than Newtonian. See V. Foley 1976, chs.2, 7, 9.

between the theory and the observational basis of the theory in terms of “observation” while the theory is a deductive scheme formulated following a pattern provided by a metaphor, and the observational basis is an interpretation or metaphorical redescription of phenomena.

It is possible to discover a connection between these epistemological tenets and the uncertainties and contradictions that have been discovered in Smith’s economic and social theories by both liberal followers and Marxist critics. The impossibility of establishing how far the inner rationality of market processes needs to be left free to act, the definition of productivity as being only productivity of material goods endowed with exchange value, the presupposition of an unquestioned correspondence between the exchange value of the aggregate of material goods produced by one national economy and the welfare it provides for its members are some of these uncertainties and contradictions. I would like to suggest that both Smith’s general epistemological presuppositions and the self-image of his theoretical practice may determine, at least partially, these puzzles concerning the foundations of newborn autonomous economic theory.

The main problems focus on the constitution of the domain of objects. Smith’s actual theorizing implies a process of redescription or interpretation as a preliminary step that he is not able to bring to the fore, even though his insights on the nature of science in *The History of Astronomy* hinted at this development.

Even in *The History of Astronomy*, where the imaginative element embedded in theories is acknowledged, the nature of phenomena is still unquestioned. As suggested above, Smith was born not accidentally before Kant, who would have acknowledged the constitutive role of the subject. Some ultimate presuppositions shared by both Smith and Hume are still Cartesian presuppositions. The atomistic definition of facts and the idea of truth as a kind of correspondence of ideas to atomic facts plays a fundamental role. These presuppositions can coexist with two opposite accounts of science: on the one hand with the rationalistic idea of science as a deduction of facts from principles which are supposed to be forever true, and on the other with the Newtonian and Galilean idea of science as accounting for the phenomena through provisional hypotheses. This alternative view, a more productive one on a methodological level, was bound nevertheless to a fundamental uncertainty concerning the true nature of science since truth was split into an “internal” truth whose meaning could be instrumental or even psychological, as admitted by both Hume and Smith and a “mirroring” idea of truth as a reflection of the essence of reality, a hard-to-leave regulative idea which it was impossible yet to relate to the “internal” idea of truth.

Even with his epistemological insights, Smith would not have been able to reach an adequate self-image of his social theoretical practice: on the one hand he would have been able to understand his theorizing as “experimental philosophy”, amounting to establishing correlations between some phenomena but he would not have been able to provide a satisfactory account of the process through which “phenomena” are recognised. This uncertainty about the status of the theory leaves two opposite outcomes open: on the one hand, scepticism concerning the possibility that theoretical models of Political Economy could have some empirical meaning or, on the other, an

absolutization of the market model as portraying the “essence” of social reality.

I would suggest that the mainstream economic thought of the following centuries was enslaved by an empiricist self-image, which remained tied to Cartesian assumptions and did learn Kant’s and Hegel’s lessons as it always assumed the description of phenomena preliminary to their explanation to be self-evident. Some 20th-century post-empiricist and anti-empiricist criticism of this image of science, stressing, on the one hand, the theory-laden character of empirical descriptions and, on the other, the role of interpretation as complementary to explanation, can provide an adequate background for criticism of “Cartesian” assumptions in the history of economic thought. Let us look in more detail how the hindering effects of Smith’s Newtonianism act, both in the “way down” from explanation to directives for action and in the “way up” from description of reality to explanation.

First, because of existing uncertainty with regard to the relationship between hypotheses and essence, or between principles in the mind and principles in reality, it seems to be difficult for Smith to state where the “natural” mechanisms lead: on the one hand the “man of government” should refrain from too much intervention, on the other hand, he should carry out some amount of intervention, even to fight negative outcomes of the “natural development” of commercial society. There is a somewhat sceptical conclusion: a systematic intervention by the “man of government” is useless because, in the long run, the natural processes will produce the best results. Intervention is possible only occasionally to eliminate “artifice”, which hinders the natural functioning of society or violates justice²⁹. But the impossible task is precisely determining what is artificial or natural: the proposed solution could sound convincing to the 18th century audience only because of the apparent self-evident character of these terms for 18th century common sense. But the solution was a *petitio principii*.

Secondly, there is another aporetic state of affairs: the one concerning the redescription of reality resulting from Smith’s economic theory. Both because of his starting from the practice of trade in modern society in his conceptualisation of the “Economic” and because of the mechanistic analogy leading his theoretical practice, Smith stressed the role of exchange-value in his description of economic phenomena³⁰. The major role played by the mechanistic scheme as a pattern of explanation leads him - at the stage in which the first survey of social reality is made and thus the “observational” basis is produced - to visualize, first of all, the phenomena of exchange. The redescription of the process of need satisfaction in terms of the production of exchange values does not mean shifting to a utilitarian view of man. It means, however, presupposing a correspondence, in a given society, between the total amount of exchange values and the total amount of use values³¹ or the idea that the water-diamond paradox is something concerning only marginal cases. In other words, Smith assumes that the passions leading individuals to seek

²⁹ See D. Forbes 1954; A.D. Megill 1975.

³⁰ See S.J. Worland 1976, H.E. Jensen 1976.

³¹ ³² See C. Napoleoni 1976, ch. 4.

after goods apart from their real usefulness are such as to put in motion, by way of an unintended result, enough labour to ultimately provide what is necessary to satisfy the real needs of every member of society. If it had been explicitly stated as a diagnosis of 18th century society³², this could have been a hypothesis allowing the possibility of considering commercial society roughly as if exchange values corresponded to use values. Such an assumption could have been held as *prima facie* true as far as some historical periods and some societies are concerned, having few problems of resource limitations and being at a stage of rapid growth.

VIII

The destiny of the theoretical contribution of Adam Smith is, in a way, paradoxical. His image has been tailored to a capitalist liberal tradition, which is distant in important aspects from the attitude of the real Adam Smith, the semi-sceptic and humanitarian attitude of an 18th-century philosopher. His general theoretical attitude is much more similar to Marx's attitude than later mainstream economists. Both Smith and Marx refute apparent concreteness, both recognize as historical what was believed to be natural and eternal, and both unify a wider field of phenomena by introducing a higher theoretical point of view. In a sense, the fortunate even if unique coincidence of factors which constituted Smith's general "Galilean" and semi-sceptic theoretical background that put him in a position to give a determinant contribution to the scientific revolution which gave birth to an autonomous economic theory. But in the meantime, the seeds of the later misinterpretation of economic theory as a utilitarian social philosophy were already present in the tensions within his theoretical background.

This turning upside down of his doctrines had the effect of turning into ideology his theoretical achievements, a real contribution to the Enlightenment turned into a manipulatory device. The point around which such turning upside down revolves is an unresolved *aporia* concerning the subject matter of political economy, in turn depending on the "Cartesian" presuppositions shared by modern thought.

³² This is, in a sense, the case for Smith. See WN Introduction.4 on the difference between savage nations and civilised nations. However, Smith is not able to realise the full implications of what he recognised, namely that the whole apparatus of concepts used in political economy has been shaped to explain the economy of commercial society rather than any economy.

RESUMO

A relação entre a concepção que Adam Smith faz do método e sua prática teórica efetiva enquanto cientista social pode ser adequadamente entendida no quadro do projeto humeano de um newtonianismo moral. Os aspectos principais da concepção do método apresentado por Adam Smith são: 1) o caráter provisório dos princípios de explicando; 2) os critérios “internos” de verdade; 3) o reconhecimento de um elemento imaginativo nos princípios, o que deixa aberto o problema da inter-relação entre verdade interna e verdade enquanto reprodução de “causas reais”.

Por um lado, a atitude newtoniana de Smith - em oposição à cartesiana - torna possível uma teorização social mais eficaz, por acolher teorias autônomas diferentes no interior do campo da “Filosofia Moral”, cada uma delas baseada em seus próprios princípios. Por outro lado, as pressuposições epistemológicas do newtonianismo produzem uma relação aporética entre as teorias e a realidade, e censuram o elemento interpretativo incrustado na descrição preliminar da realidade que a explicação científica social pressupõe.

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