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**ADAM SMITH, NEWTONIANISM AND POLITICAL ECONOMY**

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## ADAM SMITH, NEWTONIANISM AND POLITICAL ECONOMY

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### I

Adam Smith's writings on political economy have received up to now a number of different interpretations. A major point in every interpretation of Smith's work as a whole has been the assessment of the method he followed. In order to avoid the shortcomings and arbitrariness existing on this point in the literature, it is necessary to examine the social theories of Adam Smith, comparing them with the idea of scientific method held by Smith himself and by his intellectual milieu.

Before examining his ideas on method and his actual practice, let's recall the different views existing on the meaning of his work.

According to the critical literature of the 19<sup>th</sup> 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 an Hobbesian-Mandevillian idea of human nature, according to which everyone seeks only his own private benefit, and yet, by a kind of providential determinism, a common utility is produced as an unintended result.

On the contrary the literature of the 20<sup>th</sup> century has created the image of Adam Smith as an "empirical scientist", at first with regard to *The Wealth of Nations* only, and then to *The Theory of Moral Sentiments* as well, which was considered to be social psychology rather than an ethical doctrine<sup>1</sup>.

The latest organic interpretation of Smith's work, that of Ralph Lindgren, tries to rescue Smith from undue modernizations. According to this interpretation, his theoretical attitude is one and the same in both

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<sup>1</sup> On the history of the interpretation of Adam Smith see D.D. Raphael – A.L. Macfie 1976. The classical example for an empiricist interpretation is H.J. Bitterman 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.

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 other systems – a 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 organization of economic life based on historically given rules of justice was not only possible, but even useful for a more efficient functioning of economic life. Smith's work is "social philosophy" rather than "social science"<sup>2</sup>.

The problem with Lindgren's interpretation is that it is too much a forced modernization, like the preceding ones were, and it is bound, as far as it contrasts "science" with philosophy", to leave aside central evidence, such as that pertaining to Smith's Newtonianism.

This paper will support an alternative interpretation:

1) Smith's theory of Method is explicitly Humeo-Newtonian. According to this conception, theories are "imaginary machines".

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

3) His actual theoretical practice in Economics goes beyond what Smith's statements on Method are able to account for. The Newtonian tenets, and more in general the common presuppositions of "new science", both Cartesian and Newtonian, play a negative role by obscuring the active constitutive role of the theory with respect to the subject-matter.

4) The subject-matter of the economic theory seems to obtain an ultimately problematic relationship with the human reality as such, that is composed of the whole range of human passions interacting with each other.

## II

We can have an insight into Adam Smith's methodological and epistemological doctrines thanks to his early philosophical writings and in particular to *The History of Astronomy*. Smith's original life project was to write three different works: a "philosophical history" of sciences and arts, a theory of ethical rules and judgements, a theory of State and Law. The first project was never accomplished: we only have a number of preparatory materials, of which *The Principles which lead and direct Philosophical Enquiries illustrated by the History of Astronomy* is the most interesting. There are two other essays on the history of ancient physics and of ancient logics and metaphysics.

<sup>2</sup> J.R. Lindgren 1973. On the relationship between Moral Philosophy and specialized social theories in Smith and his contemporaries see S. Cremaschi 1981.

The essays originated mainly from lectures held at Edinburgh's Clubs during the 1740's. The debate which these lectures belong to extended through the 30's and 40's in Edinburgh. Hume's *Theatise* had recently appeared. Smith became a close friend of Hume and there is evidence to the fact that his philosophical views were deeply influenced by the "old true Humean philosophy"<sup>3</sup>. Even if 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 19<sup>th</sup> century. The essays aim at shaping a kind of history or genealogy of the doctrines in various branches of learning, following a path that had already been traced by Locke. This kind of reconstruction intends eventually to account for the leading principles of "scientific discovery", so as to build a metatheory of Natural Philosophy as well as of First Philosophy (*i.e.* in a Lockean spirit, of logics and metaphysics together). Following Locke and Hume, the "science of human nature" is regarded as the discourse which provides the ultimate foundation for both the validation of theories and the method of research 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"<sup>4</sup>, 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 to be the best imaginary machine ever created by the human mind in order 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 the problem of Method:

1) Theories or Systems of both Natural and Moral Philosophy are "imaginary machines", hypothetically existing behind the phenomena. These imaginary machines provide the chain connecting the phenomena which appear to us as disjointed, and thus enable the imagination to visualize reality as a coherent whole.

2) In building imaginary machines we introduce by way of an analogical procedure, *principles* which we had a chance to see actually working in one instance or another, that is, where we were able to 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

<sup>3</sup> See D.D. Raphael – A.S. Skinner 1980.

<sup>4</sup> HA II.12.

philosophy, on the other hand *mental life*, for moral philosophy. Both in the field of technology and in the field of 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 phenomena<sup>5</sup>.

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

When a new field of disconnected phenomena is explained, a new imaginary machine needs to be built up. In the construction of the machine, another field, a more familiar one, acts as a "model" of the given field of phenomena<sup>6</sup>. The chain of "models" must eventually lead to some area of human activity which – much in a Vicoesque spirit – is the area where the principles are not hidden but are rather immediately given. In other words: in so far as we are led to the areas of technology and of mental life as to the ultimate keys for understanding reality, the explanation has some antropomorphic character.

4) Some antropomorphic character of explanation is implied in the requirement for 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 some kind of unity is conferred upon the *explanandum*, which previously appeared as a chaos of disjointed phenomena. Final cause has a role to be played in this preliminary stage of explanation as far as the "imaginary machine" requires an imaginary craftsman who has built the machine in order to produce some results<sup>7</sup>. The final cause has thus an heuristic function. In the following stage, every single connexion within the whole is to 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 20<sup>th</sup> century sense, and his own philosophy of science is not identical to Kuhn's philosophy of science, as suggested by Lindgren<sup>8</sup>. Smith was born – not just in a chronological sense – before Kant: for Smith, like for most philosophers of 17<sup>th</sup> and 18<sup>th</sup> 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 in 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 theories could be interpreted as a description of true causes; the possibility of actually reaching this second kind of truth is very problematic. It is because of the coexistence

<sup>5</sup> 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.

<sup>6</sup> See HAP 2; IV.47-49; HA IV.67.

<sup>7</sup> See TMS II.ii.3.5.

<sup>8</sup> J.R. Lindgren 1973, p. 18.

of these two ideas of truth that the cognitive status of theories becomes – to Hume's and Smith's eyes – eventually aporetic. Nevertheless psychological and practical needs imply some amount of order between phenomena: that is the reason 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 the phenomena. These eventually aporetic epistemological theories seen however to support some more clearly defined methodological trends:

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

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

3) A certain kind of skepticism about the possibility of applying systems to reality (because of the ultimate skepticism about the nature of principles).

According to this general position, Smith's main polemic target in the field of Moral Philosophy in general and of 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 legislator<sup>9</sup>. In a similar vein, Smith's work in political economy aims at contrasting existing systems of political economy with his own proposal: the antisystem of "natural liberty".

### III

In order to understand the relevance to moral philosophy of the theories on Method in natural philosophy, we need to recall Smith's understanding of the terms "natural history" and "system". Adam Smith has given a major contribution to the "Four Stages Theory"<sup>10</sup>, which is one of the main contributions of the Scottish Enlightenment as a whole to an 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, which are carried out according to the Four Stages paradigm have the status of "natural history". Natural history should account for institutions, laws and customs, starting from Locke's

<sup>9</sup> 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.

<sup>10</sup> See R.L. Meek 1967; 1976; 1977.

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 connexion between phenomena<sup>11</sup>. In comparison with natural history it exemplifies a kind of knowledge that is more powerful, because in a system principles are reduced in number and the complex is more fully reduced to the simple.

Coming to economic phenomena, Smith is able to approach them in two different ways. On the one hand he is able to write a "natural history of riches", that is, he clarifies how human history has led to the present mode of producing wealth. This approach is to be found in *Lecture 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 as connected the 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 needs to be perceived as a Newtonian cosmos; then it is possible to reconstruct this cosmos in terms of interaction of human behaviours through the principle of "unintended results"<sup>12</sup>. The system Adam Smith wants to build in political economy is a "system" in the Newtonian, 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 seems to be exemplified by the preceding systems criticized by Smith: the physiocratic and the mercantilist systems. The alternative system of political economy proposed by Smith offers a definition of wealth as the annual produce of the nation's labour, something less "clear and distinct" and of less empirical immediacy than the preceding definitions of wealth as "bullion" or as "agricultural produce". This redefinition of wealth may be considered as close 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.

<sup>11</sup> HA IV.19; TMS VI.ii. See also A. Skinner 1967; WN i.f.25-26.

<sup>12</sup> See TMS II.ii.2. On Heterogenesis of Ends as a principle of explanation see D. Forbes 1954.

## IV

Although *The Wealth of Nations* is poor in methodological statements, it is possible to recognize the influence of Newtonian methodology on the plan and the structure of the work.

One of Adam Smith's contemporaries, Governor Pownall, while criticizing his work, understood that it is composed 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 operations; as Mathematicks are to Mechanicks, Astronomy, and the other 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"<sup>13</sup>. It is doubtless that – apart from the editorial presentation which is that of a work intended, rather than for an academic audience, for a public engaged in "active" life – the Newtonian *Principia* is a model for *The Wealth of Nations*. In this 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 of society. These principles should be established through collection and comparison of given facts in order to isolate those characteristics of man that are constant in every different situation. The second step should be a synthesis, that should attempt to interpret the functioning and evolution of historically given states of affairs and institutions, establishing deductive links between principles and observed facts<sup>14</sup>.

Let's try to examine how both steps, *i.e.* establishing the principles and deducing the phenomena, actually work in *The Wealth of Nations*. I will suggest the conclusion that Smith's Humeo-Newtonianism leads him, as a social theorist, further than anybody else before him; that in the meantime the inductivist dogma censors 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 different sets of principles: those expressing certain characteristics of individual psychology and those expressing certain characteristics of the motions of society, or better of the motions of wealth in society.

<sup>13</sup> A letter from Governor Pownall, in Corr, p.337.

<sup>14</sup> See PNP III. *Regulae Philosophandi*; O III.i.31; THN *Introduction*; THN I.i.4; HA IV.67-68. See also A. Skinner 1974.



The first set of principles includes: 1) Men have natural wants for food and shelter, and refined wants which stem out from pleasure experienced by human imagination when confronted with various colours, sounds and images. 2) *Interest* to satisfy 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 needs<sup>15</sup>.

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 nature<sup>16</sup>. The ones mentioned are chosen because they are able to produce the postulated effects and are supposed to be true in the given situation because they seem to be able to 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 nature which might relate to 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 cosmós, and to some extent, also to animal organisms<sup>17</sup>. The result of this search could be summarized as follows: the magnitudes considered (*values, prices*) are connected to each other according to certain laws. These laws are no "philosophical" or "physical" but are rather "mathematical" (that is, laws trying to show correlations rather than trying to discover "causes")<sup>18</sup>. Wealth works as an autonomous whole. This whole works according to *Nature* rather than to *Reason*<sup>19</sup>.

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*

<sup>15</sup> See LJ (A) II.ii; WN I.i-ii.

<sup>16</sup> See WN I.ii.1-2.

<sup>17</sup> TMS VII.iii. *Introduction*; WN I.vii.15; WN IV.vii.c.43; WN IV.v.a.19; WN IV.ix.28. Even the "invisible hand", that has been used as a proof of the deistic providentialism that was supposed to inspire Smith, has probably a Newtonian rather than a deistic origin and it stresses the analogy between social behaviours and physical motions. The phrase is used by R. Cotes in order to express 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.

<sup>18</sup> See PNPM I. *Definitiones* iv.

<sup>19</sup> See D. Forbes 1953.

*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 actually *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 evolution<sup>20</sup>. 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 the contrary of the ideal one. Secondly, he deduced an ideal way of functioning of society. This ideal functioning of society which provided both economic growth and the respect of rights and freedoms to be considered as firmly established in 18<sup>th</sup> century Britain, he named "system of natural liberty"<sup>21</sup>. 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 in disproving the alternative systems, making a diagnosis of the present economic situation, and proposing a program for future policies, does not provide a basis to the pyramid on the top of which the principles are supposed to rest. It rather 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 scenery" of commercial society<sup>22</sup>.

## VI

The methodological attitude underlying Adam Smith's economic work is something different from a "metaphysical" and deductive attitude as well as from an eclectic attitude and from the nomologico-deductive model of the Empiricism of the 20<sup>th</sup> century. It is rather an application of the program of a "Moral Newtonianism" stated in Hume's *Treatise*<sup>23</sup>. This program is far from being coherent and consistent. It is pointless to try to account too much in detail for Smith's theoretical practice on the basis of this program. 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 those conceived by 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

<sup>20</sup> WN III.i.

<sup>21</sup> WN IV.ix.51.

<sup>22</sup> For a similar point concerning the economic writings of D. Hume, see R. Kuntz 1978.

<sup>23</sup> See THN I.iii.15. See also J.A. Passmore 1952.

of "principia") without being limited by the obligation to choose principles which have a real existence, and as a consequence he is able to introduce more powerful hypotheses whose fruitfulness in establishing correlations will be tested at a later stage.

Secondly, he understands explanation, in an anticartesian 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 with 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 economic reality is seen as a process, that is, he rejects the idea of wealth as identical with some material object, e.g. with agricultural goods or with 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 conceived as a specific and determined domain of objects, definable only in connexion with the theory. His predecessors were unable to shape an idea of the subject-matter as something specifically economic, radically distinguished from objects about which everyday language is able to speak. They were bound to an idea of wealth as something that can be directly and empirically experienced.

Smith is able to emancipate himself from an excess of immediacy and chooses labour command and division of labour as the factors upon which he makes economic phenomena dependent. These factors, which are comparatively abstract, are able to bind together facts in a much more powerful way.

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 Economical is the society considered in so far as it contributes to produce wealth, with the proviso that society might be considered also 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 own philosophy of history the Economical seems to contribute – thanks to Heterogenesis of Ends – to some deeper process, namely to the progress of mankind towards perfection<sup>24</sup>. Reality

<sup>24</sup> See J. Cropsey 1957.

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in itself seems to be – from Smith's point of view – the social order, which is probably an order in becoming.

The economic order should be somehow a reflex of the social order in itself. But the relationship between these two kinds of reality – reality in itself and reality as the subject-matter of a particular theory – seems to be problematic. On this point we shall return in the concluding paragraphs.

Let's consider now those aspects of Adam Smith's Newtonianism that are in contradiction with his actual practice and that may on occasion hinder it from becoming fully self-aware and consistent.

The principle of analogy plays – like in Hume – a major role in creating the explanatory hypotheses for a certain field<sup>25</sup>. 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"<sup>26</sup>, 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 actually establishes is a model reproducing in a rough way the *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 actually *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 is able to be connected, labelling as a deviation what can be explained by the model added with various *ad hoc* principles, and leaving totally 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 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 not aware of the fact 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 superimposing on this field of phenomena the ideas of machine, of cosmos, of organism, partially modified in their meanings so as to be applicable to a wider range

<sup>25</sup> See J.P. Monteiro 1978.

<sup>26</sup> HA IV.19; HA IV.67; HA IV.33-34; HA IV.57.

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 fitted in to underlie the new system shift to partially different meanings.

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 actually does when he constructs a theory of a particular subject-matter — and the Economical is such a subject-matter — 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 is able to describe the “real causes” of the phenomena, but is rather the extent to which the theory is able to fit into its own net a great number of statements that were already known to be relevant. *Being relevant* is something pre-given to the theory: it means being relevant to people who know trade or government through their own unreflected experience.

I have already suggested that “observation” in *The Wealth of Nations* seems to be something different from a mere collection of facts. Actually, 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 is able to extract a higher rent.<sup>27</sup> Actually, there is a criterion for choosing between normal and relevant facts and those facts to be considered only to the extent that they approximate normal facts, but this criterion is never spelled out. Smith is forced to maintain that he is speaking about *reality* in an immediate sense. His claim to a direct link with 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 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 a progress towards perfection that should supersede commercial society in its present form.

Secondly, as far as the relevance of the theoretical conclusions to cation is concerned, two opposite outcomes seem to be possible: first,

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<sup>27</sup> WN I.ix.a.1.

an overall skepticism about the possibility of rational action, binding itself to a destructive criticism of the applications of the *esprit de système*; second, an overall optimistic faith in *Laissez-faire* with all the cynical consequences that one is able to 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 solved in this direction only by eliminating *evolution* and assuming *order* to be absolute, as well as by eliminating man as the subject-matter of ethics and of politics and turning the economic man into "man in itself"<sup>28</sup>

But in Adam Smith's global view both order and evolution are unrenounceable even if not consistent principles of explanation, and man is assumed to be led by a number of passions, and the selfish passions leading the economic man are only some of them.

## VII

To sum up: Adam Smith's theory of Method is a Humeo-Newtonian one. An examination of his theory of Method is able to cast a light on his own theoretical practice in moral philosophy as a whole and in political economy in particular. His epistemological tenets have both an enabling effect and an hindering one on his theoretical practice.

So far as the enabling effect of Smith's Newtonianism is concerned, this effect is to be sought in two directions: on the one hand in the abandonment of the attempt to establish the ultimate principles of reality, this attempt being substituted by the attempt to establish correlations between some aspects of human reality. On the other hand it is to be sought in the abandonment of the project of formulating a unified theory of human reality as a whole, giving place instead to the formulation of different theories of different domains of objects "discovered" inside the field of human reality. In other words: Smith accepts the anticartesian thesis that the principles of explanation are only principles of order rather than statements describing "true causes", having a real existence, as well as the "spinozist" thesis that a theory can be formulated for any field of reality apart from its more or less dignified ontological status. The result is a decentralization of the Cartesian domain of "human reality" as contrasted with "material reality", into the domains of Wealth, Government, Moral Rules, and possibly Kinship, Religion, and so on. So far as political economy is concerned, it is interpreted as a "mathematics of wealth" rather than as a Cartesian "physics of man"<sup>29</sup>.

So far as the hindering effect of Newtonianism is concerned, this effect is to be sought in the "censorship" exercised over the "active" role

<sup>28</sup> See G.R. Morrow 1923.

<sup>29</sup> V. Foley considers Smith's social theory to be a kind of "social physics". But he starts from the untenable assumption that Smith was a Cartesian much more than he was a Newtonian. See V. Foley 1976, chs. 2, 7, 9.



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

It is possible to establish a connexion between these epistemological tenets and the uncertainties and contradictions which have been discovered in the economic and social theories of Smith by both his liberal followers and his 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 provided by that society for its members instantiate 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 are such as to determine, at least partially, these puzzles concerning the foundations of the newly born autonomous economic theory.

The main problems focus around the constitution of the domain of objects. The actual theorizing carried out by Smith implies as a preliminary step a process of redescription or interpretation that Smith is not able to bring to the fore even on the basis of his deepest insights on the nature of science which had been expressed in *The History of Astronomy*.

Even in *The History of Astronomy*, where the imaginative element embedded in theories is acknowledged, the nature of "phenomena" is still unquestioned. As I suggested earlier, 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. Both the atomistic definition of facts and the idea of truth as a kind of correspondence of ideas to atomic facts

play a fundamental role. These presuppositions can coexist with two opposite accounts of science: on the one hand with the rationalistic idea of science as deduction of facts from principles which are supposed to be true for ever, and on the other hand with the Newtonian and Galilean idea of science as accounting for the phenomena by means of 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, provided that truth was split into an "internal" truth on the one hand — whose meaning could be an instrumental one, or even a "psychological" one, as stated by Hume and Smith — and a truth as reproduction of the essence of reality on the other hand, which was an

unrenounceable regulative idea but which it was impossible to relate to the "internal" truth.

Even on the basis of his more mature epistemological insights Smith would not have been able to win a fully adequate self-image of his social-theoretical practice: on the one hand he would have been able to understand his theorizing as an "experimental" one, consisting in establishing correlations between some features of reality, while on the other hand he would not have been able to provide any satisfactory account of the process through which "phenomena" are established.

This uncertainty with regard to the status of the theory leaves two opposite outcomes open: on the one hand a total skepticism concerning the possibility that theoretical models of Political Economy could have some empirical meaning, or, on the other hand, the absolutization of the market model as portraying the essence of social reality.

I would like to suggest that the mainstream economic thought of the following centuries has continued to be the prisoner of an empiricist self-image, which remained fixed in Cartesian presuppositions and did not take into account the lessons of Kant and Hegel, in so far as the nature of the description of reality preliminary to explanation was all the time supposed to be self-evident. Some 20<sup>th</sup> 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 hand the role of interpretation as complementary to explanation, can provide an adequate background for a criticism of "Cartesian" presuppositions 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 the 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 in order to fight some negative aspects of "natural development" of commercial society. There is a skeptical 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, in order to eliminate *artifice* hindering the natural functioning of society or violating justice<sup>30</sup>. But the impossible task is precisely the task of determining what is *artificial* and what is *natural*: the proposed solution could sound convincing to the 18<sup>th</sup> century audience only because of the apparent self-evidence of these terms for 18<sup>th</sup> century common sense. But the solution was actually a *petitio principii*. Secondly, there is another aporetic state of affairs: the one concerning the redescription of reality resulting from Smith's economic

<sup>30</sup> See D. Forbes 1954; A.D. Megill.

theory. Both because of his starting from the practice of trade in modern society in his conceptualization of the Economical, and because of the mechanistic analogy leading his theoretical practice, Smith stressed the role of exchange-value in his description of economic reality<sup>31</sup>. The major role played by the mechanistic scheme as a pattern of explanation leads him – at the stage in which the first reconnaissance 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 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-values<sup>32</sup>, or the idea that the water-diamond paradox is something concerning only marginal cases. In other words, Smith assumes that the passions leading the individuals to seek after goods apart from their real usefulness, are such as to put in motion, by way of an unintended result, enough labour as to provide ultimately 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 society<sup>33</sup>, this could have been a hypothesis allowing the possibility of considering commercial society in a rough way 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 fitted into a capitalist liberal tradition, one which is distant in important aspects from the attitude of the real Adam Smith, the skeptical and humanitarian attitude of an 18th century philosopher. His general theoretical attitude is something much more similar to what Marx's attitude would eventually be, than to the attitude of later mainstream economists. Both Smith and Marx refute apparent concreteness, both historicize what is supposedly natural and eternal, 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 the general “Galilean” and “skeptical” theoretical

<sup>31</sup> See S.J. Worland 1976; H.E. Jensen 1976.

<sup>32</sup> See C. Napoleoni 1976, ch. 4.

<sup>33</sup> This is, in a sense, the case for Smith. See WN *Introduction*. 4 on the difference between savage nations and civilized nations. But Smith is not able to realize the full implications of what he had recognized, namely that the whole apparatus of concepts used in political economy has been shaped in order to explain *the economy of commercial society* rather than *any kind* of economy.

background of Smith put him in a position to give a determinant contribution to the scientific revolution which originated 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 aporias of Smith's theoretical background.

This turning upside down of Smith's doctrines had the effect of changing his theoretical achievements, which had been a real contribution to enlightenment of reality, into ideology, bound to contribute to obscure reality. The pivotal point around which this turning upside down revolves, is his aporetic position concerning the subject-matter of political economy, which eventually depends on the "Cartesian" presuppositions shared by modern thought.

### 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 apresentada por Adam Smith são: 1) o caráter provisório dos princípios de explicação; 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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