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MONTESQUIEU'S ATTEMPT TO ESTABLISH HISTORY AS SCIENCE

ABSTRACT

The essay deals with Montesquieu's methodology of history. My crucial assumption is that Montesquieu intends to cultivate history as science. In the 18th century this ambition meant that he wanted to use the analytical method in the field of history. His works include many examples of the successful exploitation of analysis. Since the philosopher does not consider his methods, my aim will be to extract from his works the ideas that stand behind his historical investigations. In other words, I am going to answer how history can be practiced as science (in the Enlightenment sense of this term). First of all, I am going to explain why analysis was – and still is – so efficient in a realm of natural phenomena. My point will be that it indicated to early modern scientist how they should conduct their experiments. On the other hand, experiments give advantage to scientists due to the fact that they are able to construct and control their object. To put it differently: analysis and experiments are efficient because truth and action are convertible. Now, my crucial question is: 'Are historians capable of gaining advantage over their objects as physicists are?' Giambattista Vico, for example, agrees. According to him, researchers can comprehend historical events because history is man-made. Some parts of Montesquieu's works indicate that he shares Vico's assumptions. Hence, historians are able to scrutinize past factors, and they can perform thought experiments. Such experiments are means for validating and abolishing hypotheses by using counterfactuals.

Key words:

Montesquieu, Enlightenment, methodology of history, analysis, thought experiments, counterfactuals, *verum-factum* principle, Giambattista Vico

The aim of the essay is to prove that Montesquieu in his historical studies interposes the principles of the early modern physics: the *verum-factum* principle, analytic methodology, and experimental practices. Since the philosopher does not consider his methods, I am going to extract from his works the ideas that stand behind his historical investigations. In other words, my purpose is to answer the question: "Is it possible to establish history as science in the Enlightenment sense of this term?" Let us start with a short glimpse at the principles of early modern physics that Montesquieu inherited.

1. Principles of Physics

A substitution of the concept of knowledge considered as efficacy for a notion of truth as an object of contemplative investigation was a crucial reason for the scientific revolution in the 17th century. This shift started in the Renaissance, when a new social group of artisans – so called *virtuosos* – appeared on the stage of history. A reconciliation of physics and mechanical art was an innovation they introduced. Since each technical enterprise poses an experiment, it should be preceded by cautious investigations. Giuseppe Ceredi, for instance, prescribed constructing "a great many models, small and large, adding, changing, and removing various things…"¹

Virtuosos' methodology was fruitful so scientists adopted it. Marin Mersenne, for example, explained the features of sounds by threading two strings on a monochord; the settings of the first one were fixed, while Mersenne modified the qualities – length, weight, and tension – of the second one. His scientific practice inspired him to formulate an epistemological principle: "One is constrained to acknowledge that man is not capable of knowing the reason for anything other than that which he can make, nor other sciences than those of which he makes the principles himself, as one can demonstrate in considering mathematics". Later this

¹ Quoted in S. Drake, Essays on Galileo and the History and Philosophy of Science, Vol. 3, Toronto-Buffalo-London 1999, p. 176.

² Quoted in A. Crombie, *Science, Art. And Nature in Medieval and Modern Thought*, London 1996, p. 105.

epistemological premise was reformulated by Giambattista Vico: "the true and the made are convertible (*verum et factum convertuntur*)"³.

Thus, experiments have become an inevitable part of physics. According to Isaac Newton, each efficient investigation should start with the analysis that "... consist in making experiments and observations, and in drawing general conclusions from them by induction, and admitting of no objections against the conclusions, but such as are taken from experiments, or other certain truths..."⁴. One should keep in mind that early modern scientist unfolded their methodology against the Aristotelian one. That is why Newton preceded induction by two practices – i.e. observations and experiments – which form analysis. Aristotelian physics failed because it recklessly based induction only on perceived regularities and similarities without taking conclusions achieved in that way into question by experiments. On the contrary, modern physicists formulated excluding experiments aimed to verify or abolish propositions. If one suspects that some factor F1 causes certain affect E1, the researcher should remove F1 and replace it by other factor F2. If E1 still occurred, this would mean that an initial hypothesis is incorrect. Thus observations and experiments points true efficient causes.

2. How is history as science possible?

Is it possible, as Montesquieu wishes, to apply the *verum-factum* principle to history? At the beginning of 18th century, Vico gave a direct and assertive answer to this question. In *The New Science* he aims at establishing history as science: "We shall reduce these beginnings [of nations] to scientific principles, by which the facts of certain history may be assigned their first origins, on which they rest and by which they are reconciled"⁵. According to Vico, history is capable of reaching the same level of certainty as mathematics is because in history – as in aproric sciences – knowing subject is a creator of object:

In the night of thick darkness enveloping the earliest antiquity, so remote from ourselves, there shines the eternal and never-failing light of a truth beyond all question: that the world of civil society has certainly been made by men, and that its

³ Quoted in R. Miner, Verum-factum and Practical Wisdom in the Early Writings of Giambattista Vico, "Journal of the History of Ideas" 1998, No. 59, p. 53.

⁴ I. Newton, *Optics: or a Treatise of the Reflections, Refractions, Inflections and Colours of Light,* London 1730, p. 380. The first edition of the work was published in 1704.

⁵ G. Vico, *The New Science of Giambattista Vico* [tr. T. Bergin, M. Fisch], Ithaca 1948, p. 53.

principles are therefore to be found within the modifications of our own human mind. Whoever reflects on this cannot but marvel that the philosophers should have been bent all their energies to study of the world of nature, which, since God made it, He alone knows; and that they should have neglected the study of the world of nations or civil world, which, since men had made it, men could hope to know⁶.

By comparing an epistemological position of the knowing subject in the field of history with God's position concerning nature, Vico extended an application of his famous *verum-factum* principle which he had formulated before he started writing *The New Science*. Initially, it had pertained only to mathematics, experimental sciences, and ethics. However, in his essential work he defends an ideal of humanistic education against impact of Cartesianism. According to Descartes, knowledge of the facts, and of historical events as well, is not science, because particular facts are not reducible to general laws. Mathematics is a paradigmatic science which grasps constant relations between ideas that are made by mind. Investigations that are not capable of following mathematics are not allowed to assert rights to be science because they cannot reach absolute certainty. By applying the *verum-factum* principle to history, Vico not only includes history into a realm of science, but also demonstrates its superiority over mathematics: mathematics consider mere phantasms while history deals with things themselves.

Montesquieu and Vico share the same ambition to establish history as science and they justify this goal in a similar manner. The French philosopher is aware of the significance of the verum-factum principle. Although On the Spirit of Laws concerns history and politics, Montesquieu starts the first book of his treatment – "On Laws in General" – by recalling the relation between God and nature: "God is related to the universe as creator and preserver; the laws by which he created all things, are those by which he preserves them. He acts according to these rules, because he knows them; he knows them, because he made them..." The laws by which God governs the universe consist of the rules of the motions of matter that were discovered by the early modern physicists. Montesquieu was not occupied only with history during his lifetime, but also with natural investigations, to which he devoted some lesser-known writings, among which was a treatise on gravity titled Discours sur la Cause de la Pesanteur des Corps. Those works betray his interest both in the Newtonian science and the mechanist philosophy. By evocating physical issues at the beginning of On the Spirit of Laws, Montesquieu suggests that

⁶ Ibidem, p. 85.

⁷ Montesquieu, *The Spirit of Laws*, Vol. 1, Worcester 1802, p. 18.

he intends to mock – to some extend – natural studies in his historical work. Therefore, in the following paragraphs he allusively compares men's relation to history with the God's one to nature; people know civic laws because they are man-made: "Particular intelligent beings may have laws of their own making..." Hence men as the creators of positive laws can grasp them and establish history and politics. Moreover, people understand also natural laws that preceded – in a logical order – positive ones. While the latter are created, the former were

...never made. Before there were intelligent beings, they were possible; they had therefore possible relations, and consequently possible laws. Before laws were made, there were relations of possible justice. To say that there is nothing just or unjust but what is commanded or forbidden by positive laws, is the same as saying, that before the describing of a circle, all the radii were not equal⁹.

Montesquieu is in accord with a philosophical tradition that determines ethics as *aprioric* science. Since positive laws are contingent, and they greatly differ in each society, they may be vague to foreigners at the first glance. However, those rules are still comprehendible because they are based on natural laws which originate from fixed and inevitable relations of men's mind. Hence, historical and social enquiries imitate two realms of knowledge, i.e. physics and mathematics that involve the *verum-factum* principle.

Apart from the precognition of laws, another crucial set of conditions that make historians capable of conducting investigations, consists of passions. According to Montesquieu, history as science is possible because it poses a creation of people guided by passions: "Modern history furnishes us with an example of what happened at that time [at the time of establishing republican government] in Rome, and this is well worth noting. For the occasions which produce great changes are different, but, since men have had the same passions at all times, the causes are always the same"¹⁰ (emphasis mine). Here Montesquieu once again underlines the significance of passions by deriving from them all aspects of human existence: "The passions act with great effect upon us. Life is but a series of passions, sometimes stronger, sometimes weaker; now of one sort, now of another. It cannot be doubt-

⁸ Ibidem.

⁹ Ihidem

¹⁰ Montesquieu, Considerations on the Causes of the Greatness of the Romans and their Decline [tr. D. Lowenthal], Indianapolis 1999, p. 26.

ed that the combination of these passions during all of life, and different in every person, is responsible for the great differences among mind" (emphasis mine).

Hence passions provide both the universal substance for all particular events and a motive force that leads people to them. On the other hand, passions intermediate between knowing subject and its historic object. Montesquieu's assumption is that one can comprehend the acts of nations because they are men-made, and all people throughout history share the same passions. Past physical objects are not directly accessible to researcher, whereas passions that cause historical events are available in an immediate way. In this case, there is no gap between the ideas of mind and the essences of things due to the fact that passions constitute man's nature. Since every person has epistemologically privileged access to his or her own ideas, and people share the same biologically based nature, one can conduct fruitful historical studies. Therefore Montesquieu underlines in "Preface" to On the Spirit of Laws the role of empathy in historical investigations: "When I have been obliged to look back into antiquity, I have endeavored to assume the spirit of the ancients..."12. By providing means for historical studies, and the substance for acts, passions justify an introduction of the verum-factum principle on the field of history.

Although the assertion that human life is reducible to passions can lead to a voluntaristic view on history, Montesquieu avoids this consequence. The equation of life and passions is the first step to provide a deterministic explanatory approach. As other modern philosophers, Montesquieu undermines the significance of agent's conscious motives. His studies do not betray teleological perspective. Contrary to that, he aims at describing how passions are – as the substance of history – shaped and – as people's motive force – channeled. For this purpose, Montesquieu impregnably uses the concept of an efficient cause, and tends to explain the variety of *modi vivendi* by social and natural circumstances in which nations live. The impact of those conditions may be so great that one could suppose that different peoples represent distinct races. Montesquieu describes an impression which Romans' military success made on his contemporaries: "This calls for reflection; otherwise, we would see events without understanding them, and, by not being aware of the difference in situations, would believe that the men we read about in ancient history are of another breed than ourselves" This emphasis on external

¹¹ Montesquieu, An Essay on the Causes That May Affect Men's Minds and Characters [tr. M. Richter], "Political Theory" 1976, No. 2, p. 145.

¹² Montesquieu, *The Spirit of Law*, Vol. 1, op.cit., p. iii.

¹³ Montesquieu, Considerations, op.cit., p. 39.

factors, instead of underlining conscious motives, is in accord with his interest in mechanistic philosophy. Montesquieu writes for example: "It is difficult to believe how many things determine the state of our mind. It is not only the alignment of the brain which modifies them, but the whole body. Almost all parts of the body contribute to it, including often those which are not suspected"14. Nevertheless, Montesquieu does not claim to begin historical studies with physics. He rather seems to recall a solution which was formulated by Thomas Hobbes. The English philosopher was convinced that politics is a part of a greater system based on physics. Yet, Hobbes had inverted logical order by publishing *De Cive* before *De Homine* and *De Corpore* were finished. Hobbes justified this move by arguing that political philosophers may omit physics because causes, i.e. passions, which rule people's behavior are well-known by ordinary experience¹⁵. On the other hand, personal experience represents the moves of matter in human body. Montesquieu also does not find it is necessary to start on the physical micro level; there is no need for historians to study deeply natural philosophy. Nevertheless, one should keep in mind that mechanistic philosophy constitutes a background of Montesquieu's explanatory approach, and that he sometimes combines physics and history (as it will be shown below). Since there is no metaphysical difference between the realm of physics and the realm of history, there are no a priori contraindications for applying analytic method to the latter.

3. Application of analytic method to history

However, Montesquieu does not forejudge that each historical phenomenon may be scrutinized. Some events are highly determined, while the others are not. Contingency has a significant impact on nations when they are, for example, in their infancy. On the contrary, developed political systems are more or less determined ¹⁶. It was not possible to predict military success of Rome at the time when the city was a small monarchy. But once Romans established their institutions, their acts became strongly determined and convenient for being grasped by analysis: "If the chance of one battle – that is, a particular cause – has brought a state to ruin, some general cause made it necessary for that state to perish from a single battle. In

¹⁴ Montesquieu, An Essay on the Causes..., op.cit., p. 145.

¹⁵ See T. Hobbes, *De Cive, or the Citizen*, New York 1949, pp. 14–15.

¹⁶ See P. Schuurman, *Determinism and Causal Feedback Loops in Montesquieu's Explanations for the Military Rise and Fall of Rome*, "British Journal for the History of Philosophy" (forthcoming), p. 14.

a word, the main trend draws with it all particular accidents"¹⁷. Due to the heuristic significance of established systems, Montesquieu initially seeks how they come into being. In that point he also follows modern physicists who identify the explanation of natural phenomenon with revealing its origins, i.e. efficient causes.

The characters of political systems stem from a cluster of geographical (physical) and social causes which form the passions of nations. Thus some affects take advantage on the others; prevailing passions constitute esprit de corps that becomes a major motive force of a nation. Romans, for example, lived in a hostile social habitat so they created military institutions which later informed a warlike mentality of generations to come. For that reason, Rome was guided by the virtue of honour. Moreover, since a historian shares the same nature with Romans, he or she understands passions that did not allow them to perish. When it comes to geographical causes, here Montesquieu also employs a comparative method that sets up basis for the analysis leading to general principles. In "The Book XIV" of On the Spirit of the Laws he compares data on how different nations behave in regard to climate. Noticed regularities and dissimilarities serve as material for inductive generalization, for example: "The inhabitants of warm countries are, like old men, timorous; the people in cold countries are, like young men, brave"18. This explanatory approach is in line with Montesquieu's heuristic statement in which he favors analysis over synthesis: "I have not drawn my principles from my prejudices, but from the nature of things"19. Furthermore, to explain profoundly social phenomena related to climatic conditions, he does not hesitate to support his point with statements taken from physics and medicine:

A cold air constringes the extremities of the external fibres of the body; this increases their elasticity, and favors the return of the blood from the extremities to the heart. It contracts those very fibres; consequently it increases also their force. On the contrary, a warm air relaxes and lengthens the extremes of the fibres; of course it diminishes their force and elasticity²⁰.

Now, although historians are not capable of carrying out laboratory, controlled experiments on peoples, history furnishes researchers with so called natural ex-

¹⁷ Quoted in ibidem, p. 4.

¹⁸ Montesquieu, *The Spirit of Laws*, Vol. 1, p. 260.

¹⁹ Ibidem, Vol. 1, p. iii.

²⁰ Ibidem, Vol. 1, p. 260.

periments²¹. In order to do that, it changes the historical trajectories of nations by altering initial conditions. Hence, one may observe the various *modi vivendi* in spite of the common human nature.

4. Pitfalls of analysis and thought experiments

Yet, as mentioned before, one should resist temptation to make generalizations too rapidly. The modern methodology was formed in opposition to Aristotelian one, so 18th century analysis consists not only of induction but also of experiments testing general propositions. Montesquieu is aware of the pitfalls of rushed generalization. Therefore, the key thing for him is to find a way to validate and abolish preliminary conjectures cornering efficient causes. For this purpose he exploits the concept of experiments. Since it is not possible to perform physical experiments in history, he uses thought ones. The only difference between them lies in the means: instead of manipulating physical factors, Montesquieu uses counterfactuals. According to Paul Schuurman, the characteristic feature of the philosopher's methodology is that he does not introduce counterfactuals – contrary to most historians - to show that historical events are contingent but he employs them for deterministic aims²². Now, let us suppose that a factor F causes an effect E1. In order to check this supposition, one may pose a different input - i.e. a counterfactual C - and substitute it for F. If E1 still occurs, that means the conjecture is wrong. In that case historian must pose – by analysis – another assumption, and then he should try to abolish it by subsequent thought experiments which employ counterfactuals. On the other hand, if C leads to a different outcome E2, the historian is hot on the trail of true explanation. Hence, experiments on the field of physics and on the realm of history share the same pattern. Montesquieu uses notional experiments, for instance, in order to elucidate how the empires established by Cyrus and Syleucus lost against - respectively - Macedonians and Romans, and he links these events with the fact that the boundaries of these states were overextended. Then Montesquieu imagines what would have happened if the rulers had limited their desire for conquering lands. This thought experiment indicates that the outcome would

²¹ See "Prologue" to *Natural Experiments in History*, J. Diamond, J. Robinson (eds.), Cambridge–London 2010, pp. 1–2.

²² See P. Schuurman, *Determinism...*, op.cit., p. 4.

have been different. Thus Montesquieu formulates the law: "Nature has given states certain limits to mortify the ambition of men"²³.

To justify this comparison between history and physics, let us consider just one more objection. One may put in question the equation of experiments on these both fields because thought experiments do not provide researchers with empirical tests. But that is not a case. The outcomes of notional experiments are in force in physics as well. Physicists are not always able to manipulate material factors, as, for example, in astronomy. Moreover, sometimes they rely on thought experiments against empirical data. For instance, Galileo Galilei maintained that bodies dropped from a given height fall with the same acceleration and speed no matter of their weights. His adversaries carried such physical experiment out and a result was contrary to Galileo's prediction: heavier objects reached the ground faster than lighter ones. But even then he insisted on the proposition because the critics had not taken resilience of air into account. Until Robert Boyle constructed an air pomp, it was impossible to remove air by physical means, so Galileo needed to perform a thought experiment. Therefore, Montesquieu's counterfactual methodology remains in force.

5. Actuality of Montesquieu's methodology

Montesquieu's historical works are a great exemplification of the Enlightenment methodology. According to Ernst Cassirer, Enlightenment tended to embrace all ranges of knowledge by applying analytical approach to them²⁴. In other words, during that period analysis constitutes a horizon of thoughts. Of course, this statement is valid in a case of history as well. However, we usually consider Enlightenment as an epoch blind to historical investigations. This prejudice stems from the romantic movement that identified itself in opposition to the 18th century philosophers. Therefore, the members of romanticism claimed rights to establish history as valid knowledge on their own. Since they considered analysis as the method that oversimplifies a complexity of human existence, they overruled and replaced it by interpretation. The clearest justification of this methodological revolt was given by the neo-Kantian philosophers from the Baden School: Wilhelm Windelband and Heinrich Rickert. According to them, nature and spirit (Geist) pose

²³ Quoted in ibidem, p. 5.

²⁴ See E. Cassirer, *The Philosophy of the Enlightenment* [tr. F. Koelln, J. Petegrove], Princenton 1951, pp. 197–199.

two completely different objects which require diverse methodological approaches. Hence the neo-Kantians introduced a sharp division between the so-called nomothetic and idiographic sciences. Thus, the application of analysis was limited to natural phenomena. That pattern of thinking is still mirrored by the way in which academic units are organized; while social sciences are sometimes associated with natural ones, history is bound with humanities. One often overlooks that physical factors also play their role in the field of history and that some historical phenomena may be reduced to general laws, as we have seen it above. However, contemporary historians supply us more and more frequently with studies which intersect history and natural science²⁵. Nowadays, when those researchers understand natural phenomena much more profoundly, and when they employ the sophisticated means of analysis, Montesquieu's effort to establish history as science and his methodological ideas are more up-to-date than they used to be in the 18th century.

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²⁵ See for example *Natural Experiments in History*, passim. Editors Jared Diamond and James A. Robinson gather together several studies that combine history, economics and natural sciences. Some outcomes of those investigations are even quantified.

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