THE ELEMENTS, &c.

BOOK I.

ON METHOD.

CHAPTER I.

ON THE DISTINCTION BETWEEN POLITICAL ECONOMY AND TRUE POLITICS.

THERE happily exists in the present day a strong tendency to the study of political economy, and although it is naturally to be expected that in so complex a subject many erroneous inferences should be drawn, especially in the infancy of the investigations, yet the value of the facts elicited, and the increased attention of the public mind to such studies, must more than compensate for the illogical reasonings which time and more extensive experience cannot fail to correct.

It may therefore be advantageous to point out the relation of political economy to true politics,—to ex-

hibit each in its essential character, and to show the difference of their respective origin.

Scientific method presents itself under two forms or aspects. In the first, we commence with the axioms, general principles, and elementary definitions of a science, and from these descend to the more complex details, which are only particular cases or points of view of the elementary propositions. In the second, we commence with the observation of isolated facts, and these, being selected in a specific region or department of nature, are found (although presenting an endless variety of accidents or concrete circumstances) to involve a permanent element of similarity whose general expression is identical.

The first is à priori reasoning, or deduction; the second is à posteriori reasoning, or induction. The first mode is exhibited in the mathematical sciences, which are purely rational, independent of sensational observation, and indeed of the existence of matter. The second mode is exhibited in the physical sciences, which are composed of observation and reasoning,—their facts being derived from the observation of natural phenomena, their laws from logical reasoning on those facts.

Induction and deduction, however, are only processes or methods by which the intellect searches after truth, and as there is but *one* truth, the two methods must ever furnish us with the same final result, provided there be any object to which both may be legitimately applied.

Geometry, for instance, is purely rational, and may

be studied without any mechanical or external aid whatever, it may be studied in the mind alone, and the mind can by the bare contemplation of ideal space discover its truths.*

But even in Geometry the inductive method is capable of application, and probably was used to a certain extent at the commencement of the science. Thus a person measuring the square of the hypotheneuse of a right angled triangle might accidentally find it to be equal to the sum of the squares of the base and perpendicular of the same triangle. Suppose his triangle to have been a field, surrounded by three square fields,—a case which might very easily He measures the area of the squares, and he occur. finds perhaps to his surprise that the two smaller squares are exactly equal to the greater. Struck with the coincidence he measures squares on the sides of many other right angled triangles, and he finds the equality to hold constant in every case. He would naturally infer the general fact that they were always and in every case equal to each other, but he has not proven it scientifically, he has only learnt it empiri-The same process might enable him to discover many other geometric truths, which, although not mathematically proven, would be considered true for practical purposes, and thus the inductive or à posteriori mode would lead to the same result as the deductive or à priori mode. Principles in the manufacturing arts which are unexplained by science, are

^{*} See some admirable remarks on this subject in the preliminary treatise of the Library of Useful Knowledge, pp. 7-9.

of the à posteriori character, they have been learnt through observation, and are acted on as general principles; indeed, art is frequently the forerunner of science, many of its truths being known long before science advances to such a point as to be able to explain them rationally.

We are well aware that the pure geometrician may smile at the idea of induction being applied to the mathematical sciences. We reply, that there is not a truth which geometry shows to be necessary which may not, by the actual measurement of real spaces, be shown to be general. Deductive science gives us necessary truths, inductive science gives us general truths, and when the object is really the same the two coincide. As sciences, politics, and political economy are perfectly distinct, they are based upon primary propositions altogether different; the process of proof is essentially reversed, and yet as being both conversant about the correct mode of human action, they coincide in their results. Politics treats of equity, whence human duty; political economy treats of utility, whence human benefit; and we maintain that if human duty were universally carried into actual operation, we should thereby evolve the greatest amount of human benefit. Man and man's action is the subject of both sciences; but the one science is sensational, and generalises from facts obtained through the senses; the other is rational, and deduces from primary propositions of the human rea-To evolve the maximum of human benefit, both are absolutely necessary, because although they

coincide so far as they treat of the same subjects, each has a peculiar province in which the other can afford us no information.

The science of politics is à priori and rational, (that is, the produce of axiomatic reason); political economy is à posteriori, and founded on observation. The science of politics must commence with its indisputable axioms and exact definitions, and pursuing these into their details show how they would affect the relations of men and the order of society. Political economy commences with the observation of facts, and when these are sufficiently numerous they are gathered into clusters according to their agreement, and from them is inferred a general fact, or law, or principle, which, although not proven by pure reason, and indeed incapable of such proof, is a fair inference from the facts brought before the mind, and may justly be taken as the ground of argument or of action.

To use the language of logic, which applies with strict accuracy to this subject, we may state that political economy commences with the consequent (conclusion) and minor premiss of the argument, and from these infers the major. Politics, on the contrary, commences with the major and minor premises, and from them deduces the consequent. This radical difference is the distinguishing characteristic between the abstract and the inductive sciences.

Political economy, so far from being the result of mere observation, can by no possibility be even a science until its various propositions are connected together by the law of reason and consequent, and

even then before it can become of practical application it must admit an à priori principle or axiom altogether extraneous to itself. This is exemplified in the doctrine of utilitarianism, for when political economy has collected a certain number of facts, and has traced them back to their cause, it pronounces judgment on the cause according to the character of the effects. If the effects have been bad, it pronounces the cause bad; if the effects have been good, it pronounces the cause good. But then to apply this to legislation, it is under the necessity of admitting the à priori principle, that "the public good ought to be the object of the legislator."*

It is possible, however, for political economy, as an inductive science, to confine itself simply to the calculation of what is beneficial or prejudicial,—to arrange this in a systematic form, and present it to the world—to guide rulers in their legislative acts, and to instruct the ruled in their temporal interests. It would thus have no direct interference with legislation, which, indeed, is not its province, but would hold to legislation a relation similar to that which a science holds to its art, and thus legislation would become the practical application of the principles of political economy.

But we have said that the à priori or purely scientific mode leads to the same result as the empirical and à posteriori mode; in other words, that pure politics would lead to the same result,

^{*} This admission of Bentham's has been noticed in the Essais de Philosophie Morale of A. Vinet. Ed. Paris, p. 96.

so far as it extends, as political economy perfectly understood. And if we believe the universe to be harmoniously constructed, this must hold good in every case whatever,-indeed it is only on the principle of harmonious construction that political economy could be taken as the basis of legislative duty. It is in the accordance of the just with the beneficial, and of both with the logical, that the moral, the physical, and the intellectual worlds are combined into one harmonious whole, or rather shown to be parts of a universe—of one intelligent creation. Each portion may be studied separately, each may be considered in its unity alone, and each may throw off its dependence upon the others, so long as it is considered scientifically by the mind; but while science severs a branch from the great tree of nature, and pursues it into all its ramifications, philosophy views the branches in their common connection, as springing from the same origin, as being mutually dependent upon each other, and as incapable of actual separation as they are of annihilation.

There is another difference between pure politics and political economy.

Pure politics, if there be such a science, must lay down its rules of perfect and abstract political right. These rules being investigated by the intellect alone, are capable, like mathematical propositions, of universal verification. Any one having the capacity, who shall choose to direct his mind to the study, may convince himself of their truth. Being purely

rational, they are capable of examination by the reason alone, and may thus be tried by the axiomatic judgment of mankind. Political economy, on the contrary, is dependent on the correct observation of an indefinite number of facts, and as these must be received on the evidence of many individuals, it is sometimes difficult to arrive at an unobjectionable conclusion. True, if the facts could be perfectly observed, perfectly recorded, and perfectly reasoned with, the result would be as certain in this case as the other; but the difficulty of accurate appreciation renders the result always to a certain degree uncertain. While the intellect can think perfectly (witness algebra and geometry), it cannot appreciate external nature perfectly, so that every thing dependent on observation is an approximation, and no more. In some branches of knowledge the error may be so small as to be negligible, or may be corrected by analogy, but still strictly speaking there is an error, however small, and this error must ever make the mathematical sciences more certainly exact than the physical, independently of the circumstance that the mathematical and other abstract sciences are so inherent in our constitution that we cannot possibly conceive them to have been other than they are. The same must hold true of political science. If it exist at all, it must exist as an abstract science (that is. independent of observation), and taking its origin in the primary convictions of the reason, or the axioms of the mind, cannot be supposed different from what it is.

It will be found that politics and political economy have each its respective use, and influence, and application.

It must be admitted (although the doctrine is yet imperfectly understood, even in the most enlightened states of Europe) that legislation has its limits and its boundaries, that there is a province within whose circle legislation is competent, upon due deliberation, and that beyond the circle, legislation is not competent, not lawful, in the higher meaning of the word. There are actions which no human legislation can ever render right, and acts which are immutably and irrevocably wrong, whatever sanction they may derive from law, or enactment, or even from general consent. This general fact, however, is of little value, unless we can ascertain the rule by which is to be definitely determinedthe boundary that separates the province within which legislation is competent, and beyond which it necessarily degenerates into tyranny. A moment's reflection will suffice to convince those who are familiar with such investigations, that political economy can never be the science destined to declare the limits of the legislator's duty. No inductive science can ever produce an axiom, and no inductive science can ever establish, or go one step towards establishing, a principle of right or wrong. Right and wrong are abstract qualities superadded by the human mind to actions which otherwise would be viewed in their natural or physical character alone, and no inductive science can by any possibility determine the abstract character of any of the substantives with which it has to do. It is this universal law which distinguishes the abstract from the inductive sciences, and which necessarily prevents mathematical science from admitting even the smallest portion of mechanical proof or mechanical assistance. Whatever may be the limits of legislation, those limits are necessary, and necessary exactly in the same sense as mathematical truth is necessary,—we cannot conceive it to be other than it is. Unless it be maintained that every act which a legislator has the physical power to execute be à priori lawful and competent, there is, and there must necessarily be, a limit, determined, not by induction, nor by any observation of any facts whatever, but by the necessary axioms of the human mind, which exist at all times, and in all places, and in all individuals. This, then, is the province of the science of politics; and the province of political economy is to point out to legislators those acts which are most useful or beneficial within the circle where legislation is legitimate.

The science of political economy can never determine whether men *ought* to be free to express their opinions, or to worship their Creator according to their conscience; neither, on the other hand, can the science of politics determine whether it be more beneficial to levy a direct or an indirect tax, or whether a free trade in gold and silver be as beneficial to a community as a free trade in corn. Politics determines the province of legislation; political economy determines what particular act may be

beneficially performed within that province for the welfare of the community. Politics should settle the constitution of society so far as the relations of men are concerned. Political economy should, then, point out those beneficial or prejudicial modes of action, whose operation is only to be ascertained by observation. In the eye of politics, the end of legislation is the perfect preservation to every man of all his rights. In the eye of political economy, the end of legislation is the greatest good (benefit) of the greatest number. The end of politics, therefore, is distinct from that of political economy. And just as pure mathematics seek to determine the universal and abstract qualities of spaces, numbers, and quantities, so does politics seek to determine the universal and abstract relations of men, and to found them on axioms which are capable of universal verification. Political economy, on the contrary, bearing the same relation to pure politics that actual land-measuring does to geometry, inquires into no abstract relations, seeks to determine no principles of universal and necessary truth, but limits itself to the inquiry of what actually is in the given circumstances of society, and points out, not the character of legislative acts, but their fruits and consequences.

But while politics and political economy differ essentially in their character as sciences, and are separated from each other by a broad line of demarcation, we are not to suppose that they have no common ground. So far from this, political truth must ever find its *verification* in political economy,

and political economy may find the first hint of its great principles in the dogmas of abstract politics. Politics treats of the just-political economy of the beneficial. But according to the constitution of nature and of man, the just and the beneficial walk hand in hand, inseparably connected by the fiat of the Almighty. The unjust and the prejudicial are no less inseparably connected; and thus, wherever we find systematic injustice, we must also and invariably find systematic suffering as its constant and invariable attendant. On the other hand, wherever we find systematic suffering—(that is, suffering produced by the order of society, and not merely by the ordinary operation of the laws of general nature)we may infer, and rightly infer, that injustice is operating somewhere, and that some men are defrauding their fellows of their rights. If it be true, then, that wherever injustice is, there also is suffering, and wherever systematic suffering is, there also is injustice, the sciences which investigate the laws of these two substantives must (although perfectly distinct in themselves) afford perpetual illustration of each other's truth. It is not the suffering that constitutes the injustice; for we can determine à priori upon the character of an act, even although we had no means of appreciating the character of its consequences. On the contrary, the suffering is that invariable attendant which it has pleased God to attach to injustice, whenever and wheresoever it may be found. The injustice of an act does not reside in the act itself, in such a manner as to be appreciable by

the senses; and therefore it can never by any possibility become a portion of an inductive science. is not capable of observation; it has no form nor colour, neither can it be represented, like benefit or suffering, by the increase or decrease of the objects of physical wealth. It is the result of a mental judgment. It exists in the mind, and in the mind alone. It is an abstract quality, which the mind, from its moral constitution, superadds to an action, over and above all those natural qualities which may be detected in the action by external observation. benefit and prejudice, on the contrary, as enter into the science of political economy, are qualities which may be observed, appreciated with accuracy, and measured. This, and this only, permits the possibility of political economy becoming an inductive science. To illustrate this, let us take a familiar example. On the table before me stands an inkstand. I can observe its various qualities, its form, weight, size, colour, density, &c. I can measure its angles and sides, and survey it. I can analyse its parts, test the ingredients of the ink, examine its wood botanically to discover the species of tree of which it is made, and mechanically to discover its power of resistance to strains in different directions. I can call to my aid arithmetic, to number its parts; algebra, to determine their relations in quantity; geometry, their relations in space; chemistry, their relations in affinity; mechanics, their relations in weight; mineralogy, the qualities and properties of its metals, &c. &c.; and thus can pursue a long

course of investigation, all primarily based on the qualities apparent or discoverable in the object itself, the inkstand. But what I cannot possibly discover by any observation of the object is, whose PROPERTY it is. No attention that I can give, no investigation that I can ever make will advance me one single step in this inquiry. By observation I may determine in whose possession it is, but never by observation can I determine to whom it rightfully belongs. But still I can pursue my observations further. can place the inkstand in various circumstances. can give it first to a clerk who uses it beneficially, then to a child who injures or destroys it; or, pursuing the inquiry on a larger scale, I can successively give it for a day to twenty different persons, and observe and record the benefit or prejudice that arose in each particular case. When the observations are completed, I am in a condition to pronounce in whose possession the inkstand will be most beneficially placed. But I have not advanced a single step towards the solution of the question, Whose property is it? To whom does it rightfully belong? We have here the true distinction between politics and political economy. Political economy, which can never admit the concept property, inquires only into the question of beneficial possession,—a question which may be solved by a careful and accurate observation of external circumstances. But the concept property is invariably introduced by mankind, and there must remain some means of determining its laws. Property, like justice, is one of those abstract quali-

ties which the human mind superadds to all the qualities or conditions that can be observed in the external object, and as an abstract substantive its primary laws are à priori, and take their birth in the human mind, independently of all observation or of any appreciation of external matter whatsoever. It is then the province of politics (an abstract science) to determine the laws and the natural theory of property, and to settle by axiom the principles on which the objects existing in nature should be rightfully distributed. And it is the province of political economy (an inductive science) to determine in whose possession the objects of nature are most beneficially placed. Both sciences have their legitimate use. Both are branches of nature, and both, in so far as they are true, are the expression of the will of the Divine Intelligence, who hath done all things well.