## FRENCH PHILOSOPHY AT THE END OF THE EIGHTEENTH CENTURY-CONDORCET.

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TOWARDS the end of the eighteenth century, the rapid progress of the sciences presaged a general revolution of opinions. Not only had mathematics gained by the impulsion given in the early years of the century, but also physics, chemistry, and above all, the natural or biological sciences, had developed wonderfully. Not to mention the French mathematicians, astronomers, physicists and physiologists who rivalled Bradley, Bernoulli, Euler, Haller, and Franklin, natural history was revived by Buffon and Jussieu, who extended it beyond the narrow sphere within which specialists had hitherto confined it. By laying before the public the great questions on natural history they became valuable auxiliaries to the "philosophers," even when refusing to be considered as allies.

This is particularly true of Buffon, who was led by the plan of his great work to treat of "the general theory of the globe we live on, the distribution, nature and formation of the substances it presents to our view, the great phenomena which occur on its surface or within its bosom; the history of man and the laws which preside over his development, life and destruction. . . . . " Among these problems, which Buffon looked upon as unquestionably belonging to natural history there are a good many which only a century earlier belonged to theology. The change wrought in men's minds was therefore nothing else than a revolution. Theology was henceforward confined within its own domain; even metaphysics was no longer in good standing, and little was accepted under that name beyond psychological and moral researches, or at the utmost a remnant of speculation on the existence of God and the nature of the soul. Everywhere else the scientific spirit asserted its supremacy. Constant use was made of positive methods, mathematical formulæ and analysis, whenever the phenomena admitted of them; and the experimental processes applied to the study of the genesis and formation of animate and inanimate things. To analyze, to trace things back to their origins, was the very spirit of the age which after having struggled in the first half of the century had become victorious in the latter half.

We find a rather striking picture of this great movement in the *Éloges*, written by Condorcet for the Academy of Sciences after 1782. Condorcet was a true son of the age, and a grateful son. An enthusiastic admirer of Voltaire, a friend of Turgot and D'Alembert, imbued with the ideas of Condillac, of the Encyclopædists, and even, on some points, of Rousseau, perpetual secretary of the Academy of Sciences, and introduced into the French Academy with the help of the "philosophers," Condorcet showed even in what he wrote before the Revolution what he was to be when fully developed in his last and most important work, the Esquisse du tableau des progrès de l'esprit humain : a passionate upholder of the philosophy of his time, convinced that under its guidance humanity was on the way to happiness. His faith was so immovable that, when outlawed and threatened with death, his last words were to be a rapturous hymn to progress as attained by means of reason and science. Being an acute-minded and remarkably wellinformed man, he combined with over-sanguine hopes and previsions a clear and precise insight into the social evils of his time and the means of remedying them. By considering the body of his leading ideas we can draw up a summary balance-sheet, so to speak, of the philosophy of the eighteenth century in France, on the eve of the day when the Revolution was to put it to the severe test of facts.

According to Condorcet the proper object of philosophy is man, and, secondarily, the totality of the actual in proportion as it concerns man's development and happiness. Such a conception may be narrow or it may be wide; narrow, if we purposely exclude all researches in which we do not perceive man's immediate profit; wide, if, on the contrary, we start from the principle that all things in the universe are mutually dependent, and that consequently the science of man is inseparable from the study of the totality of the actual. Condorcet stood half-way between these two extremes. True, he had but little inclination for metaphysics. Although he would not regard as invariable the limits assigned by Locke to the human mind, and although he considered the questions of the simplicity, the immortality, and the liberty of the human soul, he did not deviate notably from his contemporaries' point of view. "True metaphysics" is to him, as to them, only the application of reasoning to the facts observed in reflecting upon our sensations, our ideas and our feelings.

But on the other hand, he has no narrowly utilitarian conception of positive science. He understands that to seek immediate utility would be to destroy the deep source of it. The most useful theories practically are composed of propositions which were discovered by curiosity alone, and which long remained useless, while no one dreamed how they could one day cease to be so. The chain of truths which spring from each other, and which can be successively discovered only with the aid of newly-discovered methods, bears no relation to the series of truths which are also to become, one after another, practically useful. A discovery is not made because it is needed, but because it is linked to other truths already known, and because we become at last strong enough to overleap the space between it and us. Let us then be wary lest under pretence of reducing the sciences to their lowest terms we should countenance ignorance, the greatest bane of mankind and the cause of nearly all our misfortunes.

Conceived in this way, positive science (the principles of which Condorcet has indeed no intention of examining) will supply a more or less rapid but a certain solution of the main problems which puzzle mankind. Man at the present time is wicked and miserable. But his vices as well as his sufferings proceed solely from ignorance and error, both of which science will dissipate. The true use of science, therefore, does not consist in its application to the arts, or at least this is but a small part of its utility. Its most important benefit is perhaps that it has destroyed prejudices, and rectified after a fashion our human intelligence. All political and moral errors originate in philosophical errors, which in their turn are connected with physical errors. There is not a religious system or a piece of supernatural extravagance which does not rest upon ignorance of natural laws. The progress of physical knowledge is all the more fatal to such errors because it often destroys them without even seeming to attack them.

Thus do we owe to Greece an eternal debt of gratitude. The philosophers of Athens, Miletus, Syracuse, and Alexandria, have made it possible for the inhabitants of modern Europe to excel all other men. Had Xerxes been victorious at Salamis, we might still be barbarians. That battle is one of those events, so rare in his-

## CONDORCET.

tory, in which the fortune of a single day determines for a long series of centuries the destiny of mankind. Fortunately the danger incurred in the fifth century B. C. no longer threatens us. Barbarism over the entire globe is no longer possible. Printing has forever saved mankind from such a danger. We shall witness no more "disastrous" epochs, such as the Middle Ages were. Science not only frees, but it guarantees the man it has freed against any aggressive return of ignorance and barbarism.

We are thus brought to the central idea of Condorcet's philosophy, which is the idea of progress and of indefinite perfectibility. The expression of this thought constantly recurs in his works, confident, eager, enthusiastic as a hallelujah. Every century shall bring with it new discoveries and new instruments for discovery; and even as Aladdin's lamp made better those who possessed it and made a good use of it, the progress of science shall be accompanied by the melioration of mankind. "My aim," says Condorcet in the beginning of the *Esquisse*, "is to show, by the aid both of reasoning and of facts, that no boundaries have been set to the improvement of the human faculties; that man's perfectibility is really indefinite; and that his progress, now independent of any opposing power, has no limit not coincident with that of the globe on which fate has cast him." Even our bodily organism will be perfected. With better hygiene, more sanitary houses, a more thorough knowledge of the animal frame, the duration of life may be increased. Death would be but the result of extraordinary accidents, or of the ever later destruction of the vital forces.

The idea thus coming to its full development in Condorcet had its roots in the philosophy of the whole century. Condorcet merely drew conclusions from principles which had been universally accepted. How often had it been said that everything is acquired, that everything comes from experience; that between the primitive man and the man of the present day there is a wide distance, and that this distance has been covered by man with the help of his own sole powers! But if these have been able to lead him up to the point where he is now, how far may they not lead him in the future! What may not be expected from a rational system of education? Helvetius dreams that by this means we may obtain "men of genius" at will. Condorcet entertains the hope that all men will thus be made wise and benevolent. All "philosophers" agreed in saying that nature "begins aright" and that if man "continues badly," the fault is with him, and not with her. It is for him, therefore, to amend himself, and to rid himself of his errors, prejudices and vices. In one word, this philosophy reduced to nothing the factor of innateness, instinct and heredity in man. As a necessary consequence, it expected everything from education, instruction and laws, and on this basis looked forward to unlimited progress.

It is true, we are wanting in information as to the prehistoric life of mankind. We can only guess the steps by which man, when isolated, or rather limited to such association as was necessary for reproduction, was able to make that primitive progress, the final term of which was articulate language. It is only by examining man's intellectual and moral faculties and physical constitution, that we can conjecture how he rose to this first stage of civilisation. At least the hypothesis thus formed is not contradicted by facts. Moreover, according to Condorcet man is naturally good. Though indifferent to good and evil while pursuing his own interest, he has yet a natural feeling of pity and benevolence, a necessary consequence of his constitution, which inclines him towards kindness and justice to his fellow-creatures. This feeling always works in the same direction, whereas self-interest counsels most various actions, so that this feeling of good-will exercises in the end a considerable influence upon the conduct of men, thus contributing to the progress of civilisation.

Whence comes it, then, that there are still so many wicked and miserable men? Condorcet does not deny the fact, but would not have it exaggerated. Humanity has already advanced far beyond the animal nature from which originally it could scarcely be distinguished. If ignorance and errors still occasion a great many evils, it is because nothing is so difficult as to destroy deeplyrooted prejudices, of which mankind contracted in its childhood a vast number, and also because there have long been classes of men whose interest was served by maintaining these prejudices, especially priests, of whom Condorcet speaks much as Voltaire and D'Alembert did. But mankind will eventually be cured; it cannot fail to be cured. Superstitions and other errors will fade away before the light of science. "It would be necessary only to enlighten people upon their real interests, and a very few simple truths would suffice to establish the happiness of mankind on a solid basis."

While indulging in most sanguine hopes for the future progress of the sciences, it was difficult for Condorcet to foretell in

## CONDORCET.

what this progress would consist, and he was wise enough not to attempt it. He contented himself with pointing out the general order of their evolution, according to which the simpler the facts to be studied, the speedier and surer will be the progress of the Thus astronomy was created first, and physiology last. science. Beyond physiology, he had a glimpse of sociology. Social phenomena were among his most habitual themes for reflexion. He understood that these phenomena like all others must be subjected to laws, the knowledge of which depended upon the observation of facts, and that this knowledge might become a science which like all others would make prophetic predictions possible. "The only foundation of belief in the natural sciences is the idea that the general laws, whether known or unknown, which regulate all phenomena in the universe, are necessary and unchanging. Wherefore should this principle be less true as regards the development of man's moral and intellectual faculties than as regards other natural operations?" Condorcet even dimly foresaw, but without dwelling upon it, the distinction between social statics and dynamics, and the preponderating importance of dynamics. On the other hand, he took up the bold idea of applying mathematical analysis to social phenomena. He thought he had thus found a most effective and fruitful use of the theory of probabilities.

Together with social science and with its aid, social art, which is the supreme object of philosophers, is to be developed and devoted to making all men free, reasonable and happy. First free, for the better enlightened men are, the freer they are. This proposition, Condorcet says, has the value of an axiom. According to the natural order of things "political enlightenment is the immediate sequence of the progress of the sciences." But this truth must be published cautiously, and Condorcet highly praises the philosophers for having quieted as much as possible the suspicions of princes. "Let us not," he says, "challenge the oppressors to league themselves together against reason; let us carefully conceal from them the close and inevitable connexion between enlightenment and liberty; let us not teach them beforehand that a nation free from prejudice soon becomes a free nation." The throne must not know that its interest lies in supporting the altar.

Again, in order that the progress of enlightenment may produce favorable results, the progress must be general and all men must share it. Condorcet here ventures to contradict his master, Voltaire. The latter was wrong, he says, in speaking scornfully of "the mob," and in thinking with his friend Frederick II. that "the stupid populace" has no need of enlightenment. Too long has intellectual and moral culture been exclusively the privilege of a minority, while the ignorant mass lies sunk in ignorance and prejudices. In any well-governed country the people will have time to acquire instruction and the few needed ideas to guide them according to reason. There must be public education, extending to all classes of society, offering to all children not so much a systematic course of instruction as the first elements of every science useful to all men, and giving to every one a survey of the various objects of knowledge. Society is interested in this, for in this way no man born to genius can be lost to society, and moreover it would be insured against the danger of seeing new prejudices constantly succeeding the old ones. But above all such an education would make men reasonable and happy by acquainting them with their rights, duties, and interests.

Trained by science and by the use of his reason, man learns that "his rights are written down in the book of nature." It was formerly to sacred books, to the bulls of popes, to the rescripts of kings, to collections of customs, to the annals of the church that men used to turn for maxims and examples from which they might draw conclusions. It is now well known, and has been declared by the American republic and by France first in the Old World, that reason is sufficient to show us the rights of man. These are all derived from the very simple maxim that, given two sentient beings, created equal by nature, it is against the natural order that one of them should seek his own happiness at the expense of the other. The question now becomes to establish on principles derived from reason alone a system of laws insuring to man the enjoyment of the advantages procured for him by the social state, while taking from him as few of his natural rights as possible.

Now most men are in fact far from enjoying their natural rights. Even where there are no longer any special privileges, where the equality of men is recognised before the law, the extreme disparity of fortunes very often makes the possession of natural rights a vain show. Of what use is the nominal enjoyment of these rights to a poor wretch dying of misery and starvation? Therefore we must found pension funds for old people and annuities for widows and orphans. A certain capital will be supplied to the young when old enough to work for themselves; popular credit societies will be established. These and many other institutions of the same kind, which may be formed in the name of society and become one of its greatest benefits, may also be the results of private associations.

Penal laws will cease to be a revolting anachronism in a society the manners of which are refined. Torture will disappear. The death penalty will be abolished. Natural children will be treated with humanity and justice; girl-mothers will not be driven to despair and crime; and, finally, we shall have a new jurisprudence, freed from the idle trash with which the prejudices of a score of nations and a score of centuries have loaded our law.

All these improvements will take place as education, guided by the social art, makes men better acquainted with their real interests. The improvement of laws, attending upon that of sciences, will bring together and often identify the private interests of each man with the common interests of all. There is no reason why the opposition between these interests, though now a violent one, should last forever. Man is naturally good. It is sufficient to impart to him gentle and pure morals, to enlighten his conscience, to prevent the laws from creating artificial opposition between the direct interests of individuals, but to cause them to develop and strengthen man's natural inclination to make his own happiness dependent on the happiness of others, and lastly, to prompt him to feel towards mean, unjust or cruel deeds a somewhat organic and reflex dislike. Reason must form laws and laws must modify men's manners.

Men will soon understand that national interests are no more incompatible with one another than private interests are. According to Condorcet there cannot exist, especially in a large empire, any truly national interest that is not merged in the general interest of mankind. All the causes which produce, embitter and perpetuate national feuds will gradually vanish. Wars between nations, like murders, will be numbered among the extraordinary atrocities, humiliating and revolting to nature.

One may recognise here the dream of universal fraternity, the humane optimism in which the eighteenth century at its close used to indulge. But such optimism did not make philosophers blind to the present state of misery, and their openly-avowed hopes were one of their forms of protest against the established code of morals and laws. This philosophy, as we have already seen, was above all an offensive weapon. The war it waged is far from closed; thence the discrepancy among the opinions concerning it even at the present day. According to some it is a poor, narrow, paltry philosophy. It understood nothing about the history of mankind and was a stranger to all religious feeling, insensible to the poetry of nature, intoxicated with the progress of science, and practically leading to frightful excesses. According to others it is the philosophy of a great age; it drew conclusions from the principles discovered or rehabilitated by the Renaissance and the Reformation; it restored to man the consciousness of his individual dignity and responsibility; it was passionately fond of justice and humanity; and, though it was wrong in believing problems too simple and in accepting too hasty solutions, at least it disposed once for all of the former social conception of inequality among men, and with the subjection of reason to theology. A weighty case which has not yet been settled ! Time will develop further phases of it, and the future alone can bring in a dispassionate verdict.