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**The Idea of Progress by John Bagnell
Bury**

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John Bagnell Bury. *The Idea of Progress.* An inquiry into its origin and growth, xv+377 p. London, MACMILLAN, 1920.

J. B. BURY, regius professor of modern history in the university of Cambridge, to whom we owe already, among other works, the standard edition of GIBBON and an excellent *History of the Freedom of Thought*, has made us a new gift, not less precious nor welcome than his previous ones. His new investigation is of fundamental importance to the historian of science, — for it is safe to assume that the latter's activity is largely impelled by his belief in progress, at the very least in scientific progress. What makes our studies so fascinating and so inspiring is the fact, which we take for granted, that science is essentially a cumulative process, and not simply a progress but an accelerated progress (1).

The idea of progress dominates modern thought to such an extent, that it takes some effort of imagination to realize its relative youth; it is not yet two hundred years old! What is the idea of progress? it means « that civilization has moved, is moving and will move in a desirable direction ». This definition evidences at once the metaphysical or adventurous character of this idea. Admitting that we can prove the reality of progress in the past and present, we can not prove its indefinite continuance in the future, nor can we prove that humanity will move forever in a desirable direction. Hence belief in progress is an act of faith, but we might as well accept at once the fact

(1) For a previous investigation on the idea of progress, a collective investigation which took place in Rome 1912, see *Isis*, II, 245. — An elaborate history was published in 1910 by JULES DELVAILLE, *Histoire de l'idée de progrès jusqu'à la fin du XVIII^e siècle*, 773 p. Paris, ALCAN. I have ventilated my own thoughts on the subject apropos of RADL, « Geschichte der biologischen Theorien », in *Isis*, II, 226-227.

that inasmuch as the future is unknown, man can not live without faith. His very activity implies some sort of faith. The assumption of progress belongs to the same order of ideas as the belief in Providence or personal immortality. Yet there is a great difference which will be sufficiently illustrated by the fact that the development of the idea of progress is intimately connected with the growth of modern science, the growth of rationalism and the struggle for political and religious liberty.

It is very curious that the Greeks, even the wisest of them, never hit on the idea of progress : their historical experience was far too small, and they were trammelled by their theories of Moira, of degeneration and cycles and their intellectual conservatism. The only ancient writer to conceive this idea, as restricted to scientific progress, was SENECA, who said, « One day our posterity will marvel at our ignorance of causes so clear to them », (1) a magnificent sentence which every scientist should always keep in mind. The spirit of the Middle Ages was not less incompatible with the birth of this idea, for their exclusive and narrow conception of Providence and their apocalyptic dreams were absolutely opposed to it. It is only with the Renaissance, when self-confidence had been restored to human reason, that the idea could germinate, though at the beginning the authority justly ascribed to the ancient writers was so overwhelming that the little seedling could grow but very slowly. It was not until COPERNICUS, VESALIUS and others had crushed this superstitious reverence that its existence was assured. The first to grasp the idea were GUILLAUME POSTEL, 1541 and JEAN BODIN, 1566. BODIN asserted the principle of the permanent and undiminishing capacities of nature; he claimed that the world had not degenerated since ancient times; he conceived all peoples as partners in one common undertaking. The next author considered by BURY is FRANCIS BACON for whom utility was the end of knowledge. But a greater step forward, — perhaps the greatest single step in the whole history of this idea, — was taken by DESCARTES. For it was only after the supremacy of reason and the invariability of the laws of nature had been proclaimed that the notion of progress could really flourish. A little later, at the close of the Cartesian period, FONTENELLE was the first to formulate the idea of scientific progress as a complete doctrine, and he contributed a great deal to its diffusion by his brilliant efforts to popularize accurate knowledge. The first, however, to « express in definite terms the vista of an immensely long progressive life in front of humanity », to conceive civilization as

(1) Venit tempus, quo posterī nostri tam aperta nos nescisse mirentur, *Natur. quæst.*, VII, 25.

being only in its infancy, was the good abbé DE SAINT-PIERRE in 1737. The development of the idea of progress was now considerably activated by the work of TURGOT, who anticipated COMTE's law of the three stages, and by the Encyclopædists. The latter indeed were inspired by two conceptions which were, so to say, fragments of the idea of progress : the solidarity of the sciences (already clearly seen by ROGER BACON) and the popularization of knowledge. They believed implicitly in the « indefinite malleability of human nature by education and institutions » and consequently in its indefinite improvement.

These efforts and some others which may be found in BURY's book constitute what may be called the first period in the history of the idea of progress. This first period extends up to the French Revolution. A new period was opened (1774) by KANT, who saw the immense significance of this idea but made it clear that nothing could be affirmed about the course of civilization until the laws of its movement had been discovered. That is what COMTE tried to do. This second period is characterized by the search for a definite law of progress ; incidentally, sociology was founded. A third period may be said to begin in 1859, with the publication of the *Origin of Species*, though the most effective extension of the idea of evolution to that of social progress, SPENCER's contribution, partly antedated DARWIN's discovery. However, it was the Darwinian, rather than the Spencerian theories, which established the notion of progress in its present commanding position.

No definite law of progress has yet been formulated, yet this idea dominates modern thought and inspires modern action. The tremendous compelling power of the principle of duty to posterity — a direct consequence of our belief in progress — is the best proof of this.

My summary, however brief, is, I hope, sufficient to show the importance of BURY's book. It is truly an excellent book, one of the best I have read for a long time. My only criticism of it is that the notes have been placed at the end of the volume, which is most irritating. Should this disposition be kept in later editions, I would suggest that asterisks be inserted in the text to warn the reader of the presence of a note.

G. SARTON.