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## Progress

## INTRODUCTION

Ike the idea of evolution, with which it has some affinity, the idea of progress seems to be typically modern. Anticipations of it may be found in ancient and medieval thought, sometimes in the form of implicit denials of the idea. But in explicit formulation, in emphasis and importance, progress, like evolution, is almost a new idea in modern times. It is not merely more prominent in modern discussion; it affects the significance of many other ideas, and so gives a characteristic color or tendency to modern thought.

The idea of evolution affects our conceptions of nature and man. But the theory of evolution is itself affected by the idea of progress. Since it was a major theme at least two centuries before Darwin, progress does not depend for its significance upon the theory of biological evolution. The reverse relationship seems to obtain. The idea of evolution gets some of its moral, social, even cosmic significance from its implication that the general motion in the world of living things, perhaps in the universe, is a progress from lower to higher forms.

Darwin thinks "Von Baer has defined advancement or progress in the organic scale better than anyone else, as resting on the amount of differentiation and specialization of the several parts of a being"—to which Darwin adds the qualification that the organisms must be judged when they have arrived at maturity. "As organisms have become slowly adapted to diversified lines of life, their parts will have become more and more differentiated and specialized for various functions from the advantage gained by the division of physiological labour. The same part appears often to have been modified first for one pur-

pose, and then long afterwards for some other and quite distinct purpose; and thus all the parts are rendered more and more complex . . . In accordance with this view," Darwin writes, "it seems, if we turn to geological evidence, that organization on the whole has advanced throughout the world by slow and interrupted steps. In the kingdom of the Vertebrata it has culminated in man."

Whether strictly biological evolution has a single or uniform direction may be disputed in the light of evidences of regression and the multiplication of lower as well as higher forms. But Darwin seems to think that since "natural selection works solely by and for the good of each being, all corporeal and mental endowments will tend to progress toward perfection." Whatever the evidence may be, the popular notion of evolution, especially when applied by writers like Herbert Spencer to human society or civilization, connotes progress—the gradual yet steady march toward perfection.

According to Waddington, "there has been real evolutionary progress." He thinks that "the changes brought about by evolution will always be... an improvement," and it is such improvements that "we, quite justifiably, refer to as evolutionary progress." Other 20th-century scientists, notably Stephen Jay Gould, emphatically disagree. For them, the fact of evolution is wholly unrelated to any form of human progress.

APART FROM THIS APPLICATION of the idea of evolution to man's world, progress seems to be the central thesis in the modern philosophy of history. In the minds of some, the philosophy of history is so intimately connected with

a theory of progress that the philosophy of history is itself regarded as a modern development. There seems to be some justification for this view in modern works on the tendency of history which have no ancient counterparts, such as the writings of Giambattista Vico, Marie-Jean Condorcet, Kant, Pierre-Joseph Proudhon, Auguste Comte, J. S. Mill, Hegel, and Marx.

These writers do not all define or explain progress in the same way. Nor do they all subscribe to an inviolable and irresistible law of progress which has the character of a divine ordinance, replacing or transforming less optimistic views of providence. But for the most part the moderns are optimists. They either believe in man's perfectibility and in his approach to perfection through his own efforts freely turned toward the realization of ideals; or they see in the forces of historywhether the manifestations of a world spirit or the pressure of material (i.e., economic) conditions—an inevitable development from less to more advanced stages of civilization, according to a dialectical pattern of conflict and resolution, each resolution necessarily rising to a higher level.

As opposed to the optimism of expecting a continual improvement in all things or an irreversible ascent to new heights, the pessimistic view denies that progress is either the law or the hope of history. It believes rather that everything which goes up must come down. As indicated in the chapter on HISTORY, the theory of cycle after cycle of rise and decline—or even the notion that the golden age is past, that it is never to be regained, and that things are steadily getting worse—prevails more in the ancient than in the modern world.

The modern exceptions to optimism in the philosophy of history are notably Oswald Spengler and, to a much less extent, Arnold Toynbee. But modern pessimism never seems to reach the intensity of the Preacher's reiteration in Ecclesiastes that "there is no new thing under the sun" and that "all is vanity and vexation of spirit." Nor does the modern theory of cycles of civilization, even in Vico, seem to be as radical as that of the ancients. In his vi-

sion of cosmic cycles Lucretius sees the whole world crumbling into atomic dust to be reborn again. Herodotus does not relieve the gloom of his observation that, in the life of cities, prosperity "never continues long in one stay." The eternity of the world means for Aristotle that "probably each art and each science has often been developed as far as possible and has again perished."

LEAVING TO THE chapter on HISTORY the discussion of progress so far as it concerns an explicit philosophy of history, we shall here deal with considerations of progress as they occur in economics, in political theory, in the history of philosophy and the whole intellectual tradition of the arts and sciences.

In this last connection, the great books play a dual role. They provide the major evidence which, on different interpretations, points toward opposite answers to the question whether or not there has been progress in the tradition of western thought. Whatever their readers may think on this subject, the great authors, having read the works of their predecessors, offer their own interpretations of the intellectual tradition. In many cases, especially among the modern writers, their point of departure—even the conception they entertain of the originality and worth of their own contribution—stems from their concern with a deplorable lack of progress, for which they offer new methods as remedies.

Before we enter upon the discussion of economic, political, or intellectual progress, it seems useful to distinguish between the fact and the idea of progress. When men examine the fact of progress, they look to the past and find there evidence for or against the assertion that a change for the better has taken place in this or that respect. Two things are involved: a study of the changes which have occurred and the judgment—based on some standard of appraisal—that the changes have been for the better. But when men entertain the idea of progress, they turn from the past and present and look to the future. They regard the past merely as a basis for prophecy, and the present as an occasion for making plans to fulfill their prophecies or hopes. The fact of progress belongs to the record of achievement; the idea of progress sets a goal to be achieved.

This distinction seems to be exemplified by the difference between ancient and modern considerations of progress. The ancients observe the fact of progress in some particulars-almost never universally. Thucydides, for example, in the opening chapters of his The History of the Peloponnesian War, contrasts the power and wealth of the modern city-states of Greece with "the weakness of ancient times." "Without commerce, without freedom of communication either by land or sea, cultivating no more of their territory than the exigencies of life required, destitute of capital, never planting their land (for they could not tell when an invader might not come and take it all away, and when he did come they had no walls to stop him), thinking that the necessities of daily sustenance could be supplied at one place as well as another, they cared little for shifting their habitation, and consequently neither built large cities nor attained to any other form of greatness."

But Thucydides does not seem to draw from these observations any general idea of progress. He does not concretely imagine a future excelling the Periclean age in the magnitude of its wars and the magnificence of its wealth, as that period dwarfs antiquity. He does not infer that whatever factors worked to cause the advance from past to present may continue to operate with similar results. It might almost be said that he does not think about the future; certainly he does not think of it as rich in promise. "Knowledge of the past," he writes, is "an aid to the interpretation of the future, which in the course of human things must resemble if it does not reflect it."

Adam Smith's thinking about economic progress represents the contrasting modern emphasis upon the future. In one sense, both Thucydides and Smith measure economic progress in the same way, though one writes of the wealth of cities, the other of the wealth of nations. Both Smith and Thucydides judge economic improvement in terms of increasing opulence, the growth of capital reserves, the expansion of commerce, and the enlarged power in war or peace which greater wealth

bestows. But Smith, in the spirit of Francis Bacon, seeks to analyze the causes of prosperity in order to make them work for further progress. He is the promoter of progress, not merely the historian who witnesses the beneficial effect on productivity of an increasingly refined division of labor and of the multiplication of machinery.

To know how these things have operated to bring about the opulence of modern nations as compared with the miserable poverty of primitive tribes or even the limited property of ancient cities is to know how to formulate policies which shall still further expand the wealth of nations. For Smith the study of the means and methods by which economic progress has been made serves to determine the policy which is most likely to ensure even greater increments of progress in the future.

MARX APPEARS TO measure economic progress by a different standard. The transition from the slave economies of antiquity through feudal serfdom to what he calls the "wageslavery" of the industrial proletariat may be accompanied by greater productivity and vaster accumulations of capital stock. But the essential point for him about these successive systems of production is their effect upon the status and conditions of labor. The Communist Manifesto notes respects in which, under the capitalist system, the supposedly free workingman is worse off than were his servile ancestors. But if economic progress is conceived as the historically determined approach to the final liberation of labor from its oppressors, then capitalism represents both an advance over feudalism and a stage in the march to communism.

Each successive economic revolution brings mankind nearer to the goal of the ideal or classless economy. Capitalism creates the proletariat—the revolutionary class which is to be that system's own undoing. The overthrow of the landed aristocracy by the bourgeoisie thus prepares the way for the dictatorship of the proletariat, as that in turn liquidates the obstacles to the realization of the perfect communist democracy.

We are not here concerned with the details

of this history and prophecy but only with the theory of progress which it involves. In the first place, it seems to set an ultimate goal to progress, while at the same time it makes progress a necessary feature of what is for Marx, as it is for Hegel, the "dialectic of history." Those who think that the inevitability of progress ought to render progress as interminable as history itself, find some inconsistency in this tenet of dialectical materialism, as well as in Hegel's notion of the necessary dialectical stages by which the Absolute Idea reaches perfect realization in the German state. Can progress be the inner law of history and yet reach its goal before the end of time?

There may be some answer to this question in a second aspect of the theory of progress which goes with a dialectic of history. The progress which the successive stages of history represent resides in the quality of human institutions rather than in the nature of man. If more economic justice or greater political liberty is achieved, it is not because the later generations of men are born with a nature more disposed to goodness or virtue, but because better institutions have evolved from the conflict of historical forces. Furthermore, according to Marx, man's nature is only partly determined at birth. Part remains to be determined by the social and economic circumstances of his life—by the system of production under which he lives. Hence though institutional progress may arrive at its historical goal with the establishment of the ideal economy, it may be possible for further progress to be made throughout the rest of time by the improvement of men themselves, when at last their natures can develop under ideal circumstances.

WE HAVE NOTED TWO great issues in the characteristically modern discussion of progress. Is the goal of progress definitely attainable, or is its goal an ideal progressively approximated but never realized? Is progress accomplished by the betterment of human institutions or by improvements in the nature of man?

The second question has a critical bearing on the first, especially for those who conceive man as infinitely perfectible. It also relates to the problem of the evolutionist: whether a higher form of life on earth will evolve from man or whether the future belongs to the progressive development of human nature biologically or culturally. Darwin is unwilling to admit that "man alone is capable of progressive improvement," but he does affirm that man "is capable of incomparably greater and more rapid improvement than is any other animal."

Rousseau, on the other hand, claims that "the faculty of self-improvement" is one distinction between man and brute "which will admit of no dispute." But he also thinks that this faculty is the cause of human decline as well as progress. "A brute, at the end of a few months," he writes, "is all he will ever be during his whole life, and his species, at the end of a thousand years, exactly what it was the first year of that thousand . . . While the brute. which has acquired nothing and has therefore nothing to lose, still retains the force of instinct, man, who loses, by age or accident, all that his perfectibility had enabled him to gain. falls by this means lower than the brutes themselves." According to Frazer, "The advance of knowledge is an infinite progression towards a goal that for ever recedes."

One other issue concerning progress remains to be stated. It raises the question of freedom or necessity in history. Is progress inevitable in the very nature of the case, or does it occur only when men plan wisely and choose well in their efforts to better themselves or the conditions of their lives?

In his The Idea of a Universal History on a Cosmo-Political Plan and his The Principle of Progress, Kant finds the possibility of progress in man's potentialities for improvement. He regards the realization of this possibility as a work of freedom rather than a manifestation of historical necessity. Political progress may have an ultimate goal—the world republic or federation of states. But this, according to Kant's conclusion in The Science of Right, is an impracticable idea, and serves only the regulative purpose of "promoting a continuous approximation to Perpetual Peace." Hegel's theory of the progressive realization of the idea of the state in history seems to represent the contrary position on both points. Progress is a historical necessity, and it reaches a historic consummation. For Tocqueville, the progress of democratic societies toward a universal equality of conditions is destined by Divine Providence.

The contrast between ancients and moderns with respect to political progress seems to be the same as that which we observed between Thucydides and Smith with regard to wealth. The ancients assert the superiority of the present over the past, and even trace the stages by which advances have been made from primitive to civilized conditions. But they do not extend the motion they observe into the future. The moderns look to the future as to a fulfillment without which present political activity would be undirected.

According to Aristotle, for example, the state is the last stage in the development of social life which begins with the family. "When several families are united, and the association aims at something more than the supply of daily needs, the first society to be formed is the village." The village or tribal community, in turn, becomes the unit out of which a larger and more truly political community is formed. "When several villages are united in a single complete community, large enough to be nearly or quite self-sufficing, the state comes into existence."

Aristotle sees this development not merely as a progress from smaller and weaker societies to larger and more powerful ones, but also as an advance toward the realization of man's political nature. Absolute or despotic government by the eldest, natural to the family, still persists in the tribe. "This is the reason why the Hellenic states were originally governed by kings; because the Hellenes were under royal rule before they came together, as the barbarians still are." Not until the domestic or tribal form of government is replaced by political or constitutional government—not until kings and subjects are replaced by statesmen and citizens—is the state or political community fully realized.

But Aristotle does not conceive the development he describes as one continuing into the future. He does not imagine a larger political unity than the city-state, as Kant is able to envisage a world state as the ultimate formation toward which the progressive political unification of mankind should tend. Though Aristotle recognizes that new institutions have been invented and old ones perfected, his political theory, unlike Mill's, does not seem to measure the goodness of the best existing institutions by their devotion to further progress.

Considering the criterion of a good form of government, Mill criticizes those who separate the maintenance of order, or the preservation of existing institutions, from the cultivation of progress. "Progress includes Order," he writes, "but Order does not include Progress." Order "is not an additional end to be reconciled with Progress, but a part and means of Progress itself. If a gain in one respect is purchased by a more than equivalent loss in the same or in any other, there is not Progress. Conduciveness to Progress, thus understood, includes the whole excellence of government."

Progress fails to define good government, Mill adds, unless we understand by the term not merely "the idea of moving onward," but "quite as much the prevention of falling back. The very same social causes ... are as much required to prevent society from retrograding, as to produce a further advance. Were there no improvement to be hoped for, life would not be the less an unceasing struggle against causes of deterioration; as it even now is. Politics, as conceived by the ancients, consisted wholly in this . . . Though we no longer hold this opinion; though most men in the present age profess a contrary creed, believing that the tendency of things, on the whole, is toward improvement; we ought not to forget that there is an incessant and everflowing current of human affairs toward the worse."

According to Mill, the ideally best polity is representative government on democratic principles. By a just distribution of political rights and by the fullest grant of liberties, it serves better than any other form of government "to promote the virtue and intelligence of the people themselves." This is the ultimate end of political progress. Inferior forms of government, such as despotic monarchy, may be justified for people as yet unfit for self-

government, but only if they also work for progress, i.e., "if they carry those communities through the intermediate stages which they must traverse before they can become fit for the best form of government."

The whole theory of good government is thus for Mill a theory of progress in which we must take "into account, not only the next step, but all the steps which society has yet to make; both those which can be foreseen and the far wider indefinite range which is at present out of sight." We must judge the merits of diverse forms of government by that ideal form "which, if the necessary conditions existed for giving effect to its beneficial tendencies, would, more than all others, favour and promote not some one improvement, but all forms and degrees of it."

In the field of the arts and sciences or culture generally, the modern emphasis upon progress seems to be even more pronounced than in the spheres of economics and politics. Lack of progress in a science is taken to indicate that it has not yet been established on the right foundations or that the right method for discovering the truth has not yet been found. Lack of agreement in a particular field is the chief symptom of these defects. But whereas "scientific work is chained to the course of progress," Weber thinks that "in the realm of art there is no progress in the same sense." Lévi-Strauss goes even further, saying that "A primitive people is not a backward or retarded people; indeed it may possess, in one realm or another, a genius for invention or action that leaves the achievements of civilized peoples far behind."

The fact that philosophy "has been cultivated for many centuries by the best minds that have ever lived, and that nevertheless no single thing is to be found in it which is not a subject of dispute, and in consequence which is not dubious," leads Descartes to propose his new method. He hopes this may ensure progress in philosophy, of the same sort which the new method has, in his view, accomplished in mathematics. The Novum Organum of Bacon seems to be dedicated to the same end of progressively augmenting knowledge in all

those fields in which, according to the inventory made in the Advancement of Learning of the present state of the sciences, no or little progress has been made since antiquity. Similarly, Locke, Hume, and Kant insist that a study of the human mind should precede all other studies in order to save men from fruitless disputes concerning matters beyond their capacities for knowledge; they hope thereby to encourage research in areas where progress can be made.

The comparison of different disciplines or subject matters with respect to their progress leads to the condemnation of those which lag behind. The great scientific advances of the 17th century tend to intensify the complaint about philosophy, especially metaphysics. The progress which has been made from the beginning in mathematics and more recently in physics means to Kant that each of these disciplines has found the "safe way" or the "secure path" of a science. By comparison, metaphysics has not yet even made a beginning. A hundred years later, William James is still to say that, by comparison with the progress of knowledge in the natural sciences, metaphysics belongs to the future.

The notion that any field of learning has attained its full maturity seems to Bacon to be the presumption of those philosophers who, seeking "to acquire the reputation of perfection for their own art," try to instill the "belief that whatever has not yet been invented and understood can never be so hereafter." Whenever such belief prevails, learning languishes. "By far the greatest obstacle to the advancement of the sciences, and the undertaking of any new attempt or departure, is to be found in men's despair and the idea of impossibility."

Though the ancients do not evidence this presumption of perfection in their arts and sciences, neither do they fret about lack of progress. Nor does the disagreement of minds seem to them to signify an unhealthy condition which requires new and special methods to cure.

"The investigation of the truth is in one way hard, in another easy," writes Aristotle. "An indication of this is found in the fact

that no one is able to attain the truth adequately, while, on the other hand, we do not collectively fail, but everyone says something true about the nature of things, and while individually we contribute little or nothing to the truth, by the union of all a considerable amount is amassed." Aristotle puts the intellectual tradition to use by adopting the policy of calling "into council the views of those of our predecessors who have declared any opinion" on whatever subject is being considered, "in order that we may profit by whatever is sound in their suggestions and avoid their errors."

But, in the opinion of the moderns, the intellectual tradition can also be the greatest impediment to the advancement of learning if it is received uncritically and with undue reverence for the authority of the ancients. "The respect in which antiquity is held today," Pascal says, "has reached such extremes in those matters in which it should have the least preponderance, that one can no longer present innovations without danger." This is the common complaint of Hobbes, Bacon, Descartes, and Harvey. "The reverence for antiquity and the authority of men who have been esteemed great in philosophy have," according to Bacon, "retarded men from advancing in science, and almost enchanted them."

Harvey agrees with Bacon that philosophers or scientists should not "swear such fealty to their mistress Antiquity, that they openly, and even in sight of all, deny and desert their friend Truth." Harvey has a much higher opinion than Bacon of the achievements of antiquity. "The ancient philosophers," he writes, "whose industry even we admire, went a different way to work, and by their unwearied labor and variety of experiments, searching into the nature of things, have left us no doubtful light to guide us in our studies. In this way it is that almost everything we yet possess of note or credit in philosophy, has been transmitted to us through the industry of ancient Greece."

His admiration for the ancients does not, however, lead Harvey to rest on their achievements. "When we acquiesce in the discoveries of the ancients, and believe (which we are apt to do through indolence) that nothing farther remains to be known," then, in his opinion, "we suffer the edge of our ingenuity to be taken off, and the lamp which they delivered us to be extinguished. No one of a surety," he continues, "will allow that all truth was engrossed by the ancients, unless he be utterly ignorant (to pass by other arts for the present) of the many remarkable discoveries that have lately been made in anatomy."

In his own anatomical researches, Harvey adopts an attitude toward the work of his predecessors, both ancient and recent, which remarkably resembles the attitude expressed by Aristotle toward his scientific forebears. "As we are about to discuss the motion, action, and use of the heart and arteries, it is imperative on us," Harvey declares, "first to state what has been thought of these things by others in their writings, and what has been held by the vulgar and by tradition, in order that what is true may be confirmed, and what is false set right by dissection, multiplied experience, and accurate observation." It is precisely this attitude which Bacon expressly condemns.

Bacon sees no genuine method of science, but merely a cultivation of opinion, in those who prepare themselves for discovery by first obtaining "a full account of all that has been said on the subject by others." Those who begin in this way, it is the judgment of Descartes, seldom go further. Particularly the followers of Aristotle, "would think themselves happy," he says, "if they had as much knowledge of nature as he had, even if this were on the condition that they should never attain to any more. They are like the ivy that never tries to mount above the trees which give it support. and which often even descends again after it has reached the summit; for it appears to me that such men also sink again—that is to say, somehow render themselves more ignorant than they would have been had they abstained from study altogether. For, not content with knowing all that is intelligibly explained in their author, they wish in addition to find in him the solution of many difficulties of which he says nothing, and in regard to which he possibly had no thought at all."

Pascal takes a more moderate view. We can profit, he thinks, from a limited respect for

the ancients. "Just as they made use of those discoveries which have been handed down to them only as a means for making new ones and this happy audacity opened the road to great things, so," Pascal suggests, "must we accept those which they found for us and follow their example by making them the means and not the end of our study, and thus try to surpass them by imitating them. For what would be more wrong than to treat the ancients with more caution than they did those who preceded them, and to have for them this inviolable respect which they only deserve from us because they did not feel a similar respect for those who had the same advantage over them?"

Modern writers seem to conceive the law of intellectual progress by an analogy between the mind of the race and the individual mind. Where Aguinas says merely that "it seems natural to human reason to advance gradually from the imperfect to the perfect," adding, in the past tense, that hence the imperfect teaching of early philosophers "was afterwards perfected by those who succeeded them," Pascal generalizes the insight and gives it future significance. "Not only does each man progress from day to day in the sciences, but all men combined make constant progress as the universe ages, because the same thing happens in the succeeding generations of men as in the different ages of each particular man. So that the whole succession of men, in the course of so many centuries, should be regarded as the same man who exists always and learns continually."

At this point Pascal applies his metaphor to effect a reversal of the relation between the moderns and the ancients. "Since old age is the time of life most distant from childhood, who does not realize that old age in this universal man should not be sought in the times closest to his birth, but in those which are farthest

away from it? Those whom we call ancients were really novices in all things, and actually belonged to the childhood of man; and as we have added to their knowledge the experience of the centuries which followed them, it is in ourselves that may be found this antiquity which we revere in others."

As Frazer views it, "Intellectual progress, which reveals itself in the growth of art and science and the spread of more liberal views, cannot be dissociated from industrial or economic progress, and that in its turn receives an immense impulse from conquest and empire."

Whether by accident or borrowing, this characteristically modern view of the advantage progress confers upon modernity is expressed in similar language by Hobbes and Bacon. "Though I reverence those men of ancient times," writes Hobbes, "who either have written truth perspicuously or have set us in a better way to find it out for ourselves; yet to the antiquity itself I think nothing due; for if we will reverence age, the present is the oldest." "Antiquity, as we call it," writes Bacon, "is the young state of the world; for those times are ancient when the world is ancient; and not those we vulgarly account ancient by computing backwards; so that the present time is the real antiquity."

To secure a sound, not specious, progress in all things of the mind, Bacon recommends the avoidance of two extremes, the affectations of antiquity and novelty, for "antiquity envies new improvements, and novelty is not content to add without defacing." Since "antiquity deserves that men should stand awhile upon it, to view around which is the best way," the great books of the past can lay the foundations for progress, but only if they are properly read. "Let great authors, therefore, have their due," Bacon declares, "but so as not to defraud time, which is the author of authors, and the parent of truth."