

Turgot and the Contexts of Progress

Author(s): Robert Nisbet

Source: Proceedings of the American Philosophical Society, Jun. 12, 1975, Vol. 119, No.

3 (Jun. 12, 1975), pp. 214-222

Published by: American Philosophical Society

Stable URL: https://www.jstor.org/stable/986671

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at https://about.jstor.org/terms



American Philosophical Society is collaborating with JSTOR to digitize, preserve and extend access to Proceedings of the American Philosophical Society

TURGOT AND THE CONTEXTS OF PROGRESS

ROBERT NISBET

Albert Schweitzer Professor in the Humanities, Columbia University (Read November 14, 1974)

1.

BENJAMIN FRANKLIN, while on his mission to France to win support of the cause of the American colonists in their war with England, sent a copy of Richard Price's Observations on Civil Turgot's letter of March. Liberty to Turgot. 1778, to Price suggests his keen disappointment at the course a number of the American state constitutions were taking in their formation. stead of coalescing all authorities into a single one, that of the nation, they have created different bodies, a house of representatives, a council, and a governor, simply because England has a house of commons, a house of lords, and a king." Turgot thought the Americans should jettison any thought of the differentiation of powers that Montesquieu in 1748 had recommended in his The Spirit of the Laws and aim instead at a singlehouse legislature, no upper house or council, and a rigorously circumscribed executive. In this he leaned toward the constitution of Pennsylvania which his friend Franklin was supposed to have authored. After Turgot's death in 1781, Dr. Price published his letter. From the point of view of students of American history the chief importance of Turgot's letter was that it inspired John Adams to write, in three volumes, his notable Defense of the Constitutions of the United States, a book that at one and the same time mirrored and stimulated the debates among Americans as to the course which constitutions should take in giving effect to newly gained independence from the British. It is fair to say that a good deal of the controversy in America over "aristocratic," "monarchical," and "republican" values which raged in the 1780's and even after, was sparked by Turgot's letter to Dr. Price.1

From the point of view of Turgot's life and thought, however, the chief importance of the letter is its reflection of his abiding interest in the problem of change. Turgot was convinced that the separation-of-powers principle would result in time in the emergence of corporate bodies, both in

government and in society, which would have, even as these had had in Europe, a constricting influence upon possibilities of the political, economic, and social change which were for him utterly vital to a nation's prosperity. I should mention that in the same letter to Dr. Price, Turgot vehemently opposed the right of government to regulate commerce of any kind. Closely related during most of his life to the doctrines of the Physiocrats in France, profoundly interested, as I shall indicate in some detail in this paper, in the whole matter of progress, of the advancement of the human mind and human institutions, his overriding criterion for any political structure was whether or not it seemed to promote opportunities for the kind of liberty and spontaneity of action which alone, in Turgot's view, could ever result in human progress. His opposition to what he called "bodies" in the Price letter was hardly more than a restatement of what he had written in the middle of the 1750's on the subject of fondations for the Encyclopedia, a point of view that had flowered, but only briefly, in 1776 in his edict as controller-general abolishing the guilds. Everything must be done, Turgot thought, to hold down to a minimum those corporate organizations-no matter in what sphere, economic, cultural, or political—which always threaten to come into being where human beings congregate over their special interests and which, the record shows, become bastions of conservatism, obstacles to progress.

His own twenty-five-year career as government servant in France had been devoted precisely to the principles of natural liberty and of free commerce in every possible realm of French economic and political activity. During the fifteen years he had served as *intendant* of the district of Limoges, he had done much to dissolve ancient feudal, or quasi-feudal, restrictions on trade and occupation. He had established agricultural and veterinary schools as the means of upgrading the quality of labor, and had even succeeded in making grain a commodity of free trade. The long-hated *corvée* had been abolished in further development of freedom of work. Limoges, one of France's poorest districts when Turgot took over

PROCEEDINGS OF THE AMERICAN PHILOSOPHICAL SOCIETY, VOL. 119, NO. 3, JUNE 1975

¹R. R. Palmer, *The Age of Democratic Revolution* (Princeton University Press, 1959), pp. 267-269, has a brief and illuminating account of Turgot's letter and its consequences.

its government, had become one of the more prosperous ones when Turgot left in 1774 to become, as reward for his achievement, controller-general of all France under the young Louis XVI.

His career in that office was, however, destined to be a short one. In his efforts to apply to the whole country measures which had worked so well in Limoges, he encountered, inevitably, powerful enemies in Paris, chiefly in the Parlement. His edicts in 1776 which instituted free trade in grain, which abolished the guilds, promoted full tolerance for Protestants, and nullified nationally the corvée (an act that especially incurred hatred of Turgot by the nobles) were the immediate grounds of opposition from the Parlement and of pressure on Louis XVI to force Turgot's resignation from office. This resignation occurred in 1776, leading to Turgot's retirement from all public office and to his family estate where he spent his last five years (he died in 1781 at age fiftyfour) almost entirely in study and extensive correspondence.

2.

Turgot deserves to be known as the brilliant, if ultimately unsuccessful, administrator he was in fact for a quarter of a century, and doubtless it is in this role that he will be best known for a long time to general readers of European history. But, his eminence as government servant notwithstanding, he merits equal if not greater acclaim for his writings in economic and social philosophy. It is in that light that I shall deal with him here.

His economic writings, done in the interstices of his career in government, are well known to historians of economic thought. The late Joseph Schumpeter, in his monumental History of Economic Analysis, paid high tribute to Turgot's theoretical genius, finding it indeed greater than Adam Smith's so far as the key areas of economic theory are concerned. Not until the late nineteenth century, Schumpeter wrote, would work as good in the realm of wages, prices, and capital be done by European economists. "It is not too much to say that analytical economics took a century to get where it could have got in twenty years after the publication of Turgot's treatise had its content been properly understood and absorbed by an alert profession." 2 And quite recently the English economist, Ronald L. Meek, of the University of Leicester, has referred to Turgot's "staggeringly 'modern' theory of capital." ³

Turgot's best known work in economics is his long essay, "Reflections on the Formation and Distribution of Wealth," written in 1766 and published in 1769, some seven years before the appearance of Adam Smith's The Wealth of Nations. There is striking affinity between the central ideas of Turgot's essay and the constitutive concepts of Smith's great work. Without question, Turgot anticipated Adam Smith in some very important respects. Nor is this essay the sum of his economic reflections. Almost equally remarkable is the detailed eulogy he wrote in 1759 to Vincent de Gournay, mentor of the Physiocrats and close friend and associate of Turgot. This is probably the earliest reasonably complete exposition of Turgot's economic philosophy, one that was built around the system of natural liberty Adam Smith and the early classical economists were to extoll. Close to the Physiocrats, especially du Pont de Nemours, Turgot is their superior in his grasp of the complex interrelation of elements of land, capital, work, wages, production and consumption in the economy. He had a vivid sense, as Professor Meek notes, of the economy as a kind of machine, but he also had the historian's or social evolutionist's sense of the emergence of the commercial, or capitalist, system from still earlier stages of economic life.

The last brings me to the ideas I wish to develop most fully in this paper: those on change, development, and progress. What Turgot had to say about the advancement of human society, from its most primitive state through the long vistas of evolutionary time to the contemporary world, falls among the most impressive intellectual contributions of the whole eighteenth century. Talented as he was in government administration, prophetic though his economic views assuredly were, it is in the domain of what the nineteenth century was to label social dynamics that his greatest distinction seems to me to lie.

Turgot was fond of contrasting minds possessed of "the ardor of genius" with lesser minds "created to unite the discoveries of others under a single point of view in order to clarify and per-

² Joseph A. Schumpeter, *History of Economic Analysis* (Oxford University Press, 1954), p. 249.

³ Ronald L. Meek, ed. Turgot on Progress, Sociology and Economics (Cambridge University Press, 1973), p. 19. It is a pleasure to pay tribute to this volume, for its perceptive introduction, which offers sound insight into some of Turgot's ideas and themes, particularly those in economics, and also for its excellent translations of three of Turgot's most important essays: "A Philosophical Review of the Successive Advances of the Human Mind," "Plan for Two Discourses on Universal History," and "Reflections on the Formation and Distribution of Wealth."

fect them." The latter are, he writes, "diamonds which brilliantly reflect a borrowed light, but which, in total darkness would be confounded with the meanest stones." Turgot seems to have thought himself one of the second class, but I am myself not so sure he does not merit inclusion in the first. In the history of the idea of social evolution no more original mind is to be found.

What Turgot wrote on the subject of progress, its nature, causes, phases, and direction, is to be found chiefly in a series of works I shall refer to as the Sorbonne papers.4 All were written just before, during, or immediately after his student years at the Sorbonne. He entered the University at age twenty-two, in 1749, with the intention of devoting his life to an ecclesiastical career. Accepted by the Maison de Sorbonne, a part of the theological faculty, Turgot quickly made his intellectual gifts so well known that he was elected by his fellow-students to the post of *prieur*, largely honorary in nature but one that called for an occasional discourse to be delivered publicly. Turgot gave two of these public discourses in 1750, the first in July, the second in December, and it was the latter that established his reputation among intellectuals in Paris as premier philosopher of progress. I shall come to it momentarily. Let me first describe briefly in order the Sorbonne papers, of which there are five.

The first seems to have been written in 1748 just before he entered the Maison de Sorbonne. Its title is: "Researches into the Causes of the Progress and Decline of the Sciences and Arts or Reflections on the History of the Progress of the Human Mind." 5 The second, and the first of the two discourses he gave publicly at the Sorbonne, is titled: "The Advantages which the Establishment of Christianity has Procured for the Human Race." 6 I find it chiefly interesting for the tension which seems already to have been present in his mind as early as the date of its delivery, July, 1750, concerning the balance of divine and natural causes of human progress. Commencing in tribute to divine beneficence and sagacity, the discourse terminates amid praises by Turgot of the qualities which lie in human nature and lead to progress of the mind over the ages. This tension I speak of was in a fair way to being resolved, one senses, by the time Turgot presented the second of his public discourses, the one referred to above, at the end of the same year. This one carries the title: "A Philosophical Review of the Successive Advances of the Human Mind," 7 and although God is in no way banished from the scene, he is relegated, as it were, to a proper role befitting the eighteenth century, as Prime Mover but in no sense Intervener. The bulk of the discourse is taken up by discussion of the phases and causes, all secular, of the progress of mankind, and reads in many ways like an ode or apostrophe. Much superior in most respects is the fourth of the Sorbonne papers, probably written in 1751, though not for public presentation, and bearing the title: "Plan for Two Discourses on Universal History." 8 It is, without question, the single best piece on the subject of progress to be found in the eighteenth century prior to the publication of Condorcet's An Historical Sketch of the Progress of the Human Mind in 1794. Condorcet, it might be mentioned, was one of Turgot's most ardent admirers; he it was who wrote the first biography of Turgot, shortly after his death in 1781. The fifth of the Sorbonne papers, written either in late 1751 or early 1752 immediately before Turgot's commencement of government service, is the "Plan for a Work in Political Geography." 9

Before turning to the specific contributions of these papers to the problem of change, something should be said here about the modern idea of progress. It is, as we know, a product of the late seventeenth century, more especially of that elegant donnybrook known to posterity as the Quarrel of the Ancients and Moderns wherein such defenders of the superiority of ancient philosophers and poets as Boileau and Swift vied with those who like Fontenelle and Perrault defended the superiority of thinkers and artists of their own day.¹⁰ I dare say most of us today, reading some of the tracts involved (among them Swift's delicious Battle of the Books), are inclined on the evidence to give the laurel to the defenders of the Ancients. But so far as the history of ideas is concerned during the century or two following,

⁴ All five essays are contained in the first volume of Euvres de Turgot et Documents Le Concernant avec Biographie et Notes (5 v., Paris, Librairie Felix Alcan, 1913-1923), ed. Gustave Schelle. This is the definitive edition, thus far at least, of Turgot's essays, discourses, voluminous economic reports, and extensive correspondence. Earlier and less complete editions were done by du Pont de Nemours, Turgot's admiring friend, in 1808-1811 and by Eugene Daire and Hippolyte Dussard in 1844. Except where noted, my references will be to the Schelle edition, hereafter referred to as Schelle.

⁵ Schelle, 1: pp. 116-152. ⁶ Schelle, 1: pp. 194-214.

⁷ Schelle, 1: pp. 214–235.

⁸ Schelle, 1: pp. 275-323.

⁹ Schelle, 1: pp. 255-274.

¹⁰ The best account of the Quarrel is still Hubert Gillot, La Querelle des Anciens et des Modernes in France (Paris, 1914). See also the treatment in Frederick J. Teggart, Theory of History (Yale University Press, 1925), pp. 80-83. Teggart's profound appreciation of Turgot and his relation to the problem of progress in that same work should also be mentioned here.

victory definitely belongs to those like Fontenelle and Perrault who spoke not only for the supremacy of the moderns but the reality of the principle of mankind's progress of mind over a vast stretch of time. It has to be admitted that the idea of progress, as we find it stated in Fontenelle and Perrault, rests upon rather shaky foundations. The circularity of reasoning is manifest, and comes down basically to this: the superiority of the moderns over the ancients is the result of the steady progress of the human mind over the centuries, and the existence of this progress may be inferred from the superiority of the modern philosophers and dramatists over the ancient.

Never mind! The idea of progress became what we know it as today-one of the three or four essential components of the modern mind in the West, at least down to our own time. Turgot's great relation to the idea of progress consists in his systematic statement and development of what had been only adumbrated, really, in the writings of the late seventeenth century. There its referent had been exclusively the arts and let-Little if any attention was given in the seventeenth and early eighteenth centuries to institutions and to society as a whole. What we find in Turgot's second discourse of December, 1750, and in his ensuing essay on universal history (this inspired, by the way, by Bossuet's classic of a century earlier but made radically different by Turgot's complete abandonment of Bishop Bossuet's wholly theistic treatment of mankind's history) is human progress declared to be a fixed, natural law, anchored in purely human faculties and motivations, reaching back to the most primitive of times and forward to an indefinite if not endless future, and encompassing not merely the arts and sciences but the very structure of society.

Fascinating to any contemporary reader of both these papers, particularly the second, is Turgot's panoramic envisagement of mankind's long past in the form of a sequence of regular stages to which he gives the labels "hunting," "pastoral," and "agricultural." These, as he stresses here, and also in some of his much later economic papers, alone make intelligible the commercial age in which the Europe of the eighteenth century lived. Also to be appreciated in Turgot's treatment is the crucial idea of "social surplus," the means whereby advance from one stage to the next was alone possible.

Montesquieu, in his Spirit of the Laws (1748), had differentiated among peoples on earth in these terms—as hunters, grazers, and cultivators—but

there is no hint in his work of their possible contemplation as stages of development. Montesquieu was primarily interested in them as illustrations of his theory of the influence of topography and climate on man's economic activities.

What gives distinctiveness and, so far as I am aware, utter originality to Turgot's use of the differentiation is its systematic use as a means of accounting in developmental terms for the contrasts and discrepancies to be seen among peoples in the world around us. In other words, Turgot is doing more than simply stating that mankind has moved in its past through the hunting, pastoral, and agricultural stages. Much more boldly he is saying that in the present world such differences, far from being mere adaptations to terrain or climate, are most fundamentally differences of degree of social development. It is this assertion that places Turgot in the very vanguard of modern theorists of social evolution. The idea of progress is, in short, for Turgot, more than a descriptive conclusion; it is a method, a logic, of inquiry.

Two subordinate and closely related aspects of this developmental theory are noteworthy. First is the concept of culture. I refer to those traits of human behavior which are transmitted, not biologically through the germ plasm, but socially, through symbolic communication. It is commonly thought that this concept, so crucial to the social sciences, is a product of the nineteenth century; it is generally assigned to the anthropologist E. B. Tylor, specifically to his Primitive Culture, published in 1871. But the idea of culture is luminously present in Turgot's writings. How is it, he asks, that, whereas the natural world reveals an unending cyclical succession of death and life ("all things die; all things are reborn") from generation to generation, with each new individual compelled to start from the beginning, the history of human civilization reveals no such cycle of decay and genesis, but on the contrary a linear, cumulative progress, one that incorporates all the ages of mankind into a single, everchanging pattern? "The procession of mankind . . . gives us from epoch to epoch an ever-varying spectacle."

The answer to this question, Turgot tells us, lies in man's unique capacity to conceptualize and thus to store his knowledge, making it available to each new generation, all the while improving upon it.

The arbitrary symbols of speech and writing, in presenting men with the means of reinforcing possession of their thoughts and of communicating them to their fellows, have created a common treasure-house of all individuals' knowledge, which one generation

¹¹ Schelle, 1: pp. 279–280.

contributes to the next, a heritage constantly increased by the discoveries of each age.¹²

Turgot was evidently struck by this resolution of the matter, as indeed he should have been, for in his "Universal History" a year later he repeats it, though more succinctly. Man, "possessor of the treasury of symbols which he has been able to multiply ad infinitum, can secure the holding of all his acquired ideas . . . and transmit them to his successors." ¹³ Neither Tylor nor any other cultural anthropologist of the nineteenth century or indeed our own has ever given the concept of culture more elegant statement.

The second aspect of Turgot's theory of social development is no less striking in originality. I refer to a method of anthropological observation and classification that is also commonly referred to the nineteenth century for its origin. Of the popularity of the method-widely called the Comparative Method—in that century there can be no doubt. It lights up the pages of such writers as Auguste Comte, Herbert Spencer, Lewis Morgan, Edward B. Tylor, Karl Marx, and Friedrich Engels, among a large number. The essence of the Comparative Method has to do with a good deal more than simple comparison. That essence is anchored indeed in the idea of progressive development of mankind. What the Comparative Method sought to do in the hands of its great exemplars was arrange all the peoples of the world, those in the present and past alike, in a single series that would exhibit mankind's progress through the ages, one stage exemplified by this people, another by that, and so on. Existing primitive peoples, so called, could be, within the perspective of this method, likened to living fossils. It is no exaggeration to say that modern anthropology came into existence as a self-conscious discipline in the middle of the nineteenth century largely around a broad-gauged use of this method.14 It supplied, albeit with different longrun success, ethnographers with much the same kind of golden thread for their collections of artifacts that Darwin's idea of natural selection supplied his and others' osbervations of fauna and flora.

Turgot is, without question, the real founder of the Comparative Method, one that, as he saw, was indissolubly linked with the conception of mankind as being in ceaseless linear progressive advancement. Here is his statement of the method in the second of his two discourses at the Sorbonne in 1750, that on the successive advances of the human mind.

All ages are linked together by a chain of causes and effects which unite the present state of the world with everything that has preceded it. . . . The inequality of nations increases [with development through time]; here the arts start to develop; there they advance with long steps toward perfection. In one place they are arrested in their mediocrity; in another the primal darkness is not yet wholly dispelled; and through these infinitely varied inequalities, the present state of the world, in presenting every shade of barbarism and civilization, gives us at a single glance all the monuments, the vestiges, of each step taken by the human mind, the likeness of each stage it has passed through, the history of all ages.¹⁵

3.

The ideas I have so far mentioned, while far from the stock in trade of most historians of social thought, are well enough known to Turgot specialists and students of the history of the idea of progress in the eighteenth century. I shall say no more about them here. What I want now to do is turn to an aspect of Turgot's thinking on progress that is little known, so far as I can tell, even to specialists, and that stands in curious opposition in certain respects to the ideas he set forth in the two discourses I have just cited. In those, as is evident to the most cursory reader, progress is taken as not only a fact but as a fixed, unvarying law, applicable as a developmental principle to all mankind. The spirit is one of almost religious contemplation.

If we turn, however, as I shall now do, to the very first of the Sorbonne papers, written in 1748, a full two years prior to the others, we find something decidedly different. In this paper, "Researches into the Causes of the Progress and Decline of the Sciences and the Arts, or Reflections on the History of the Progress of the Human Mind," the spirit is far from being one of firm belief in the constancy and universality of progress. There is none of the almost reverential regard for the spirit of progress, conceived as cosmic principle, that stands out in the later discourses. What we find in this first of the Sorbonne papers is an astute, extraordinarily learned, inquiry into the causes of cultural advancement on the one hand and of cultural decline or stagnation on the other.

Why, Turgot asks, is creative achievement so rare in history, why does genius manifest itself in

¹² Schelle, **1**: p. 215.

¹³ Schelle, 1: p. 276.

¹⁴ For an excellent account of this method, so little understood by historians of social thought, see Kenneth E. Bock, *The Acceptance of Histories* (University of California Press, 1956).

¹⁵ Schelle, 1: p. 217.

the arts and sciences so rarely, all things considered? Throughout the paper Turgot's interest in the contexts of genius is strong. "We must look for the causes enabling genius to develop, those which help it, those which circumscribe it, and those which destroy its activity." 16

Naïve and inadequate some of Turgot's answers to his great problem assuredly are (he was but twenty-one years old when he wrote this paper in 1748), but others must invite our highest respect. Right or wrong in his answers to the problem of the appearance of genius, he never takes refuge in appeal to the kinds of *Weltgeisten* and *Zeitgeisten* which, along with the whole cultivated mystique of genius, whether in individuals or in peoples, would flower among other romantic blooms in the nineteenth century.

He is distrustful of the view that creativeness of high order is sufficiently explained by simple reference to what is called genius, that is possession of superior genetic powers in individuals or peoples. Not that he denies the existence of such powers; they must always be our point of departure, he writes. But we must, in our effort at explanation, go on beyond them. There is, after all, the problem of the distribution in time of creative individuals. "It is tempting to think that nature yields genius more abundantly at certain times and in certain places than in others, but this idea disappears on close examination." So far as biology is concerned, "Nature sows everywhere in every age at about equal intervals a certain number of geniuses whom the fortunes of education and events either develop or relegate to obscurity."

That great minds in the arts and sciences are endowed with superior innate powers, Turgot does not doubt for a moment. The question is, however: does absence of creative minds in some historical period, in a people, or in a given field of endeavour, necessarily argue the absence from the scene of individuals possessed of high genetic capabilities? It is best, in want of resolving proof from biology, to assume that such individuals are indeed present but without the crucial influences of a cultural character present to make possible their development and emergence as illustrious creative minds. Not every peasant boy can be made into a Corneille, Turgot writes, but "Corneille born and bred in a village would spend his life behind a plow. . . ."

Turgot applies the same perspective to his consideration of great peoples in history—Jews,

Greeks, and others. Simple recourse to genetic strain is not enough. "Men who gaze into deep waters cannot find the bottom; they see only their own image. Thus it is that men have seen in the causes of manifest things beings similar to themselves." The barbaric peoples are not innately different from us. "The inhabitants of barbaric countries are no less capable than others in matters of government." In sum, with respect to peoples as to individuals, biology can only be our point of departure; it cannot give us sufficient answers.

Turgot is equally critical of Montesquieu's notable theory of climatic and topographical causes of variability among institutions and cultures. In his paper on political geography ¹⁷ he refers to "the danger involved in making use of this principle." He refers also to "false applications which have been made thereof to the character of peoples and their languages, to the keenness of imagination, etc." He writes of "the necessity of having exhausted moral causes before having the right to assert anything of the physical influence of climates."

Geography is, however, vital, Turgot writes, for what it suggests to us as necessary background for the kinds of social and cultural processes which *are* at work in the production of great achievements in peoples, areas, and ages. Such processes are those of contact of peoples, mixture of languages, cultures, and ideas. To the degree that such topographical features, say, as navigable rivers and harbors or natural land routes facilitate these processes they are important to us. Nevertheless, fundamental for Turgot are the historical factors which liberate peoples from isolation and its inevitable inertias.

Even wars are important. Others in Turgot's age and after saw war as an invariable obstacle to progress in the arts. "It is not wars . . . which retard; it is indolence and routine." He continues: "It must be noted that the most peaceful progress of the ancient peoples, as in the towns of Greece, was intermixed with continual strife. The Jews built Jerusalem with one hand and fought with the other." It is not war that Turgot is celebrating, obviously, not even its martial virtues; it is, rather, the mixture and fertilization of ideas and language, the liberation from ancient custom and routine, which have so often in human history been possible only in circumstances of war, with its inevitable colliding of peoples.

Processes of change in language are very important. "It is probably a misfortune for languages to be too fixed, because in changing they

¹⁶ Schelle, 1: pp. 116-142. Except in two or three instances I have not thought it necessary to provide page references for my citations from this brief work.

¹⁷ Schelle, 1: p. 264.

are often made more flexible and expressive." In order for genius to rise there must be appropriate conditions of language—usually those which follow the mixture of several languages or dialects. "Nearly all languages are a mixture of several languages, and when they mix, the result contains something valuable of each." He points to the recriprocal relation between language and the poet. "When the language is once formed, there begin to be poets; but it becomes fixed only when it has been employed in the writings of a few geniuses, because only then is a standard acquired whereby to judge the purity of the language."

Great men in any field can, however, exact their price: the result of the adulation they command. Thus, Descartes was a genuinely great figure in philosophy, Turgot writes, even if he did tend to confuse with intuition what he had learned in school as a boy. But the legacy of Cartesianism has been, on the whole, stifling, especially in the moral sciences. Here Turgot is echoing the critical view of Descartes that Vico had so eloquently taken earlier in the century, though I do not know whether Turgot had at this age actually read the author of the New Science. Cartesianism, Turgot tells us, with its insistence upon truths arrived at deductively from self-evident axioms, has been the bane of those disciplines where facts and hard research are required.

Turgot sees inherited ideas as the chief obstacles to new knowledge. Reasoning alone will not get us over these obstacles. Facts are vital. "The greatest genius will not question a theory unless he is driven by facts." Hence Turgot's profound respect for seeing and doing, for observation and experiment. "I do not admire Columbus for having said 'the earth is round and hence in travelling westward one will encounter land'; what characterizes a mighty soul is the boldness with which Columbus surrendered himself to an unknown sea on the strength of a mere theory."

Turgot's respect for technology, for the mechanics and arts, as a foundation for science, is very great. Plainly, from his remarks on Descartes, he does not think the greatness of the seventeenth century in physical science sprang from derivations and linkages alone in *ideas*. Utterly vital, he says, have been "new inventions in mechanics." And here we are ultimately indebted to artisans rather than philosophers. Modern science, Turgot declares, rests upon bold experiments, but "in order to make experiments, it is essential that mechanics and the arts be developed to a certain degree of perfection. . . ." One does not see Turgot as in sympathy with that brieflived theory of our century which saw modern

science rooted in Platonism! Behind science is experiment and artisanship. "Any art cultivated over a period of centuries is bound to fall into the hands of some inventive genius."

He shows much the same appreciation of *craft*, in the fine arts as well as in the sciences. Why, he asks, have the English, unlike the French, Italians, a few Germans and Spaniards, never produced great painters. The reasons he adduces are two, somewhat related. First, the English will only pay for the very best art. Second, and more important, the English, in banishing images from their churches, destroyed, in effect, an industry, a craft. They

destroyed the means of producing moderately good painters, and no trade in which the moderately good cannot thrive is productive of the great. Our painters in France, who furnish all the little village churches with pictures, constitute a nursery for great men. When first beginning in an art or craft, one is seldom assured of success therein; but if one must be sure of succeeding largely in order to earn one's bread, fathers will not apprentice their children to that trade.¹⁸

Nor is Turgot blind to the role of chance in history. Causes of progress are both general and particular, fixed and fortuitous. "Chances lead to a host of discoveries, and chances multiply with time. A child's play can reveal the telescope, improve on optics, and extend the boundaries of the universe in great and little ways." Human imagination is fitful and of short duration. Long periods may separate the smallest of changes or improvements. "Men learn how to strike medals and, two thousand years later, they learn to imprint characters on paper; so difficult is it for men to advance the least step."

Above all, the causes of the rare and intermittent outbursts of creative achievement, lie in settings which lay a high premium upon change, mobility, and variety of ideas. It is this conviction that guides Turgot in a great deal of his seminal "Plan for a Work in Political Geography." ¹⁹ That essay is a good deal more than its title suggests. It is in fact one of the earliest if not the earliest treatises on historical and cultural geography. As I noted above, Turgot reacted critically to Montesquieu's effort to give terrain and climate direct causal significance, so far as explanations of cultures and institutions

¹⁹ Schelle, **1**: pp. 255–274.

¹⁸ Schelle, 1: pp. 121-122. It is amusing to realize that in 1749, one year after Turgot wrote these words on the English lack of great painters, Joshua Reynolds made his historic visit as an aspiring young artist to Italy, thus setting in motion his own distinguished career and also in effect founding England's one notable school of painters, which lasted approximately a century.

are concerned, but he yields to no one in his appreciation of what geography contributes in the way of differential setting for human history. The "Plan . . ." is primarily devoted to Turgot's outlining of what he calls "political world maps," synoptic images, all of them, of the unions of geography, natural resources, level of culture, and historical circumstance which the different ages of world history reveal. One can only admire the boldness of the imagery here, and the originality of the conception. Not until the great works of Alexander von Humboldt, Ratzel, and Vidal de la Blache in the next century do we find comparable images and perspectives. For me, however, what is most valuable in Turgot's short treatise on historical geography is his linking of geographic setting with communications, with arteries of commerce, migration, and war. cisely as biology sets certain limits, genetically, of achievement in individuals and peoples, so does geography. We must, however, in each instance, be wary, Turgot argues, in stopping too quickly with either kind of limit in our explanations.

As Turgot finds the causes of high efflorescences of culture in the amounts of change, mobility, and diversity which are present in their settings, so does he find the causes of cultural stagnation or fixity in settings of opposite character. His contrast here of the ancient Greeks and Egyptians is instructive:

Greece advanced much farther than the Egyptians in the sciences, which she derived from them, simply because she was not subject to a single despotic power. Had she constituted, as did Egypt, one political being, undoubtedly a Lycurgus or Solon, in desiring to protect the sciences, would have attempted to subject their study to government regulation. The spirit of sect, natural enough in the earliest philosophers, would then have become the spirit of the nation. . . . Happily, the situation in which Greece found herself, divided as she was into an infinitude of tiny republics, gave to genius all the liberty which it requires and which no one should ever fear to give it.²⁰

Geography is vital to understanding of culture or any other aspect of man's history in the degree to which it encourages, by way of mountain passes, natural land and sea routes, easily navigable rivers and seas, and the like, the flow of peoples and their ideas and traditions which is so necessary to intellectual progress. Similarly, where geography imposes difficulties in such flow of peoples, through deserts or formidable mountain ranges or unnavigable bodies of water, vicinal isolation commonly results, with consequent cutting off of institutions and ideas from sources of innovation from the outside.

Turgot gives to colonization a great deal of importance in his theory of human achievement. Where geographic setting leads to ease of colonization, novel forms of fresh germination are made possible. "Colonies are like fruits which cling to the tree till they have received from it sufficient nurture; then they detach themselves, germinate and produce new trees." It is in this context that Turgot makes his famous prophecy (in 1748, be it remembered) of the American Revolution. Still referring to colonies and their separations from mother countries, he adds to the sentence just quoted: "Carthage did what Thebes had done and what America will someday do." Later, Burke, in one of his defenses of the American colonists. made use of almost identical imagery.21

4.

I referred above to the striking difference of spirit to be found between Turgot's earliest paper on progress, that from which I have just quoted at length, and his later ones, particularly the second discourse at the Sorbonne in December, 1750, and the essay on universal history written the following year. Whereas in the first the spirit is one of pure inquiry, with the progress of man far from taken for granted, with, indeed, numerous instances adduced of the opposite state, the spirit we encounter in the later papers is almost religious in its acceptance of progress. Here progress has ceased to be a problem for study and has manifestly become a fixed, invariable, natural law, godlike in its universality and power.

We can only speculate on the change that took place in Turgot's mind. I think it was rooted in what we know to be his loss of faith in Christianity—a loss that he forthrightly stated when he explained to family and friends why he was choosing a career in government (this in 1751 while still at the Sorbonne) rather than in the Church as had been his original intent. It is not extreme to suggest that, by 1750, Progress had become a substitute for Providence in Turgot's mind. This supposition is fortified by examination of the two discourses he gave publicly in that year, the titles of which I gave in full above. Suffice it to say that in the first, on Christianity's benefits to mankind's progress, there is strong implication toward the end of that discourse that man was progressing under his own power, God having retired in effect from the scene. In short, a faltering of religious conviction, or, if we prefer, a strengthening of secular conviction, can be seen in that one ora-The second of the two discourses, coming

²⁰ Schelle, 1: p. 132.

²¹ Schelle, 1: p. 141.

six months after the first, makes progress, as we have seen, a basic law of the universe without need of divine intervention.

Turgot never returned in his writings to direct concern with the subject of progress or with analytical ideas which flowed from the subject. It is hard to doubt what many a reader of Turgot has been forced to conclude: that had he remained in the university (keeping in mind that the limits imposed by the Church were few and broad in that day) as theologian-philosopher, he would have almost certainly have written works of the

stature of The Spirit of the Laws, The Wealth of Nations, and The Decline and Fall of the Roman Empire. The appeal of public life was, however, strong. Turgot's father had served with distinction in a high post in the municipal government of Paris, and we judge that Turgot, having abandoned the ecclesiastical career which, as a third son, was generally thought proper in his day, thought French public life an ideal arena in which to seek some of the progressive changes and liberations of mind he had written about so brilliantly as a student.