

COSMOLOGY without HEADACHES

(Lecture Series)

(compiling, transcribing, researching, editing always in progress)

LECTURE XXIV: Social Revolutions as Copernican Aftershocks (A):



Utilitarianism; Socialism and Sociology

We have now had a look at the Age of Enlightenment as an historical effect, from modern perspective, caused by the advent of scientific logic overcoming the ancient traditions that once were our guides to knowledge; the old limitations as to *what* we can know and *how* we can know anything at all about the workings of the world. This new cause-and-effect scenario is, fundamentally, still the modern perspective, although, in the 19th century, the materialistic understanding or world-view that had been concocted by Descartes, Newton, and Locke was still developing out of a deepening trust in the scientific method to reveal truth and engender both security in predictability and certainty of knowledge. Despite Hume's logical protestations, the idea of *causation* and that of *natural law* and *natural rights* had been deeply planted and seemed so 'self-evident' as to be ineradicable. In England they were, in fact, already institutionalized. They would be the very foundation of the new democratic republic in America and were an integral part of the new 'paradigm' carried to France by Voltaire and promulgated by such as Diderot and the *Philosophes*. The expectation of the illuminating power of reason and that blinding faith in the anti-faith called 'science' tended to obscure any weaker light from less reliable sources—such as revelation; magic; astrology; intuition; authoritarian dogma—thus tending to cast custom and tradition, generally, into the shadows.

The implication: *reason alone is the means to truth*, and the methods of science, which reason was then busily developing in physics and chemistry and biology, would apply across the board to every pursuit of knowledge, ultimately to knowledge of mankind. If the mechanical process of cause and effect is the sole motive force behind human behavior, determining the generation of social and political institutions and actions and even pushing the course of history itself, then through the methods of science, it seemed to the ‘enlightened’, mankind may have the potential to resolve virtually every problem; to transform the world from a vale of tears into a utopian paradise. By taming Nature humanity could, logically, achieve the perfectly rational existence.

Attaining that glorious goal would require more than constructing new and appropriate social and political institutions. The old systems, based on false presumptions and outmoded traditions and exploitation of the weak and unfortunate, would need to be eradicated. Therein lay the motive for destabilization by *revolution*, rising from the less privileged but no less intelligent classes and pitted against the authority of birth and blood and bursting forth in such as the French Revolution, bringing desecration, confiscation, conflagration, usurpation (all seen as anti-elite events). But then came the return of contention, compulsion, disillusion, corruption, confusion among the revolutionaries; followed by persecution, executions, imperfections that had not been rubbed out, and finally *dissolution*—and in rather short order the mighty had again subdued the righteous. The logic-driven liberals misjudged the difficulty of imposing an untried, idealized system—a system barely under construction (and without plans)—upon a populace steeped in a reality of old, weathered traditions. Comfortable if non-rational customs were simply wrenched away; terminated by force. The ends seemed all important to the ‘enlightened’; reaching (or creating) paradise was worth any means. Riots can ruin a government, but are not effective in replacing it. After the initial explosion of the Revolution came the glory of ‘Mr. Democracy’ himself, Robespierre—then such revulsion over the excesses of his Reign of Terror that he was guillotined himself and Napoleon was welcomed as a savior.

Across the Channel in England, just prior to the French Revolutionary period, a struggling monarchy was dealing poorly with its own revolutionaries in America. Still strongly influenced by Hobbes’ notion that society is the result of natural passions, the British gave birth to **Jeremy Bentham** [1748-1832] and his cohort, **James Mill** [1773-1836] and the rudiments of a new social science called utilitarianism. Utilitarianism, proposed as a method by which to achieve the greatest happiness for the greatest number, is based on the over-riding notion that, as George Sabine points out, “the end of human conduct is simply to enjoy as much pleasure and suffer as little pain as possible” [A HISTORY OF POLITICAL THEORY; Holt, Rinehart & Winston, 1961; p.564].

Bentham understood the pursuit of happiness to be the fundamental driving force of individual souls. He saw government as the means to freeing individuals for that pursuit, but he also knew that too much freedom in that respect would lead to problems and social conflict. The ideal would be to aim for the happiness not of individuals directly but of a whole society. Naturally, such an achievement would result in some folks’ happiness being advanced, while for others it would be retarded. Furthermore, some sorts of happiness, particularly personal preferences, would have to be sacrificed for more general sorts of community-wide utility. As science progresses and knowledge accumulates, better and more direct means to such group happiness will be increasingly

revealed so that laws ought to be made in the interest of the *whole* society's total happiness. To monitor such laws, scientific means were needed for measuring their effect: i.e., counting or weighing satisfaction. What could be more materialistic? That is where the concept of utility comes into play. Bentham advises the legislator:

To take an exact account, then, of the general tendency of any act, by which the interests of the community are affected, proceed as follows. Begin with any one person of those whose interests seem most immediately to be affected by it....Sum up all the values of all the *pleasures* of the one side, and those of all the pains on the other....*Sum up* the numbers expressive of *good* tendency, which the act has, with respect to each individual, in regard to whom the tendency of it is good upon the whole...., again with respect to each individual, in regard to whom the tendency of it is *bad* upon the whole. Take the *balance*....In all this there is nothing but what the practice of mankind, wheresoever they have a clear view of their own interest, is perfectly conformable to.

[Bentham; INTRODUCTION TO THE PRINCIPLES OF MORALS AND LEGISLATION; *Preface*; pp.9-10; *quoted in* Strauss-Cropsey; HISTORY OF POLITICAL PHILOSOPHY; *Jeremy Bentham and James Mill; Essay by* Timothy Fuller; Univ. of Chicago, 1987; p.724]

The principle and the calculus of utilitarian theory were Bentham's. It was left to James Mill, more or less Bentham's disciple, to work out a practical application: a



Jeremy Bentham

political system that would provide cohesive overlordship while summing up and redistributing 'utils' such as to allow the greatest possible happiness. Mill was convinced that a mixed regime was the answer. Neither outright *democracy* (difficult to sustain and with its likelihood of a tyranny of the majority); nor *aristocracy* (under which the middle and lower classes would tend to be repressed and exploited); nor *monarchy* (liable of early descent into despotism) would do. A mixed regime, then, as proffered by Aristotle?—perhaps. But a government that included something of all three forms, each configured as a check against the others, would likely result in corrupting the democratic leaders who, he thought, even though they were representing the workers and the poor, would have to be fairly well schooled, at least literate, to be effective and thus were likely be educated professionals, landowners, etc., and social climbers seeking personal glory and favor among the upper levels. As such, these 'representatives' would tend to support policies favorable to the elite institutions. So the 'lower house' as a true representative of democracy could be the answer to the exploitation of the many, but only if the representatives were actually members of the class they represented: directly from the towns and districts themselves (not landowners and lawyers and representatives of special interests or the military). And they would have to be held to short terms of service. That way they must soon return to the community and be subjected to the policies and laws they had proposed and endorsed. Members of 'the middle rank', the elder Mill thought, would be most likely to mediate between rich and poor, provide a proper example of right conduct, and identify their interests with the interests of the whole—so that something close to the proper Benthamite calculation of pleasure vs. pain would be sought and made possible. Timothy Fuller [Neuwaldegg Institute fellow and political science professor at Colorado College] wonders whether "the conflict between the intellectual leadership necessary to legislate scientifically, and

the demands of individuals and groups to liberate and develop themselves as they see fit” can actually be resolved by “the confident arguments of [James Mill’s] *An Essay on Government*” [Strauss-Cropsey; HISTORY OF POLITICAL PHILOSOPHY; *Jeremy Bentham and James Mill; Essay* by Timothy Fuller; Univ. of Chicago, 1987; p.729].

It is here that we find the origin of our ‘liberals’ and ‘conservatives’:

Early *liberals*, like Bentham and the Mills who developed out of Locke’s vision, were generally on the side of new principles based on science and reason and might be compared to *Gassendistes*: atomistic materialists, in that they saw the millions of separate and irreducible individuals as bound into a coherent social whole according to over-arching *à priori* principles, like parts in a machine. They tended more and more toward the democratic-egalitarian end of the scale. The more radical of them promoted a utopian collectivism of one sort or another that promoted equality by making the individual parts equally meaningless apart from the whole. Generally they were attempting to overthrow everything that had gone before. All customs, experience, and doctrines were seen as mere accident and/or clouded ideas based on the pre-modern thinking of such as Aristotle and Plato in their ancient quest for the ultimate ‘good’. In brief, the old ways were thought irredeemably wrong, leading to warfare, poverty, and sorrow. Tradition must step aside or be torn asunder to make way for science and reason.

Pre-USA *Conservatives*, on the other hand, can be seen as exempting political knowledge from science. They understood society as a natural continuum—progressing, possibly, as history marched on, but by small, fix-it steps: gradual adjustments while clinging to long-proven traditions. They tended, like Edmund Burke and the great British historian McCauley and the French sociologist Alexis de Tocqueville (despite his surprise at the continuing success of America) to accept inequality as a fact of nature. Thus the conservatives might favor an out and out monarchy, or at least a selective scheme of some sort that would provide elite leadership in order to avoid or, at least, depress the ultimate mediocrity of the whole that was expected to result from the ‘leveling’ tendency naturally associated with egalitarianism. These were the very sort who, concurrently, were losing their heads in France.

As the father figure of modern conservatism, let us share some of Burke’s *Reflections of the Revolution in France*:

When I see the spirit of liberty in action, I see a strong principle at work; and this, for a while, is all I can possibly know of it. The wild *gas*, the fixed air is plainly broke loose: but we ought to suspend our judgement until the first effervescence is a little subsided, till the liquor is cleared, and until we see something deeper than the agitation of a troubled and frothy surface. I must be tolerably sure, before I venture publicly to congratulate men upon a blessing, that they have really received one. Flattery corrupts both the receiver and the giver; and adulation is not of more service to the people than to kings. I should therefore suspend my congratulations on the new liberty of France, until I was informed how it had been combined with government; with public force; with the discipline and obedience of armies; with the collection of an effective and well-distributed revenue; and with morality and religion; with the solidity of property; with peace and order; with civil and social manners. All these things (in their way) are good

things too; and, without them, liberty is not a benefit whilst it lasts, and is not likely to continue long. The effect of liberty to individuals is, that they may do what they please: We ought to see what it will please them to do, before we risque congratulations, which may be soon turned into complaints.

[From Conor Cruise O'Brian, *THE LONG AFFAIR: Thomas Jefferson and the French Revolution, 1785-1800*; University of Chicago, 1998; p.308 (Epilogue)]

Admitted: knowledge had vastly increased, so education should be expanded. More history and wider respect for humanity might be taught. But that risked a tyranny of the majority or that the libertine tendency of democracy would lead to anarchy, mob rule, respect for nothing: devaluing rather than elevating mankind. That fear had not been lost on the American founding fathers. Recall that John Adams—Hamilton, too, and others of the Federalists, felt that the joined states ought to be completely (or overwhelmingly at least) subjected to strong central authority of a quasi-aristocratic nature. Some of them, in very much the traditional European fashion, considered the bulk of humanity incapable of self-government, though the outcome of the impending French Revolution: Reign of Terror, rise of Napoleon, international bloodbath, and restoration of monarchy had not yet occurred to cement that view. Actually, Adams, before the Constitutional Convention—thus well before he himself was elected as the second President of the United States—even favored a kind of mixed regime, one that would have included an elected monarch. To first fill that role he proposed **George Washington** [1732-1799], superhero of the War of Independence, who seemed the only man capable of pulling the diverse states together. He urged that Washington be appointed by the Convention as the first King of America. Some process, he suggested, ought to be described in the new Constitution by which future kings would be selected.

Washington would almost surely have declined that honor. Legend has it that in England, while trying to patch things up as best he could as the ambassador from the

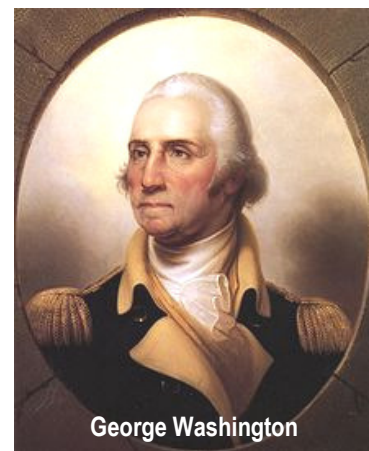


Franklin in London - 1767

newly independent confederation of American states, Benjamin Franklin was asked by George III what he thought General Washington might do, now that the hostilities were over. Franklin said he believed Washington would go back to his farm. Surprised, the King remarked: 'If he does that, he will be the greatest man on Earth'.

Washington did just that, for which decision he is often referred to as 'the modern Cincinnatus'. But America was in turmoil and he was pressed back into service as President of the Constitutional

Convention in the hope of setting the country on the high rails. But even the very democracy-oriented Jefferson expected things would not go smoothly for the new republic, predicting recurrent revolutions every few decades—for the 'tree of liberty', he said (paraphrasing), 'will need watering from time to time by the blood of tyrants and patriots'.



George Washington

Having been British colonies and thus participants in the rise of liberal ideas, the thirteen separate ‘states’ had already evolved into essentially republican governments, though with varying degrees of success. In that sense, from the American perspective, the War of Independence was not really a revolution, though it certainly was a rebellion. Among Americans there was already a consensus on popular government and, as British citizens, natural rights were generally assumed. The apparent denial of those very rights was, in fact, the spark causing the conflagration. However dimly understood or ill-defined the idea may have been, or however many generations back it may have been formed, the dream of freedom—freedom from political and religious oppression—was in fact what had brought most of their forebears to the New World. It remained only to cast off the remainder of the English regime, the monarchical and aristocratic elements; to perfect what already, as if instinctively, they had begun to create: a ‘democratic republic’.

They did not have to throw everything away and reinvent the wheel, as it were—as would the French and, in the 20th century, the Soviets, Chinese, Cubans, *et al*—and begin anew to build an untested and uncertain system based only upon human logic (some good, some not so). In fact, practically all modern ‘revolutions’ are coups or usurpations: violent overthrows of one sort or another, usually by gangsters (even if in uniform) rather than by ‘the people’, and often inciting mobs to mask their true intention and achieve their goal (hardly for the good of the ‘mob’), ending in despotism of one sort or another, complete with purges and bloodbaths as if in imitation of France.

Americans, on the other hand, as mentioned, already had a history, if relatively brief, and a tradition of democracy. Though that experience was necessarily imperfect and had been a struggle—often eschewing important things like religious tolerance in puritan communities, quashing the freedom of speech and faith, and moving swiftly to the status warned against by the more thoughtful liberals: tyranny of the majority—they learned lessons from their mistakes and shortcomings, and seemed to be developing antipathy toward such institutions as privileged classes and hereditary monarchy. Most, by the 1780s (though it may be presumptuous to say ‘most’ had even heard of John Locke—still, ‘most’) had already accepted something like Locke’s ‘natural rights’ ideas out of their own experience—out of habit or intuition without plumbing the arcane philosophical depths of materialism and questioning human nature and wondering whether or not we could actually know anything insensible. Admittedly there were problems: further small rebellions to be put down and the dispossessions, even lynching of Tory ‘traitors’, but nothing like what would take place in France under Robespierre. In fact, the great bulk of America’s Tories were simply exiled or ‘encouraged to depart’ to Canada or England—not exactly receiving a rousing welcome in either place.

Adam Smith’s advocacy of *laissez-faire* (in *WEALTH OF NATIONS*, published as if Providentially in 1776), a notion that had been earlier trumpeted by French Physiocrats, promoting a general attitude of non-intervention with “the invisible hand” in the private market system, also struck a consonant and resounding chord among the former colonials. So Jefferson and Franklin, in the *Declaration of Independence*, without a lot of prefatory, philosophical weasel-words and without disconcerting references to ancient authors and the whys and wherefores of social contract theory, could get straight to “We hold these truths to be self-evident”. Likewise Publius, *The Federalist*, could go more or less directly to the discussion of *practical* problems of government and how the nation might *preserve and improve* rather than have to *establish* popular government. To

paraphrase, he (or rather—according to ‘him’—the proposed Constitution) presented ‘a democratic solution to the inherent democratic problems’. By this ‘Publius’ did not mean creating a ‘mixed regime’ with the introduction of interacting elements of monarchy or aristocracy to the proposed new government. He meant tampering with and inhibiting an unrealizable and untenable idea of ‘pure’ democracy by means of elected representation; by the separation of powers interacting through the system of checks and balances constitutionally established between them; and especially by the newly realized advantages of a large scale republic: *impure* democratic elements. Rather than preach something brand new, suspiciously philosophical, and intensely and uselessly debatable, Madison, Hamilton, and John Jay could assume a fundamental bias in their readers; a leaning toward a political philosophy of popular sovereignty, so they could recommend to the people of the separate states the work produced by the Constitutional Convention as a practical ‘fix’ rather than some fanciful, radical, and thus fearsome new concept.

‘Positive’ Thinking:

In 1789, while the French were arranging to behead their king, **George Washington** [1732-1799] was elected the first President of a brand new nation without a shot being fired. Despite the problems following the French Revolution and the failure to institute or impose a truly democratic system, intellectual liberals (those who managed to escape the guillotine) seemed to have kept a positive attitude concerning the social future. After all, progress seemed to be a scientific certainty. But progress toward what?

Powered by the Enlightenment the Revolution attempted to replace every vestige of the old system, including a radical change in education. Prior to the overthrow of the monarchy a finished education in France was, for the most part, limited to offspring of aristocrats and was steeped in the classics and laden with ancient Latin and Greek and what was known of ancient history. The same was true in England at the traditional universities, Oxford and Cambridge. Science was not a subject one would expect to find in the curriculum of these staid institutions. Even medicine was not taught as a science. Doctors were expected to be gentlemen, or the next thing to such status, and it was more important to be able to dress, act, and converse on a level with ones elite patients than to cure them. Other than the study of human anatomy, medical students were hardly exposed to anything beyond what the gentry were expected to know. In casting aside all tradition associated with the old regime, the French Revolution radically changed education along with everything else. Everything was to be newly invented and based on scientific reasoning. One of the many new journals of science that were constantly springing into existence and failing, only to reappear over and over under new management and mastheads, exulted:

The Revolution has razed everything to the ground. Government, morals, habits, everything has to be rebuilt. What a magnificent site for the architects! What a grand opportunity of making use of all the fine and excellent ideas that had remained speculative, of employing so many materials that could not be used before, of rejecting so many others that had been obstructions for centuries and which [we] long had been forced to use.

[From *Décade philosophique* (1794), vol.1;

found in Gouhier: *LA JEUNESSE D’AUGUSTE COMTE*, vol.2 p.31

as quoted in F.A. Hayek; *THE COUNTER-REVOLUTION OF SCIENCE: Studies on the Abuse of Reason*; Liberty Fund, Indianapolis, 1979; p.194—*reprint* Free Press (Macmillan), Glencoe IL, 1952]

So the old schools were junked and replaced with the *écoles centrales*. Scientific subjects took the lead. Ancient languages were practically forgotten, literature and history were minimized, religious and moral instruction was deleted. French proto-socialist **Saint-Simon** [1760-1825] reports in his *Mémoire sur la science de l'homme* (1813):



Such is the difference in this respect between the state of ... even thirty years ago and that of today that while in those not distant days, if one wanted to know whether a person had received a distinguished education, one asked: "Does he know his Greek and Latin authors well?" Today one asks: "Is he good at mathematics? Is he familiar with the achievements of physics, of chemistry, of natural history, in short, of the positive sciences and those of observation?"

[Claude Henri de Rouvroy, Duc de Saint-Simon, from *Oeuvres de Saint-Simon et d'Enfantin* (Paris, 1877-78), vol.40, p.16; quoted in Hayek; *THE COUNTER-REVOLUTION OF SCIENCE*, p.196]

So we have the first appearance of the technical specialist, further advanced by a very new type of higher institution called the *Ecole polytechnique*. Now we have the development of the engineering mentality, especially useful for military purposes, so the school was especially coveted later by Napoleon. It was staffed by some the greatest scientific minds of the era. The tendency was to teach science as a practical endeavor rather than theory and/or philosophy, engendering the expectation that there were no limits to what the human mind could accomplish by eclipsing all metaphysics and religion. It was indeed an atheistic thrust but it made France the indisputable leader in modern science during the first half of the 19th century. The spirit of the enterprise—and the bias of the time—might best be illustrated by a quotation of the most illustrious of French thinkers at the time, Laplace, chairman of the school's board of directors:

We ought...to regard the present state of the universe as the effect of its anterior state and as the cause of the one which is to follow. Given for one instant an intelligence which could comprehend all the forces by which nature is animated and the respective situation of the beings who compose it—an intelligence sufficiently vast to submit these data to analysis—it would embrace in the same formula the movements of the greatest bodies of the universe and those of the lightest atom; for it, nothing would be uncertain and the future, as the past, would be present to its eyes. The human mind offers, in the perfection which it has been able to give to astronomy, a feeble idea of this intelligence. Its discoveries in mechanics and geometry, added to that of universal gravity, have enabled it to comprehend in the same analytical expressions the past and future states of the system of the world. Applying the same method to some other objects of its knowledge, it has succeeded in referring to general laws observed phenomena and in foreseeing those which given circumstances ought to produce.

[from *Essai philosophique sur les probabilités* (A Philosophic Essay on Probability)—1814; in *Les maitres de la pensée scientifique* (Paris, 1921), p.3; found in GATEWAY TO THE GREAT BOOKS, vol.9: MATHEMATICS: Pierre Simon de Laplace; Frederick W. Truscott & Frederick L. Emory, trans.; Encyc. Brit. Pub., 1963; p.326]

This was (characteristic of Laplace) a kind of world formula—so why not apply the same method to the study of society? That, of course, was something that had been suggested as early as Hobbes. With the Revolution, the loss of connection to history and tradition due to the absence of literature in education, in a sense, freed the mind of early 19th century France—and later of an ‘enlightened’ and liberalized Europe—to entertain the notion that history was not simply useless but restrictive: a leash tying humanity to outmoded social expectations. Ignorant of the acquired knowledge of generations, it was assumed that reason could concoct something much better: ‘better living through social engineering’ might have been the motto of the new social science.

Saint-Simon had, for a long time, the inkling of such an idea, even without a science education. Yet he felt the need for such learning. He moved to a house facing the *Ecole polytechnique* so he could entertain the instructors and students in his home and learn about technology without enrolling—besides, he may have been too old (or too ignorant of science) to qualify. It must not have worked out as expected. He complained that his learned guests ‘talked little but ate much’. Still he established his reputation with ideas about the ordering of society along the lines of a factory for maximizing efficiency.

Saint-Simon’s life was the proverbial rollercoaster. He was a wealthy young aristocrat and bold adventurer, worldly and respected. Then, amid the rumblings of the Revolution, he renounced his blood-right to become an exemplary *sans-culotte* and ran through his fortune by publishing his scattered ideas. Descending into dire poverty, even a term in prison and possibly a stint in an asylum, he was rescued by his former valet; rising again to organize and lead a kind of socialist cult of brilliant young men, only to squander his earnings again in the pursuit of his dream of saving humanity from itself and trying to make himself the high priest of a new civilization. He was a supreme egotist, yet charming; alternately brilliant and mad; deeply serious in his purpose: his mission from God. Yet he was often remarkably silly in attempting to carry it forward.

He did receive help in organizing his ideas, beginning in 1813, from certain of his followers: youthful recruits from the *Ecole polytechnique*—first Augustine Thierry, who soon departed over political differences. Thierry moved toward anarchism and Saint-Simon could not conceive of a society without government control; then came Comte. Comte did not shrink from the idea that “politics ... is the science of production” [*OEURES DE SAINT-SIMON ET D’ENFANTIN* (Paris, 1925) vol.18; p.189] or that “all men will work; they will regard themselves as laborers attached to one workshop whose efforts will be directed to guide human intelligence...” [*ibid.*, vol.15; p.55] or “anybody who does not obey the orders will be treated by the others as a quadruped” [*Lettres*, ed. A.Periere (1925) p.54]. But Comte, too, ultimately parted with his guru as Saint-Simon began resurrecting his earlier ‘Council of Newton’ ideas, engendering a pseudo-religion that eventually sank into absurdity even while paradoxically rising in membership. He was the self-appointed prophet to whom the Lord revealed that he must organize and chair (with help from Newton’s spirit) the Council of Newton, by which the people of all the planets will be instructed concerning the natural/rational laws, and which will do the work of God on Earth. He understood that there were three stages of human history: polytheism; deism, by which he meant monotheism; and ‘positivism’ or science, by which mankind learned of God’s real laws: the previously hidden laws of nature—apparently unaware that he was resurrecting the very dogmatic concept that science abhorred. [*Quotes in above paragraph found in* Hayek, *THE COUNTER-REVOLUTION OF SCIENCE*; pp.221-223]

Positivism, in keeping with Enlightenment cosmology, is an understanding associated mainly with **August Comte** [1798-1857], the developer of Saint-Simon's ill-defined scientific 'social philosophy' and probably the inventor of the term 'sociology'. Comte's positivism held, with the materialists such as Locke and Hume and his own mentor Condorcet, that only sense data is real knowledge. Beyond that, only the assertions of logic and mathematics (as with Kant) were admitted as intellectual truths. Otherwise, all claims of intuition, imagination, revelation, or metaphysics were discounted. Comte, borrowing heavily from Saint-Simon, considered mathematics as the exemplar for progress to truth in science, including his new social science, which has led to our modern fixation with social, economic, educational, and political statistics. He saw mathematics and logic as a kind of mental science: 'experimenting', as it were, with the conceptual 'things' that are 'discovered' as tools to be utilized in the excavating of truth. He arranged the sciences in ascending order, from the simpler and less important (though it is hard to imagine that today's astronomers and physicists would be pleased to find they were the simplest and least important) to the more complex and more important: the study of humans (e.g., biology and chemistry and medicine) and ultimately to that of greatest importance, human society—ergo, *sociology*. The simpler sciences, naturally, developed earliest—as a foundation must be in place if an edifice is to be erected. Like so many predecessors, including his old partner Saint-Simon, he further noted the progress of civilization as having passed through three stages. For Comte they were:



1. *Theological*—a primal age during which society adheres to a divine will; an era itself divided into three stages: *animism*; *polytheism*; *monotheism*. He might have carried this a step further per the Enlightenment, to *atheism*, but that would have to wait through the next stage;
2. *Metaphysical*—consisting of the replacement of the divine with the natural: unknowable and unknowing causes and forces and mysterious substances as the 'way' of the cosmos, which could include *pantheism* and/or *astrology*, and *the occult*; and,
3. 'Positive' (by which he meant the scientific or experimental)—*empiricism*, *absolutism*—cold reality: the means to positive or true knowledge.

He was convinced (as Kant and Rousseau had been), especially after the example of Robespierre and the Reign of Terror following the Revolution, that mankind (perhaps not intellectuals like himself, but average folk) needed religion of some sort for comfort in step #3. So instead of promoting *atheism* (logically associated with the final phase), he stepped (or rather lunged) sideways, beyond his strictures of logic, and started a positivist pseudo-religion based on '*humanism*' (of which, instead of Saint-Simon—who had taught him everything; and whom he had come to ridicule for his excesses—Comte would now be high priest). He saw scientists and intellectuals (technocrats) as ministers of his new *nonotheism*; even marshaled an army of secular saints: Frederick the Great, Dante, Shakespeare, Adam Smith, etc. Could whatever disease that had infested the brain of Saint-Simon have been contagious? The moral teaching was Kantian: 'live for others'. The prophesy: a practical reformation of the social order by means of industry, education, productive labor, arts, moral improvement, and diffusion of science.

Here, in both Saint-Simon and Comte, besides the dawning of sociology, was also a forewarning of many strange and innumerable drifting cults having come unmoored from traditional faiths—such as a fairly successful one of our own age started by a science fiction writer, L. Ron Hubbard, simply on a wager (with Werner Earhart, also the founder of a psycho-religious entity called ‘Est’) that Hubbard could begin his own religion and collect a serious following: hence, Scientology. The paradox is hard not to notice. Wasn’t science actually the anti-faith? Yet here was the inventor of positivism presenting a new belief—even if it was, after all, a worshiping of science, it was dogma nonetheless: propaganda, as it were, promoting through authority the desired optimism that sheer facts of scientific investigation alone could not produce.

Comte fully expected that all the natural laws of his social science soon would be uncovered. That eventuality would diminish the unwarranted idea of liberty of conscience or ‘free will’—thus: his humanistic religion. Through education, he thought (perhaps he meant ‘indoctrination’), true freedom would be found in submission to scientific laws. And yes, he admitted, the Revolution had fallen short: it did not succeed in replacing or even in burying the *ancien regime*. Nonetheless it had been necessary in preparing the way for the truth and the new scientific or rational society based on that truth. He, too, he thought, was helping it along; speeding up the ultimate society’s inevitable arrival.

Here, then, in Comte’s series of steps to modernity or toward some sort of final state, was not only an example of the growing assumption of progress but a prototype of the process of history that was already being developed by Hegel. Though Hegel never mentions Comte, and probably died before Comte published *The Course in Positivist Philosophy* [1830s], this idea of a progression of historical stages was certainly ‘in the air’. In fact, the Enlightenment and the French Revolution have come to be understood by some as proof of that idea—as part of the progress. Besides Saint-Simon, Turgot and Condorcet and several other precursors to Comte had laid out similar three-stage versions of history (by different names). Hegel was doing the same in Berlin. Others would follow and, from our perspective, it is easy to see such a progression. Comte assumed the progress would continue and, as facts and/or laws were uncovered, it would require a relatively simple mathematical exercise to predict the next level of complexity. He expected, and was successful in convincing many others, such socio-political refinement would soon be achieved.

HANDOUT for supplemental reading:

(1) ch.17, “Comte and Hegel” from *THE COUNTER-REVOLUTION OF SCIENCE* by F.A. Hayek; Liberty Fund, Indianapolis, 1979 (*republished from Free Press, Glencoe, 1952*); pp.321-363, (*Handed out after previous lecture, No.XXIII*)

and

(2) *selection from Will Durant: THE STORY OF PHILOSOPHY*; Garden City (Simon & Schuster), NY, 1927 *from* ch.VI, subhead VIII, ‘A Note on Hegel’; p.321-325