Social Science and the Mantle of the Enlightenment:
Science, Politics, Ideology, and Philosophy, in Progressive-Era America

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"The real race argument centers today," wrote W.E.B. Du Bois in 1909, on the question, "from the standpoint of modern science, are Negroes men?" And, indeed, modern science, including social science, was the standpoint from which arguments on social issues frequently proceeded in Progressive-Era America. It was a time of uncommon excitement among practitioners of social science about the future. Social problems not previously conceived of as in the domain of science were now held to be able to be conceived of within its domain, and practitioners of social science were re-framing social issues—rethinking social relations previously considered fixed and immutable. As the social economist Mary Kingsbury Simkhovitch put it in the Political Science Quarterly in 1902: "The order of the day is not an eternal order, but that what is can actually be otherwise."

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With its emphasis on science as a groundwork for conceiving the political, modern American social science was heir to the eighteenth century Enlightenment. The dramatic story of cultural transformation which was the Enlightenment has been told by historians in various different ways. One way of telling it is as a story of progression from a world understood in Christian cosmological terms to a world comprehended in terms of the new natural sciences. Understood in this way, the Enlightenment challenged the more than 1,000 years old tradition that saw the world as enchanted by God's will. Before the Enlightenment, politics was the province of God, and kings ruled by divine right. In this context, the Enlightenment was an anomaly. Its cultural churning and innovation placed a secular and scientific worldview at the

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center of a web of commitments and beliefs that held tolerance, urbanity, and intellectual humility in high esteem, and sought freedom and a reformist agenda of progress through the use of critical reason. In this way, Enlightenment thinkers like Hume, Diderot, and Voltaire opposed religious enthusiasm, and disenchanted the world in such works as *A Treatise of Human Nature* , *the Encyclopédie,* and *Candide*.

In politics, the Enlightenment meant that legitimate political authority, long considered the province of God, was increasingly thought of as a human construct. God's place in earthly doings—including his agency in the moral world—took on new character as deists (and some atheists) challenged Protestant and Catholic dogmatic belief. A world enchanted by spiritual grace and faith was challenged by Enlightenment materialism. To materialists, spiritual agency came to be seen as a fantasy of wishful thinking. (Yet a disenchanted world, such Enlightenment thinkers often recognized—one in which we humans have only each other to look to for solace and aid—would need be a world in which we had best to try to get along: stop autos-da-fé, witch dunking, and the wars of religion that had ravaged Europe for the preceding century and a half.)

In this paper I wish to take up the question of the mantle of the eighteenth century Enlightenment in late nineteenth and early twentieth century America, and to offer remarks on how in placing the cloak of the Enlightenment project on younger shoulders we will discover clear continuities—for the Enlightenment had not ended in the eighteenth century—but also ambiguities about its legacy. Many of the cultural cross currents alive in eighteenth century cultural and thought remained yet alive in Progressive Era America.

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The currents shaping the scene in Progressive Era America continued and extended those present at the Enlightenment's genesis. Eighteenth century Enlightenment thought took place in the context of a great wave of concurrent developments: an age of international

exploration and discovery, the rise of modern science, the advent of the first industrial revolution, the expansive growth of commerce and capitalism, and growing urbanization. And each of these developments continued apace in the late nineteenth and early twentieth century United States: the second industrial revolution, its taking off point in the aftermath of the American Civil War, accelerated the growth of American commerce and capitalism (by the end of the nineteenth century the U.S. led the world in production of manufactured goods). Urbanization followed close behind. By 1910 more than twenty U.S. cities had populations exceeding 100,000; and continental and international exploration and discovery continued—often as imperialistic venturing. Science and technology likewise progressed in what can only be described as a torrent. Earlier Copernican and Newtonian revolutions were joined by a cascade of late nineteenth and early twentieth century advances: Darwin's revolutionary evolutionary theory (1859), Roentgen's discovery of x rays (1895), Planck's quantum theory (1900), and Einstein's theory of relativity (1905), among them. And technology flourished: Bell's telephone (1876), the dawn of commercial electrical power at Edison's Pearl St. Station in Manhattan (1882), Tesla's alternating current motor (1888), Marconi's radio (c.1900), the Wright brothers' airplane (1903), and Ford's Model T (1908), joined a burgeoning bio-medical revolution that developed a typhoid vaccine, discovered aspirin, classified human blood types, isolated the whooping cough bacillus, and developed diagnostic tests for diphtheria and tuberculosis.

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Onto this cultural terrain entered modern American social science. If the modern physical sciences had unlocked and were continuing to unlock nature's secrets, and could offer universal laws of mathematical precision (such as Newton's inverse-square law of gravitation), or offer Copernican and Darwinian paradigm-shifting re-conceptualizations of man's place in the physical (and moral) order of the universe, then could not modern social science offer similarly precise mathematical laws, or paradigm-shifting re-conceptualizations? (Recall that with Copernicus earth

was reconceived as third rock from the sun and humans therewith displaced from the God-given cosmic center; with Darwin, we humans were reconceived as animals evolved from other animals and therefore not different in kind but only in degree from them; together we are all evolved from the primordial slime.)

Might not the social sciences—including sociology, economics, political science, psychology, and anthropology--achieve the status of physics, chemistry, and bio-medicine? Could sociologists, economists, and political scientists, for example, achieve the status, respect, and cultural authority of physicists, chemists, and biologists? Might modern social science be able to delineate the causes of social, economic, and political success, as well as the causes of poverty and other social problems? And if the social sciences could delineate such causes, could they not then establish the technical possibility of effective prescriptive action? The biblical injunction that "the poor will always be with you" need not necessarily be so if social scientists could understand its causes and prescribe a cure. Social scientists might, if they could get their science right, disabuse their fellow citizens that the structure of the social world—relations between men and women, black and white, rich and poor--had been passed down from an enchanted world above and that we humans could do little more than stand in Job-like awe before it in mystical wonder.

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Late nineteenth and early twentieth century social scientists set out with research agendas that saw them establish political science laboratories, engage door to door survey data collection, and run statistical analyses on data they had collected about economy and society. And they founded or were central agents in the founding of associations such as the American Association for Labor Legislation and the NAACP. They established settlement houses or worked closely with them. They were central players in the development of newly constructed academic disciplines and departments that were at the center of the rise of the secular, modern research universities that began to supplant smaller, denominationally affiliated, private colleges. Through their efforts they contributed to the "first measured century" and to later development of "the averaged American."

But they did not readily discover the causes of poverty, or racism's solution. Economics prided itself on being more mathematically rigorous than other social sciences, but it could not offer ready cures for economic downturns. Questions that persist to this day about what would count as a social science, how, methodologically, social science ought proceed, and what role social scientists themselves ought play in politics remained unresolved, even as social scientists claimed that their efforts were comparable to those of physical scientists.

Sociologist and historian W.E.B. Du Bois drew close the comparison with geologists in his 1903 Some Notes on the Negroes in New York City: "Since now scientists have begun to study men and conditions of group life so carefully, persons who would better the world in any way must study and learn from the material collected here, just as in other lines we use the wisdom of the geologist…." Political scientist John W. Burgess, founder of Columbia's graduate School of Political Science, characterized his approach as "an attempt to apply the method, which has been found so productive in the domain of Natural Science, to Political Science…." Sociologist William Howe Tolman compared efforts in social science to those in bio-medicine: "The social, like the physical evils, exists in all our large cities, and there is no reason why it [the social evil] should not be studied scientifically, like small-pox, typhus, or other deadly and insidious diseases.... The social sciences are beginning to be made the subject of scientific study and are yielding most fruitful results." Economist John Bates Clark held economists to be like chemists: "The farmer who irrigates a number of acres may raise a crop. The chemist who discovers a means by which the alkali that now ruins the land may be converted into a fertilizer, will do more than a million farmers. So the economist who can devise a means of removing the cause of extreme poverty, with the consequent ignorance and brutality, will do more than many charitable associations for the permanent benefit of the poor." Political scientist and historian Charles Beard, exuberant about the near-term future prospects for political science, declared: "Political science is to be the greatest of all sciences. Physics and politics are to be united, but the former is to be the bondsman."

These new enthusiasms for the "science" in "social science" were to varying degrees self-serving. For, though the social sciences share with the physical sciences a commitment to

observation, evidence, and inquiry, stubborn methodological differences between the social and the "hard," physical sciences remained. In the above quotations, Burgess asserts that he will attempt to use "the method" of the Natural Sciences in Political Science. But he does not tell us what that method is. Du Bois asserts that scientists of "men and conditions of group life" are comparable to geologists. Just how this might be so is unclear. Tolman tells us that the social evils of the city should "be studied scientifically, like small-pox," but this verbal turn of phrase drafts a simile (social evils can be studied *like* diseases) into service in declaring the studies of social evils to be of a piece with the study of human diseases. But saying it does not make it so. Clark's economists may be comparable to chemists in some aspects, but he needs to make explicit the manner in which they are so. And, for all the bravado of his declaration, Beard never says how political science will enslave physics. His claim seems both odd and over-reaching.

Even in the day, there were doubters. In 1892, Leslie Stephen, president of the Social and Political Education League, wrote: "There is no science of sociology, properly scientific--merely a heap of vague empirical observations, too flimsy to be useful in strict logical inference." Or, alternatively, as Darren Staloff's conference paper demonstrates, John Adams may have had it right when he, as Staloff writes, had as a "primary goal…to establish a scientifically based and modern form of academic skepticism" in which those inclined toward social science might seek out "the patterns of human sociability and political association in the human past," and in the context of this academic skepticism recognize that true social science can at best offer tendencies or probabilities about individual and collective human action, not inverse-square-law algorithmic certainty. As W.E.B. Du Bois wrote in 1898: "*Sociology* is the science that studies the actions of human beings and seeks laws and regularities among these actions. Perhaps few if any exact laws of human action will ever be discovered, but many tendencies and uniform movements have already been pointed out, and that the study and inquiry in this field yields much of value and interest is not to be doubted."

If social science is of a piece with physical science, the social scientists of the late nineteenth and early twentieth centuries did not demonstrate it to be so through these verbal flourishes. Turn-of-the-twentieth century social science declared itself to be observation-based and empirical, and its proponents clearly aspired to conjoin their efforts with the efforts of physical scientists, but just what social science was, and if it could be more than the savvy empirical skepticism John Adams and Du Bois suggest remains uncertain.

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The eighteenth century Enlightenment had engendered a collision of the enchanted and materialistic worldviews. It was a collision that, while filled with cultural tumult, had largely seen the collapse of religious explanation in the scientific sphere. In science, at least, the enchanted world had lost out to a triumphant secular materialism. And, even if the social scientists of the era couldn't say exactly what the method of their science was, I had been given to something of a working hypothesis that social scientists were agreed that pursuing a science of the social meant a secular research agenda. I knew well the philosopher David Hume's eighteenth century belief-in-proportion-to-the-evidence atheism, Denis Diderot's (purported) declaration that "Man will never be free until the last king is strangle with the entrails of the last priest" (Diderot actually wrote: "And his hands would plait the priest's entrails, / For want of a rope, to strangle kings.") And I knew also the philosopher Nietzsche's proclamation of God's death, the sociologist Marx's adage that religion is the opiate of the people, and the psychologist Freud's declaration that religion is mass delusion.

So when I began to read the works of various social scientists in the U.S. at the end of the nineteenth century I had the view that, since scientists are committed to understanding the world through observation and evidence, I would discover Progressive-Era social scientists to be kindred spirits with Hume, Marx, and Freud.

I was not disappointed. In 1895, the sociologist Franklin H. Giddings wrote: "Sociology is the natural history and natural philosophy of society...a descriptive, historical and explanatory account of natural communities, of animals and of men, savage, barbarian and civilized, as they have actually been, as they actually are. It affords data to Social Ethics. There can be a Christian Society. There can be a Christian Social Ethics, but a 'Christian Sociology' is as absurd as a Christian Chemistry or a Christian Astronomy." Zoologist and president of Stanford University, David S. Jordan concurred: "the word 'Christian' prefixed to the name of any science is a species of venerable quackery. Sociology is a science because its facts and inferences are true, not because they are the teaching of any authority." By 1907 former Columbia University president Seth Low could confidently write that "It is hardly more than a generation, if so long, since teaching in every department of intellectual activity depended for its weight upon authority. Now, however, that sort of teaching is absolutely confined to the domain of Theology." The science associated with the rise of the modern research university appealed to “facts,” Low said, not to theological authority.

But I had moved too quickly. As other precincts reported, the picture changed. Right there in the historical record along with such declarations of the secular nature of social science was a rich history of a different sort, and with it, as it would turn out, the cultural collision between religion and materialism so central to the Enlightenment had not left God dead. I had understood the collision to have ended in the collapse of the religious in ruminations of social scientists and social theorists. I was wrong.

In 1880 the Reverend J.H.W. Stuckenberg, in his book Christian Sociology, called sociology "a department of Christian theology." "By adopting sociology," he wrote, "theology enlarges its own domain and will, at the same time, infuse a new spirit into social science." In 1892, a chair of "Christian Sociology" was established at the Chicago Theological Seminary, held by Graham Taylor, a minister famous for his "socioreligious" survey of conditions among the poor. Taylor called upon "social science" to become, "the science of Christian society. Its field is the

world, including all classes and conditions of men from all nationalities. Its work is to investigate the conditions of social and personal life, discover the causes of suffering and the sources of inharmonious relations." In Taylor's view the answer was "sociology with God left in it." In 1895, John Bascom, professor of political science at Williams College, wrote: "Christian principles correctly applied to society and a correct Sociology are identical." In 1908, Jeremiah W. Jenks, professor of political economy and politics at Cornell University saw the principles of Jesus's teachings as relevant to politics: "As a student of social science and politics, it has been a source of satisfaction to me to see how many cases the principles laid down by him [Jesus] have made their way, often without the will of political or social leaders, into the scheme of our modern life. The Christian religion has proved itself practical in politics, and statesmen are realizing as never before that God cannot be left out as a factor in public affairs." The next year, Walter Rauschenbusch, distinguished theologian of the Social Gospel movement, wrote that Jesus: "had the scientific insight that comes to most men only by training." God was not culturally dead, and the Enlightenment project of removing him from realms of science and politics was, with these scholars, strikingly called into question.

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Progressive Era American philosophy, in the guise of William James' pragmatism has some explanatory power here, I think. We may usefully turn to William James' 1906-1907 lectures on pragmatism for insightful expression of the dual currents in Progressive Era social science thought. As James put it his lecture, "The Present Dilemma in Philosophy"--: "Our children, one may say, are almost born scientific. But our esteem for facts has not neutralized in us all religiousness." "Man," James observed, "wants facts; he wants science; but he also wants a religion." And continues: "Now what kinds of philosophy do you find actually offered to meet your need? You find an empirical philosophy that is not religious enough, and religious philosophy that is not empirical enough for your purpose. If you look to the quarter where facts are most considered you find the whole tough-minded program in operation, and the 'conflict

between science and religion' in full blast…. the vision is materialistic and depressing…. You get, in short, a materialistic universe, in which only the tough-minded find themselves congenially at home." "If now, on the other hand, you turn to the religious quarter for consolation, and take counsel of the tender-minded philosophies" you find, as he says, "two main types" of religious philosophy, one "radical and aggressive" and another with an "air of fighting a slow retreat." His lectures were, at once, a sociological reporting on these cultural currents, and an insightful sorting out of those currents in philosophical terms. And in this, William James was, in a measure, summarizing the cultural ethos of his day: some scholars rejected religion, some modern science; some saw science as requiring a commitment to a materialist or naturalistic ontology; others believed science could neither infuse life with meaningful purpose nor account for the world of the spirit. But James' insight that these differences could profitably be seen as matters of temperament contributed not to heightening tensions around metaphysical commitments, but relaxing them. Are differences in *temperament* worth killing for? Must we, even if we were to bring God back into our social science and politics engage in the sort of religiously inspired enthusiasm that had given rise to fierce and bloody wars in the centuries prior to the eighteenth century?

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We turn now our attention to social science and politics. One consequence of the Enlightenment had been that with the loosening of the political and cultural power of kings and clergy a fairly open fight had developed in terms of what elements in society were to gain political and cultural power. And while Hobbes, Hume, and Voltaire among others had been to varying degrees wary of democracy, other Enlightenment thinkers--John Adams, Thomas Jefferson, James Madison, and Alexander Hamilton among them--had been strong proponents of a measured, representative democracy. (Indeed, Jefferson's "life, liberty, and the pursuit of happiness" is an icon of this thread of Enlightenment thought.)

By the late nineteenth and early twentieth centuries political battles in the U.S. were no longer being fought around king and clergy, but around the proper relationship between the power of corporations, government, and the individual and collective interests of the people. An Enlightenment legacy in politics was that Progressive Era politics was largely shaped by secular (worldly) issues of whether (or how best) to regulate the economy.

Conservatives, such as the political scientist John Burgess could assert in an 1898 essay, "Private Corporations from the Point of View of Political Science," that corporate power was a vehicle for social improvement: "a private business corporation is, from the point of view of political science, a group of human beings, usually belonging to the best class of citizens, associated for the prosecution of some great enterprise and endowed with certain privileges and obligations." And while populists, progressives, and political radicals might insist that corporations generally failed to meet the "certain obligations" to society at large, to Burgess an over-reaching government was worse. "What we mean by liberty in political science," he said, "is absence of government in a given sphere of individual or social action." "Keeping this meaning in our minds, it is easy to see how corporations are a great stay against paternalism in government," Burgess concluded. And, indeed, for all of their differences, conservatives like Burgess, as well as populists, modern liberals, and radicals were playing on a secular Enlightenment political terrain—the power of the church and that of kings, so central to an earlier politics was here quietly absent.

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A central question of Progressive Era social science proved to be: would it herald a reinvigorated democracy, or serve as an instrument of technocracy? In this question lay a dual vision and an unresolved tension, and an unresolved paradox of the age. Were (and are) science and social science elitist enterprises of a privileged, educated community sharing a specialized and esoteric language? Were scientists qualified as experts to advise and lead where non-scientists can not? Did science know best? Ought scientists be ceded a compelling authority in political

policy decision-making, and be permitted to wield a technocratic social control? Or, alternatively, if science signifies an experimental method accessible to all, one that promotes undogmatic, open-ended, rational inquiry in which hypotheses and propositions can be evaluated by any observer who has access to the evidence, then science might prove to be a great democratizing force. Education need not belong only to the few.

This unresolved tension between science as elitist enterprise and science as democratizing force was a formative and unresolved paradox in the Progressive Era. For, science was understood both as a great leveling and equalizing force, and, at the same time, as an elitist occupation of the learned, an ambivalence reflected in the role of social scientists--were they to be intellectual paternalists wielding power, or champions of democracy helping to wrest power from barons of wealth who were turning the country into an oligarchy.

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However these issues of social sciences' status as a science, and social sciences' relationship to democracy and to the spiritual world may be, W.E.B. Du Bois was right to observe that "the real race argument" in Progressive Era America on issues of race took place from the standpoint of science. Du Bois and his allies in the fight against racism and segregation had not only to battle against longstanding religious and folkloric traditions, popular culture representations, and irrational fears, they also had to do battle with fellow social scientists.

In 1911 Du Bois wrote, "science to-day places no meets [i.e. limits] and bounds to the development of races given the favorable environment and there is no scientific proof that an individual of any race may not reach the highest. For this reason is it not the wisest and best course to refuse to tread the paths of exclusion and human despisery and to see that the gates of opportunity are absolutely closed in the faces of no race or people?" And he asserted, given "the

present state of scientific knowledge concerning the meaning of the term 'race'" it was "unscientific to assert that mulattoes and Eurasians were degenerate in the absence of all scientific data." Had racist views "remained merely academic opinions," Du Bois wrote incisively, "it would not be necessary to recall them, but they have become the scientific sanction for widespread and decisive political action--like the disfranchisement of American negroes, the subjection of India and the partition of Africa."

Du Bois found social science allies. At the 1909 National Negro Conference—an important moment in the formation of the NAACP—the Columbia University economist Edwin R.A. Seligman told those gathered for the first morning session: "The more scientific we are, the less prejudice we have." Philosopher John Dewey said: "in the matter of this scientific discussion," the best "biological science," shows "there is no 'inferior race,' and the members of a race so-called should each have the same opportunities of social environment and personality as those of a more favored race." Burt G. Wilder, professor of neurology at Cornell University, in an address titled, "The Brain of the American Negro," declared that human brains of all races are vastly similar. Livingston Farrand, professor of anthropology at Columbia University, said that "'the term 'race'" is at the "present time in hopeless disrepute. We do not know what it means and are unable to agree upon an arbitrary definition of it." "It is absolutely unjustifiable," he said, "to assert that there is trustworthy evidence for the view that marked differences of mental capacity between the different races exist."

Franz Boas, the Columbia University anthropologist, was, along with Du Bois, the most conspicuous of the proponents of social science in the service of demolishing racial prejudice. Boas was the era's most influential anthropologist and leader of a school of cultural-environmental anthropology. Differences in pigmentation or hair texture, Boas asserted, had nothing to do with "inferior ability." Culture dominated genetics in shaping individual lives. In May 1910, at the Second National Negro Conference held in New York City, where scholar and civic activists would

adopt the name The National Association for the Advancement of Colored People (NAACP), Boas addressed "The Real Race Problem." "The biological evidence," Boas held, "does not sustain the view, which is so often proposed, that the mental power of the one race is higher than that of the other."

> Any one who is familiar with ethnological facts will recognize that the conditions under which the American slave population developed is apt to destroy what little culture may have existed. The complete break with the African past; the imposition of labor, in the results of which the slave had no direct interest; the difficulty of assimilating the elements of civilization by which they were surrounded, all tended equally to reduce to a minimum the amount of independent cultural achievement of the group.

In 1911, Boas published The Mind of Primitive Man, his most influential rebuttal to the Teutonic theory, calling into question "how far we are justified in assuming...that the North European type...represents the highest development of mankind." "Anatomical and physiological considerations do not support," Boas said, "the common assumption that the white race represents physically the highest type of man." That same year, Boas, supplied a paper, "Instability of Human Types," for the first Universal Races Congress, convened in London. "Environment," Boas wrote, was central to the way in which humans develop. "The old idea of absolute stability of human types must...be given up," he wrote, "and with it the belief of the hereditary superiority of certain types over others."

But Du Bois, Boas, Wilder, Dewey and Seligman were battling back against a pervasive cultural racism, evident even in the writings of fellow social scientists. The Yale political economist Irving Fisher--"the prime mover in the American Eugenics Society"--in the Journal of the National Institute of Social Sciences in 1915 declared: "The most vital problem before the world to-day is the problem of preventing race deterioration"; "the movements for eugenics and race betterment are the ones directed most definitely against race deterioration." And statistician Frederick L. Hoffman argued a decade earlier in his book Race Traits and Tendencies of the American Negro (1896), a publication sponsored by the American Economic Association, that people of "Aryan descent will prove the superior" to "the negroes...solely on account of [the Aryans'] ancient

inheritance of virtue and transmitted qualities which are determining factors in the struggle for race supremacy." As Hoffman wrote:

> The lower races, even under the same conditions of life, must necessarily fail because of the vast numbers of incapables which a hard struggle for life has eliminated from the ranks of the white races, are still forming the large body of the lower races.
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> Intercourse with the white race must absolutely cease and race purity must be insisted upon in marriage as well as outside of it.... The compensation of such an independent struggle will be a race of people [the Negroes] who will gain a place among civilized mankind and will increase and multiply instead of dying out with loathsome diseases.

Proponents of eugenics were finding support in the Carnegie Institution's Station for Experimental Evolution at Cold Spring Harbor on Long Island, New York (headed by the zoologist and eugenicist Charles Davenport), and in Dr. John Harvey Kellogg's Race Betterment Foundation of Battle Creek, Michigan.

Du Bois and is allies would be left to fight against racism on social scientific and scientific grounds, but the battle would be fraught with many difficulties, and setbacks, and eugenics would turn not only against Americans of African ancestry, but, in another time and place, be used by the Nazis with horrifying consequences. The secular and scientific legacy of the Enlightenment was to be fraught with turmoil of enormous import, not only in Progressive Era America, but into a wider future.

## Conclusion

The young social science-trained men and women of the late nineteenth and earlier twentieth centuries came of age, intellectually and politically, at a time of sharp change in America. Slavery had ended, and the industrial revolution had taken off. The concept of a fixed natural social order, a providential great chain of being, under assault from the eighteenth century Enlightenment, was, by the late nineteenth century, giving way before notions of experiment,

change, evolution, and progress, fueled by Charles Darwin's theory of evolution and the new industrial market economy.

The social order of the day was now being interpreted, by some at least, as no longer stable and fixed, and longstanding social relations--on issues of gender, race, labor, and the like were or might be, in the light of modern science, open to a re-interpretation and remaking. Darwinian evolutionary theory, combined with the rapid evident changes in the industrializing market economy, signaled the possibilities. Besides, science and technology had fueled social and economic change through their insight and invention. Social scientists offered their fellow citizens the view that the society in which they all lived, having been humanly made need not be viewed as fixed and immutable, but might be humanly remade. Imaginative and experimental energies might awaken to the possibilities of a democratic remaking of the social order, and by their efforts fulfill the promise of American democracy, though democratic aspirations and the potentially contrary guiding principle of scientific expertise gave rise to a dilemma of modernism yet to be resolved.

The Enlightenment's cultural commitment to science and secularism was nowhere more in evidence than in the nineteenth century transformation of higher education. All American colleges founded in the seventeenth, eighteenth, or early nineteenth centuries had had strong ties to one or another religious denomination. By the early twentieth century none of the nation's leading university's did. In the space of several decades, the small, denominational college had been transformed into the modern, secular, research university—and at the center of these new institutions of higher learning were the disciplines and departments of the social science and physical sciences. Still, many social and physical scientists, and certainly the broader, popular culture, remained religiously devout. The Enlightenment turned American culture more toward the secular and scientific, but not completely so. The secular and scientific Enlightenment project which promoted a reformist agenda of progress through the use of critical reason, and held

tolerance, urbanity, and intellectual humility in high regard, found continued expression in Progressive Era America, but it did so amid a continuing cultural churning and conflict.

It is a mantle and a legacy that we live with to this day.