AN ABSTRACT OF THE THESIS OF

Brian R. Schefke for the degree of Master of Arts in History of Science presented on August 11, 2000. Title: Morality and Materialism: American Conservatives and Science, 1945-1964. Redacted for Privacy

Abstract approved: _____

Ronald E. Doel

Following World War II, the United States enjoyed unprecedented power and prestige. The wartime alliance with the Soviet Union quickly collapsed amid mutual suspicion and fear, however, resulting in the Cold War. Science was a significant political component in that ideological conflict. In the United States, inspired by Franklin D. Roosevelt's New Deal, many placed their confidence in the ability of science to improve the human condition. By contrast, American conservatives viewed the New Deal much more negatively; they were also ambivalent about the promise of modern science. A few even saw a troubling acceptance of the superiority of science over other forms of knowledge, a view they labeled as "scientism." Conservatives like Richard M. Weaver, the economist Friedrich A. Hayek, and others attempted to criticize scientism, but this critique did not take hold. Ultimately, conservatives were unable to enlist scientists in their criticism of scientism; moreover, the overriding importance of anticommunism to the postwar conservative resurgence blunted conservative antiscientism. Conservative scientists, while dissenting from their left-liberal peers in the realm of politics, nonetheless shared with those peers a strong belief in the positive values

of science. In addition, conservative scientists often emphasized the importance of Western science to freedom, in contrast to communist science supposedly tainted by ideology. As conservatives recognized the value of science to their own political goals, the antiscientistic critique faded. This conservative view, hitherto neglected in the historical literature, was and remains an important part of the interaction of science and politics in America during the twentieth century.

Morality and Materialism: American Conservatives and Science, 1945-1964

by

Brian R. Schefke

A THESIS

submitted to

Oregon State University

in partial fulfillment of
the requirements for the
degree of

Master of Arts

Presented August 11, 2000
Commencement June 2001

Master of Arts thesis of Brian R. Schefke presented on August 11, 2000

APPROVED:

Redacted for Privacy

Major Professor, representing History of Science

Redacted for Privacy

Chair of Department of History

Redacted for Privacy

Dean of Graduate School

I understand that my thesis will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

Redacted for Privacy

Brian R. Schefke, Author

TABLE OF CONTENTS

Morality and Materialism: American Conservatives and Science, 1945-1964

Introduction

Perhaps the most enduring symbol of the twentieth century is the Second World War and its 50-year political aftermath, the Cold War. In that period of conflict, the links between science and politics in America, though not new, were strengthened considerably. Increasingly, science was linked to national goals of economic prosperity and political influence. This was evident in the proliferation of "big science" projects, consumer goods, and military technologies. Yet discussions about science did not only center on science and technology themselves, but also around their political implications. It is appropriate, therefore, to examine the relationship between science and, for lack of a better term, political ideology. What did science mean to intellectuals in the United States, both scientists and non-scientists, in the context of the early Cold War period? Fundamentally, science was a significant component in that ideological conflict between Western-style capitalist democracy and Soviet-style communism.

Few analyses of the relationship between science and politics consider connections between conservatism and science, perhaps out of an assumption that science allied with political and economic elites already defines that relationship. There was, however, a conservative critique of science in the early Cold War period. Conservatives did not always see science as the vanguard of American progress and prosperity; rather, some believed that science ought play a limited role in American life. In this work, I aim to elucidate the relationship between conservative intellectuals, science, and scientists during the Cold War. There are several questions that arise. What was the critique of

science by conservatives in this time period? Did scientists who considered themselves conservative, or appeared to be more conservative than their peers, share this criticism? Given that most critical study of science among intellectuals comes from the left today, what happened to the right-wing critique? In attempting to answer these questions, this analysis may shed more light on the shifting links between science and politics, especially in the charged atmosphere of the postwar world.[1]

More specifically, what conservatives feared was "scientism," defined as the "pejorative term for the belief that the methods of the natural sciences, or the categories and things recognized in natural science, form the only proper elements in any philosophical or other inquiry." Conservatives saw an ever-optimistic faith in the power of the scientific method as a misguided meliorism that ignored transcendent truths that could not be revealed through scientific study. In their own writings that reflected their anxieties, conservatives used terms like "science" and "technology" in a broad manner, hence one is tempted to believe that conservatives were antiscientific. This, however, goes too far. Many conservative intellectuals stated that they did not oppose science in its proper sphere, which they often defined as the classification of natural phenomena. What alarmed conservatives was the application of natural science technique to the study of society and man in a way that appeared to reject subjective philosophy yet produced value judgments. Furthermore, many conservatives feared the ascendancy of a

---

[1] Though religion, particularly Christianity, played an important role in conservative thought of the time, conservative criticism of science was not grounded in religion alone. Conservative religious rhetoric, at least among "mainstream" thinkers, was woven into a broader context of conservative philosophy and was generally less strident than that of today's "religious right". For these reasons, I do not address explicitly religious aspects of conservatism and conservative criticism of science in great detail in this thesis. See Ronald L. Numbers, *The Creationists* (New York: Alfred A. Knopf, 1992); Richard Hofstadter, *Anti-Intellectualism in American Life* (New York: Vintage Books, 1963); and James Gilbert, *Redeeming Culture: American Religion in an Age of Science* (Chicago: University of Chicago Press, 1997).

technocratic elite that saw itself as comprising the best leaders of the people due to its "scientific", and hence "proper", world view.[2]

The nascent antiscientistic critique, however, did not take hold as a major conservative intellectual project. Except in the case of a few areas, such as that of evolution, there appears to be no significant conservative fears of scientism today. Conservative antiscientism was superseded by higher priorities, namely anticommunism. The dedication of conservatives to opposing communism, embodied by the Soviet Union, created an intellectual climate of conservative ambivalence toward science. Conservatives largely supported defense expenditures that relied on scientific research, which was heavily funded by the U.S. government. Though some worried that increased emphasis on science might lead to the increased influence of science in areas of social policy, thus creating a "scientific" society like the Soviet Union, this fear began to fade by the mid-1960s. The overriding importance, generally, of anticommunism to American policies established itself most firmly in the realm of conservative thought. The exigencies of the postwar world guided conservative opinions on science and scientism.[3]

---

[2] Simon Blackburn, ed., *The Oxford Dictionary of Philosophy* (New York: Oxford University Press, 1994), 344. See also Tom Sorrell, *Scientism: Philosophy and the Infatuation with Science* (London: Routledge, 1991), for an analysis of scientism generally. It is important to note that fears of an overpowering scientism, and its related technological impact, were not new in postwar America. See, for example, Clarence Edwin Ayers, *Science: The False Messiah* (Indianapolis, IN: The Bobbs-Merrill Co., 1927) and Joseph Wood Krutch, *The Modern Temper: A Study and a Confession* (New York: Harcourt, Brace, & Co., 1929).

[3] On government expenditures for defense, Daniel Kevles notes that by 1949, the Department of Defense and the Atomic Energy Commission (AEC) together "accounted for 96 percent of all federal dollars spent on the campuses for research in the physical sciences." By 1956, "overall federal expenditures for research and development reached $3 billion." See Daniel J. Kevles, *The Physicists: The History of a Scientific Community in Modern America* (Cambridge, MA: Harvard University Press, 1995), 359, 369, hereafter cited as *The Physicists*. Kevles' book is a good overall study of the growth of science and support for science in the United States, particularly during the twentieth century.

A Cold War political framework had quickly taken shape in American politics after World War II. Anticommunism cut across the spectrum of ideology from left to right. The perception of the Soviet threat did not shift considerably with changes in either the executive or legislative branches of the U.S. government. The Democrats lost control of both houses of Congress in the midterm elections of 1946. In that body, vigorous debates took place over foreign policy and national security in particular. Soviet armies massed in eastern Europe certainly looked threatening to a rapidly demobilizing United States. Conservative voices in Congress, such as Senators Robert Taft and John Bricker of Ohio, combined anticommunism with "classic" conservative isolationism; though other conservatives felt communism was best fought through active alliances with other nations, especially those in western Europe. The threat of so-called monolithic communism even moved liberals to establish strong anticommunist credentials; this also helped liberals defend themselves from charges that their political program evinced a natural sympathy for communism. President Harry S. Truman's foreign policy, as defined by the Truman Doctrine and his decision to go to war in Korea in 1950, illustrated such a need among liberals.

What was the nature of politics in the United States in the late 1940s and 1950s? Given the entrenchment of most aspects of the New Deal welfare state instituted by Franklin D. Roosevelt, it would appear that the dominant political viewpoint in postwar America was liberalism. Liberalism had shifted from its old nineteenth-century character of limited state power and *laissez-faire* economics to a philosophy of a more activist government that used its power in the pursuit of social insurance, increased regulation of business, and, by the 1960s, an alliance with the civil rights movement. Many mass

media news outlets, such as *The New York Times*, *The New Republic*, and *The Nation,* staked out predominantly liberal editorial stances on the issues of the day. Roosevelt's successor, Truman, devised his own policy of extending the welfare state that he called the Fair Deal, which was ultimately unsuccessful. Even Dwight Eisenhower, elected in 1952 and the first Republican president since Herbert Hoover in 1928, kept the New Deal welfare structure intact. Academics, including Arthur Schlesinger, Jr. and Louis Hartz, emphasized the fundamentally liberal character of American politics and the widespread consensus surrounding liberalism.[4]

The postwar years, however, saw an increased self-consciousness on the part of the American right that grew over time. Despite Republican victories in the congressional elections in 1946, a conservative intellectual community languished. A few conservatives had established journals like *The Freeman*, but these had small circulations and received little attention from the public. A self-described conservative wrote in 1949 that "'Conservative' is among the most unpopular words in the American vocabulary." A feeling existed among many on the right that liberalism had captured American politics and that this heralded a future of an ever-expanding state at home and capitulation to communism abroad. Indeed, to almost all conservatives, liberalism and communism, as left of center political philosophies, differed from each other only in degree.[5]

In 1964, *National Review* columnist Frank S. Meyer asked, "What is conservatism?" This query was the title of a collection of essays written by Meyer's colleagues as an

---

[4] Louis Hartz, *The Liberal Tradition in America: An Interpretation of American Political Thought since the Revolution* (New York: Harcourt, Brace & Co., 1955); Arthur M. Schlesinger, Jr., *The Vital Center: The Politics of Freedom* (Cambridge, MA: The Riverside Press, 1949). Alan Brinkley defines modern American liberalism and explores its rise from the New Deal as well as its current difficulties in Alan Brinkley, *Liberalism and Its Discontents* (Cambridge, MA: Harvard University Press, 1998).

attempt to define and unify the American right following World War II. Conservatives were gradually rebuilding their intellectual and political base in an era of—according to the right wing—liberal dominance and orthodoxy. By 1964, conservatives had a presidential candidate in Arizona senator Barry Goldwater that they believed they could truly call their own; Eisenhower had not sufficed in the 1950s, and Richard Nixon lost the presidential election in 1960 and the California gubernatorial election in 1962. There was, nevertheless, considerable division among conservatives as to what their philosophy really was. Was its foundation to be an advocacy of minimal government and maximum individualism? Or should the conservative movement rest upon the bedrock of traditional authority and Christian morals? While conservatives were certain of what they opposed —liberalism at home and communism abroad—they were divided on a positive program of conservatism throughout the 1940s, 1950s, and 1960s. The complex nature of conservatism presents a challenge to writing any kind of historical work on the right; indeed, it is problematic to refer to conservatism as an ideology at all. Nevertheless, some generalizations are both necessary and unavoidable.[6]

With respect to science in America, World War II had changed the nature of that endeavor considerably. Scientific research figured prominently in America's prosecution of the war and, as a result, massive federal support bound tightly together the state and the scientific community. Many regarded the war as a "physicists' war"; the development of

---

[5] Peter Viereck, *Conservatism Revisited*, 2nd ed. (New York: The Free Press, 1962), 20.

[6] Recent historiography has done much to highlight the historical importance of right-wing politics, especially in the twentieth century. The need for scholarship on the right and the challenge of doing so are described in Alan Brinkley, "The Problem of American Conservatism," *American Historical Review* 8 (1994): 409-429.

radar, the proximity fuse, and the atomic bomb provided clear testimony of the vital role scientists played in the war effort. American war research was carried out under the auspices of the Office of Scientific Research and Development (OSRD), chaired by MIT vice president Vannevar Bush. The OSRD received considerable funding, first from the president's emergency budget and later through congressional appropriation; over $2 billion was spent on the Manhattan Project alone. After the war, Bush disbanded the OSRD, but strongly believed that the United States need to adopt a national science policy and especially a program for continued federal support for science on a large scale. Encouraged by President Franklin D. Roosevelt, Bush submitted in 1945 an influential report titled *Science—The Endless Frontier* that proposed a central organization in the federal government, managed by scientists, that would provide all federal funding for scientific research. Bush's suggestion became reality when the National Science Foundation (NSF) was established in 1950, but considerable changes from Bush's original vision came out of a compromise between Bush's ideal and a rival ideal put forth by West Virginia senator Harley Kilgore.[7]

American Cold War science has garnered considerable attention from historians. Previous studies have explored, for example, the connections between Cold War military priorities and science at elite universities such as the Massachusetts Institute of Technology (MIT) and Stanford. "Big science", the commonly used term for large-scale

[7] The National Science Foundation was not, of course, the first peacetime federal institution of support for the sciences; such support extended back to at least the nineteenth century. See A. Hunter Dupree, *Science in the Federal Government: A History of Policies and Activities* (Baltimore: The Johns Hopkins University Press, 1986). On Vannevar Bush and his life, see G. Pascal Zachary, *Endless Frontier: Vannevar Bush, Engineer of the American Century* (New York: Free Press, 1997). Bush favored a science agency run largely by scientists and that distributed funds to elite institutions; Kilgore favored a more centralized agency under tighter federal control that distributed funds more broadly.

research projects, had its origins before the war, but the structures put in place to meet wartime needs were expanded dramatically afterward partly in order to meet the Soviet challenge. This challenge was exemplified by, among other things, the Soviet launch of *Sputnik* on October 4, 1957. Links between scientists in different nations, particularly those between the Western and Eastern blocs, were profoundly affected by Cold War tensions and policies. Domestically, Cold War anticommunist ideology had far-reaching implications for the organization of scientific institutions, scientific groups that addressed political issues, and treatment of individual scientists whose political views were deemed incompatible with American anticommunism. Historical research on these and other issues pertaining to Cold War science has considerably enriched our understanding of the interplay between science and politics.[8]

The question of the relationship between science and political ideology is particularly interesting. American scientific policy was shaped to address America's Cold War role as leader of the Western democracies and as a foe of communism. The Atomic Energy Commission (AEC), established in 1946, controlled civilian and military nuclear research

[8] On science and the universities in the Cold War, see Stuart W. Leslie, *The Cold War and American Science: The Military-Industrial-Academic Complex at MIT and Stanford* (New York: Columbia University Press, 1993). On "big science", see Peter Galison and Bruce Hevly, eds., *Big Science: The Growth of Large-Scale Research* (Stanford: Stanford University Press, 1992); James H. Capshew and Karen A. Rader, "Big Science: Price to the Present," in *Science After '40*, ed. Arthur Thackray, *Osiris* 7 [2nd series] (1992): 3-25, and Roger L. Geiger, "Science, Universities, and National Defense," *Science After '40*, 26-48. On *Sputnik* and the American reaction to it, see Robert A. Divine, *The* Sputnik *Challenge* (New York: Oxford University Press, 1993). On internationalism in science during the Cold War, see Ronald E. Doel, "Internationalism After 1940," in *The Cambridge History of Science, volume 8: Modern Science in National and International Context*, eds. David N. Livingstone and Ronald L. Numbers (forthcoming); Joseph A. Manzione, "The American Scientific Community, the United States Government, and the Issue of International Scientific Relations During the Cold War, 1945-1960," Ph.D. dissertation, University of Michigan, 1992 and "'Amusing and Amazing and Practical and Military': The Legacy of Scientific Internationalism in American Foreign Policy, 1945-1963," *Diplomatic History* 24 , no. 1 (2000): 21-55. On American science and anticommunism, see Jessica Wang, *American Science in an Age of Anxiety: Scientists, Anticommunism, and the Cold War* (Chapel Hill, NC: University of North Carolina Press, 1999), hereafter cited as *Age of Anxiety*.

in the United States; many of the debates surrounding the AEC dealt with issues of secrecy and security. In the wake of *Sputnik*, Congress passed the National Defense Education Act (NDEA) that provided greater federal funding for education in mathematics and science. The title of the law clearly showed that a disinterested search for truth was not what Congress had in mind. Of even greater importance in terms of research policy was the passage of the National Aeronautics and Space Act, which created the National Aeronautics and Space Administration (NASA). These are only a few examples of the postwar marriage of science with national goals of security, prestige and power. The inclination of United States leaders to see themselves embroiled in a conflict with an implacable, monolithic enemy imparted a great urgency and importance to such measures.[9]

Yet some scientists began to speak out against the increasingly aggressive anticommunist stance of the United States during the Truman administration and afterward. Among the various sciences, physics had the highest profile both among government officials and the general public, given the creation and use of the atomic bomb. For this reason, the views of physicists, particularly nuclear physicists, carried considerable weight in discussions about science and defense policy. Journals such as the *Bulletin of the Atomic Scientists* tackled issues of science, public policy, and international relations, especially with respect to nuclear weapons and disarmament. An early concern, for example, surrounded the decision of the Truman administration to go forward with the production of the hydrogen bomb. Some physicists, such as J. Robert Oppenheimer,

---

[9] Jeffrey K. Stine, *A History of Science Policy in the United States, 1940-1985* (Washington, D.C.: Government Printing Office, 1986), 27-29, 41-42.

opposed the bomb, while others such as Edward Teller favored it. Scientists played an active role in the debate, which touched upon issues of national defense and foreign policy as well as military influence on American science. Scientists increasingly organized themselves into groups in order to exert influence on American policy with respect to funding, control of science, and arms control; this became known as the "scientists' movement". The marriage of science and warfare during World War II and the tightening of that link between the two in the Cold War made "disinterestedness" in politics untenable. Scientists enhanced their role as political players from the moment they took government money for research. Yet the influence of conservative-minded scientists in this process remains largely unexplored.[10]

In the following study, I briefly cover in Chapter 1 the growth of the conservative movement in the United States after 1945, particularly in terms of conservative ideas. In Chapter 2, I focus on the critique of scientism from two conservative (at least in the postwar American context) thinkers, economist Friedrich A. Hayek and professor of English Richard M. Weaver; in addition I examine antiscientism as it appeared on the pages of *National Review*, the most important postwar conservative journal. In Chapter 3, I will explore the links between scientists and conservatism, with particular attention to anticommunism, and the effect conservative antiscientism had, if any, on scientists.

[10] On the relationship between issues of funding, science, and the state, see Daniel S. Greenberg, *The Politics of Pure Science* (New York: New American Library, 1967) and Ralph E. Lapp, *The New Priesthood: The Scientific Elite and the Uses of Power* (New York: Harper & Row, 1965).

Chapter 1
The Conservative Resurgence

"This is another book about the dissolution of the West." Matter-of-fact, yet dramatic, this statement opens *Ideas Have Consequences*, Richard M. Weaver's 1948 book hailed by its publisher as "an unsparing diagnosis of the ills of our age." Weaver, a professor of English at the University of Chicago, fired what many in the post-World War II conservative community considered the opening barrage of a resurgence of the American right. The jubilance at war's end did not last long; soon afterward the United States mobilized itself politically, economically, and militarily against its wartime partner of necessity, the Soviet Union. Though wartime productivity and the decline of the European empires brought the United States unprecedented prosperity and international influence, there remained considerable uncertainty with regard to the postwar world order. Domestically, a burgeoning middle class grew more complacent, yet the desire among some in government for continued state activism did not waver.[1]

The New Deal coalition forged by President Franklin D. Roosevelt had been a watershed in American politics. The early years of the Depression were a time of crisis for the American establishment. By 1933, housing starts had dropped to their lowest point since the 1880s. Farmers suffered from precipitous declines in prices, and in 1933 alone, ten percent of American farms were sold, mostly due to mortgage foreclosures. From 1929 to 1934, 10,000 banks had failed. Most significantly, at least in most

---

[1] Richard M. Weaver, *Ideas Have Consequences* (Chicago: University of Chicago Press, 1948), 1, hereafter cited as *Ideas*; Richard S. Kirkendall, *A Global Power: America Since the Age of Roosevelt* (New York: Alfred A. Knopf, 1980), 11, hereafter cited as *Global Power*.

Americans' eyes, were the 13 million unemployed—25 percent of the work force—that Roosevelt faced when he took office in 1933. The United States was mired in economic crisis. In this context, America appeared ripe for revolution. One needed only to look overseas to Germany and the Soviet Union to find examples of centralized, authoritarian regimes that took power in an atmosphere of economic degradation and social chaos.[2]

Such radical change, however, did not happen in America. In the presidential election of 1932, Roosevelt garnered nearly 23 million votes to Herbert Hoover's 16 million. Despite the feeling among many that the Depression had confirmed socialist criticism of American capitalism, the Socialist Party candidate, Norman Thomas, got fewer votes than had Eugene Debs in 1912. Thomas ran again in 1936, only to record the lowest vote total for any Socialist Party candidate since 1900. The Communist Party candidates in 1932 and 1936 (William Z. Foster and Earl Browder, respectively) fared worse than the Socialists, even though Communist Party membership had increased throughout the 1930s. Why had the radical parties not only failed to gain votes, but lost them in this period? One suggestion is that Roosevelt's New Deal had actually appropriated much of the Socialist Party's platform of 1932.[3]

This view was not wholly unfounded. Through the New Deal, the federal government took a more interventionist role in the economy. The Agricultural Adjustment Act of 1933, for example, subsidized farmers who removed land from production in order to raise prices for farm products. In the industrial sector, the National Industrial Recovery

---

[2] Stuart Kidd, "The Great Depression and the New Deal," in *America's Century: Perspectives on U.S. History since 1900* , hereafter cited as *America's Century*, ed. Iwan W. Morgan and Neil A. Wynn (New York: Holmes & Meyer, 1993), 80-109, on 81, 86.

[3] Ibid., 86-87.

Act (NIRA) of 1933 "gave trade associations the authority to set standards to stabilize and regulate their commercial sectors exempt from the antitrust laws." This effort was not successful, as the U.S. Supreme Court, in *Schecter v. U.S.*, declared the NIRA unconstitutional. Nevertheless, the New Deal represented "a nexus of public-private authority based in the boardrooms and bureaus of New York and Washington." Roosevelt's legendary "Hundred Days" brought about a multitude of executive "administrations" (the NRA, AAA, and PWA), "authorities" (the TVA), and "corporations" (the RFC and FDIC). There can be little doubt that the New Deal represented state intervention in the private economy on a scale that exceeded the trust-busting of the Progressive era earlier in the century.[4]

The final legacy of the New Deal, however, has been the subject of great controversy. Though the New Deal state was "interventionist," many disagree on how much of a break from the past the "Roosevelt revolution" actually was. Though Roosevelt faced criticism from the left during his administration, historians and commentators of the "New Left," writing in the 1960s, were even more skeptical. New Left historians often repeated older criticisms of the New Deal as a "patchwork" policy that had no unifying values to it. The New Left also went beyond this, often arguing that the New Deal was "a meaningless episode" or even "pernicious." Historian Barton Bernstein's observation that "the liberal reforms of the New Deal did not transform the American system" and that such reforms

[4] Alan Dawley, *Struggles for Justice: Social Responsibility and the Liberal State* (Cambridge, MA: Belknap Press, 1991), 368.

"conserved and protected American corporate capitalism," succinctly encapsulated the New Left view.[5]

EARLY RUMBLINGS

The attitude of the American political right towards the New Deal, however, was and continues to be very different. The limited welfare state brought about by the New Deal was seen by those of a right-wing bent as a political, economic, and intellectual sibling of socialism and communism. It is this concern over economics in which the reemergence of American conservatism is rooted. Despite the seemingly high popularity of the New Deal, opposition from conservatives formed when Roosevelt's policies appeared to go too far in the eyes of these skeptics. In 1934 a group of businessmen formed the American Liberty League to oppose the New Deal; the Liberty League was dominated by industrialists but also included among its members notable Democrats such as Al Smith, the 1928 Democratic nominee for President. Despite the presence of such disgruntled Democrats, the Liberty League never developed a broad base of support. It was, in fact, "so patently an alliance of the wealthy" that during the 1936 presidential elections, the Republican National Committee asked the League not to endorse the Republican candidate, Alf Landon, for fear that such an endorsement would confirm suspicions that the Republican party was beholden to wealthy interests.[6]

---

[5] William E. Leuchtenberg, *The FDR Years: On Roosevelt and His Legacy* (New York: Columbia University Press, 1995), p. 240; Barton J. Bernstein, "The New Deal: The Conservative Achievements of Liberal Reform," in *Towards a New Past: Dissenting Essays in American History*, ed. Barton J. Bernstein, (New York: Pantheon Books, 1968), 263-288.

[6] William E. Leuchtenberg, *Franklin D. Roosevelt and the New Deal, 1932-1940* (New York: Harper & Row, 1963), 92, 179.

Roosevelt defeated Landon handily in the election. In the next twelve years, Roosevelt solidified his New Deal program and worked to keep together the coalition that supported him. Political opposition to his domestic policies, however, continued and had grown stronger by 1940. Furthermore, events abroad took on greater importance to the United States in the late 1930s and 1940s. The rise of Nazi Germany presented Roosevelt with a formidable foreign policy challenge, one that was hampered by isolationist Neutrality Acts (passed with considerable backing from conservative members of Congress) intended to keep the United States from entering the war in Europe and thus repeating the "mistake" of 1917. The Japanese attack on Pearl Harbor on December 7, 1941 left the United States with no doubt as to the necessity of entering World War II. Resistance to the New Deal did not end, but it now took place within the halls of the wartime bureaucracy. Even so, the war demanded some need for unity within the American state and in American life more generally. Though liberals increasingly began to wonder if their dream was dying, there appeared to be no conservative renaissance that Americans took seriously in the early 1940s.[7]

The brutality of Nazi Germany and of the Soviet Union under Stalin (despite the latter's role as a war ally), coupled with seemingly growing statism in the United States and in Allied Europe, signified to some a discernable pattern of overbearing government power, particularly in the economic realm. In the eyes of those believers in free-market economics, it was not coincidental that both Hitler's Nazi regime and the communist Soviet Union promised citizens vast government-supported social welfare and employed

[7] On the failure to extend the New Deal, see Alan Brinkley, *The End of Reform: New Deal Liberalism in Recession and War* (New York: Alfred A. Knopf, 1995).

anti-capitalist rhetoric. For these thinkers, the New Deal was a blueprint for dictatorship, whether or not it was intended to be so.

One of the early "libertarians"—those who advocated a dramatically reduced state and a return to *laissez-faire* capitalism—was Albert Jay Nock, a social commentator probably best known for the journal he founded in the 1920s, *The Freeman*. Nock also produced books that advocated this line, including *Our Enemy, The State* (1935), and *Memoirs of a Superfluous Man* (1943). Nock deplored the expansion of state power and the appeal that power had to the uneducable masses. Instead, the "Remnant" would save American society, the small fraction of truly intelligent people who could reverse the decay of the American nation. Nock died in 1945, but later conservative intellectuals would cite him as an important influence in their formative years. Among these were the sociologist Robert Nisbet, professor of history Russell Kirk, and mostly notably, William F. Buckley, Jr. Nock's work was joined by that of others who feared the "collectivist" and welfarist state of Roosevelt: Isabel Paterson's *The God of the Machine* (1943), Garet Garrett's *The Revolution Was* (1944), and John Flynn's *As We Go Marching* (1945). All three of these books attacked the welfare state of the New Deal; Flynn in particular voiced the theme of welfare-as-path-to-totalitarianism that resonated throughout later conservative literature.[8]

Despite the efforts of the Liberty League and Nock, a conservative movement was, at best, in its embryonic stage during the 1940s. "Conservative" was a label that few used to describe themselves. *The Freeman* was relegated to the role of an obscure, low-circulation journal that eventually failed (though it was revived later). Conservatives

[8] George H. Nash, *The Conservative Intellectual Movement in America since 1945* (Wilmington, DE: Intercollegiate Studies Institute, 1996), 10-11, hereafter cited as *Conservative Movement.*

were, in the eyes of many, "economic royalists" and isolationists who were content to amass wealth while the rest of the nation (and the world) burned. Strangely enough, one voice against collectivism that had real impact in the United States came not from an American, but an Austrian professor of economics living in London.

That Austrian was Friedrich A. Hayek and the book he wrote—*The Road To Serfdom* (1944)—remains his best-known work. More importantly, it became required reading for conservatives. Hayek was born in Vienna in 1899 and educated in economics at the University of Vienna. After working in Austrian academic circles, Hayek traveled to the London School of Economics to take a professorship in 1931. The Nazi *Anschluss* of Austria in 1938 convinced Hayek to stay in England, and he became a British subject in that same year. Writing in London at the height of the blitz, Hayek believed that the war was largely caused by the collectivist impulse of totalitarian state power. *The Road To Serfdom* was a polemic in response to that impulse, a warning that "it is Germany whose fate we are in some danger of repeating." The danger was evident in the tendency, even in the liberal democracies, toward "central planning", an attribute carried to its most extreme form in fascist and socialist societies. In Hayek's view, the "abandoned road" was that of classical liberalism; Western liberalism was strongly rooted in "the basic individualism inherited by us from Erasmus to Montaigne, from Cicero and Tacitus, Pericles and Thucydides."[9]

---

[9] F. A. Hayek, *The Road to Serfdom* (Chicago: University of Chicago Press, 1944), 2, 13. Hayek's use of the term "liberalism" means nineteenth-century European liberalism and not the twentieth-century concept, which is associated with greater government activism, particularly in the United States. In fact, Hayek refused to label himself a conservative. In his essay, "Why I Am Not a Conservative," he differentiated his classical liberalism from conservatism, though many contemporaries saw strong similarities between the two. Because American conservatives generally supported Hayek's economic views, I will, for the purpose of this work, place him in the conservative camp. See F. A. Hayek, "Why I Am Not a Conservative," in *What Is Conservatism?*, ed. Frank S. Meyer (New York: Holt, Reinhart and Winston, 1964), 88-103.

What replaced the "abandoned road", according to Hayek, was impatience with the slow march of (classical) liberal policy. No longer content with the limitations of such liberalism, Western civilization had "undertaken to dispense with the forces which produced unforeseen results and to replace the impersonal and anonymous mechanism of the market by collective and 'conscious' direction of all social forces." In Hayek's view, German thinkers were, since 1870, at the forefront of social and political philosophy and that most of this philosophy was socialist to one degree or another. These ideas overtook liberal movements in Germany and spread outward, to the nations with a tradition of freedom: France, the Low Countries, and especially Britain.[10]

The authority of socialist ideas in Germany enabled fascists to establish themselves both there and in Italy. Hayek pointed to the intellectual ancestry of German and Italian leadership:

> Everyone who has watched the growth of these movements [i.e., fascism and Nazism] in Italy or in Germany has been struck by the number of leading men, from Mussolini downward (and not excluding Laval or Quisling), who began as socialists and ended as Fascists or Nazis.

Readers of Hayek might find a contradiction in the fact that extreme right-wing governments such as those of the Nazis and Fascists expressed vehement hatred for the Communist Party and communist states like the Soviet Union. After all, leftists of various stripes were harassed and persecuted under the Nazi regime; furthermore, did not Germany make war on the communist Soviet Union? This difference, Hayek told the reader, was merely on the surface. Communists, Nazis, and Fascists "competed for the support of the same type of mind and reserved for each other the hatred of the heretic." In addition, "the real enemy, the man with whom they had nothing in common...is the

[10] Hayek. *The Road to Serfdom*, 21.

liberal of the old type." The Nazi and the communist both realized "that there can be no compromise between them and those who really believe in individual freedom."[11]

The importance of a free-market economy lay in the empowerment of individuals participating in that economy to achieve desired ends of the broadest sort. Hence, economic power could not be separated from other kinds of power; economic ends were not separable from other ends. Socialist rhetoric against pecuniary motives, therefore, was misleading because those motives were really "the desire for general opportunity, the desire for power to achieve unspecified ends." Economic freedom allowed one to decide which of his or her desires an economic gain or loss will affect. Central planning of the economy posed the question "whether it shall be we who decide what is more and what is less important for us, or whether this is to be decided by the planner." For Hayek, the crux of the matter was that an "authority directing all economic activity...would control the allocation of the limited means for all our ends."[12]

Hayek also responded to those who believed in a sort of compromise "democratic socialism"—it was unachievable and because of the very nature of socialist planning, something very different than the intended result eventually developed. The best alternative was the "Rule of Law", a system of government restrained by rules "fixed and announced beforehand." The difference between liberal rules and socialist rules was that liberal governments set rules delineating the conditions under which individuals may

---

[11] Ibid., 29-30. Hayek, in a footnote, cites a February 1941 quote from Hitler in which Hitler states that "basically National Socialism and Marxism are the same." Hayek and other anti-socialists often stressed that the full name of the Nazi Party was the National *Socialist* German Workers' Party and hence referred to Nazism as National Socialism to emphasize similarities between Nazism and leftist socialism.

[12] Ibid., 89, 91.

pursue goals, whereas socialist governments determined the goals themselves. By abandoning the market, socialist regimes also abandoned fixed rules and became "arbitrary" governments, since these governments had to constantly adjust to varying economic conditions. In liberal capitalist societies, the marketplace was the institution for these adjustments; in socialist societies, the power of the state substituted for that of the market.[13]

Despite Hayek's warning against the trend toward planned economies and the dangers they presented, Hayek did not favor of complete *laissez-faire* capitalism. Hayek stated this explicitly in *The Road To Serfdom*: "The liberal argument is in favor of making the best possible use of the forces of competition as a means of coordinating human efforts, not an argument for leaving things just as they are." The state did have an appropriate role in crafting regulations to aid competition (such as anti-trust laws) or in providing social insurance in instances where the market may be inadequate. Hayek, however, believed that this regulatory role of the state should be limited and explicitly delineated and restrained, so as not to replace competition with "inferior methods of guiding economic activity" where such action was unwarranted.[14]

Hayek was not only outlining a positive program of economic policy, but was also responding to issues of economic planning that were the subject of much debate in Britain during the 1930s and 1940s. Specifically, Hayek took issue with the economic ideas of British economist John Maynard Keynes such as those elaborated in Keynes' now-famous book, *The General Theory of Employment, Interest, and Money* (1936) as well as earlier

---

[13] Ibid., 74.

[14] Ibid., 36.

works. Keynes and his supporters advocated greater state intervention in the market economy to alleviate high unemployment and increase purchasing power of individuals. Keynes and Hayek themselves debated through personal letters and journal articles. To Hayek, effective planning was not possible because the planners could not "know" well enough the complex interactions of individuals that made up society. The British government, however, adopted many of Keynes' proposals.[15]

The Road To Serfdom produced a response that Hayek had not expected. It was first published in the United Kingdom; the University of Chicago Press published the book in the United States in September 1944—after three publishing houses had already rejected it. After the initial publishing run of 2,000 copies, 5,000 more were printed within a week. *Reader's Digest* condensed the book a few months later and the Book-Of-The-Month Club distributed over a million reprints. Reviews appeared all across America; a sympathetic review was featured in *Fortune*, whereas the *New Republic* was hostile, claiming that reactionary interests overstated the scholarly importance of the book.[16]

---

[15] A recent study of the debate between Hayek and Keynes can be found in B.J. McCormick, *Hayek and the Keynesian Avalanche* (New York: Harvester Wheatsheaf, 1992), hereafter cited as *Keynesian Avalanche*. Hayek and others criticized economic planning in F.A. Hayek, ed., *Collectivist Economic Planning: Critical Studies on the Possibilities of Socialism* (London: Routledge & Kegan Paul, Ltd., 1935). Henry Hazlitt, an American conservative, fashioned a critique of Keynesianism in Henry Hazlitt, ed., *The Critics of Keynesian Economics* (Princeton, NJ: D. Van Nostrand Company, Inc., 1960), a collection of essays that included Hayek and Hayek's teacher Ludwig von Mises.

[16] Nash, *Conservative Movement*, 4-5. For reactions to Hayek in liberal media, see Alvin H. Hansen, "The New Crusade Against Planning," *The New Republic* (hereafter cited as *TNR*), 1 January 1945, 9-12 and Stuart Chase, "Back to Grandfather," *The Nation* (hereafter cited as *Nation*), 19 May 1945, 564-566. It is noteworthy that the University of Chicago became home to what is known as the "Chicago School" of conservative/libertarian economics and to this day is associated with conservative social thought. Hayek was himself a professor at Chicago from 1950 to 1962, as was Milton Friedman, perhaps the most respected conservative economist in the United States. Hayek's ideas have been the subject of a growing body of scholarship. See Eamonn Butler, *Hayek: His Contribution to the Political and Economic Thought of Our Time* (London: Maurice Temple Smith, 1983), for a short, laudatory overview of Hayek; John Gray, *Hayek on Liberty*, 3rd ed., (London: Routledge, 1998) and Chandran Kukathas, *Hayek and Modern Liberalism* (Oxford: Clarendon Press, 1989) for more critical perspectives on Hayek; and Jack Birner and Rudy Van Zijp, eds., *Hayek, Co-ordination and Evolution: His Legacy in Philosophy, Politics, Economics, and the*

Hayek was not the only European immigrant to raise the alarm against overbearing state involvement in the economies of liberal nations. His teacher Ludwig von Mises, himself a professor of economics at the University of Vienna, also wrote tracts in the 1930s and 1940s defending capitalism against what he perceived to be a socialist challenge. Like Hayek, Mises was an Austrian whose anti-Nazi views led him to emigrate from Austria to Switzerland in 1934 and then to the United States in 1940. Mises later became professor of economics at New York University, a position he held for over 20 years.[17]

Mises has been overshadowed by his former student, but the themes present in his works were similar to those found in Hayek's writings. Perhaps the best summary of Mises' views can be found in this paragraph from his book *Omnipotent Government: The Rise of the Total State and Total War* (1944):

> The essential teaching of liberalism is that social cooperation and the division of labor can be achieved only in a system of private ownership of the means of production, i.e., within a market society, or capitalism. All the other principles of liberalism—democracy, personal freedom of the individual, freedom of speech and of the press, religious tolerance, peace among the nations—are consequences of this basic postulate. They can be realized only within a society based on private property.

Opposing this liberal tradition was the "new mentality" of "etatism" which "appears in two forms: socialism and interventionism." Etatism "assigns to the state the task of guiding the citizens and of holding them in tutelage. It aimed at restricting the individual's freedom to act." According to Mises, one form or another of etatism was practiced in every nation. "Interventionism" was practiced by liberal democracies that

---

History of Ideas (London: Routledge, 1994) for a broad analysis by a number of scholars.

[17] Nash, *Conservative Movement*, 7, 9.

did not wish to banish the market, but instead preferred to regulate it. "Socialism" was best illustrated by the regimes in Nazi Germany and the Soviet Union. Like Hayek, Mises believed that the differences between the Nazis and the Communists were in appearance and method only and that the difference between the two did not "concern the essential features of socialism."[18]

Ultimately, the statist impulse that dominated government in nations like the Soviet Union and in Nazi Germany led to internal violence and war thereafter. Socialist states sought autarchy and did not view market devices as legitimate means of obtaining needed goods and services. Hence, they conducted wars of conquest in order to secure raw materials within borders that they could control. The situation in the liberal democracies was not very encouraging, wrote Mises, because they were rapidly abandoning liberalism and capitalism in favor of some variant of etatism. To avoid war and maintain peace, what was needed was free capitalism and free trade. "When everyone is free to live and to work where he likes, there are no longer causes for war," and international organizations for the maintenance of peace would be made unnecessary by "an unhampered market economy."[19]

Mises was more inclined to total *laissez-faire* capitalism than was Hayek. Both, however, were writing in the shadow of war in Europe. Both were refugees from Nazism, and both came to the United States (though Hayek was a British citizen) as part of the migration of European intellectuals out of repressive states. The rise of authoritarian

---

[18] Ludwig von Mises, *Omnipotent Government: The Rise of the Total State and Total War* (New Haven, CT: Yale University Press, 1944), 44, 48, 56, 60. Mises used the word "etatism" instead of "statism" to, as he explained in his introduction, illustrate that this notion of a supreme state did not originate in the Anglo-Saxon countries (as the English derivation might imply), but was transported there from the Continent.

states in Europe influenced the ideas of Hayek, Mises, and other "libertarian" intellectuals just as it did those (such as Albert Einstein) who were more leftist and pacifist-inclined. Rather than reaffirm socialism and point to Germany and the Soviet Union as examples of socialism gone awry, the "libertarians" believed that the regimes in those two nations were perfectly consistent with socialist doctrine. Clearly, the authoritarian experience shaped the ideas of these scholars in various ways, and the resurgence of American conservatism owes much to the influx of these refugees.

Indeed, the inspiration that some European thinkers provided to American conservatives illustrated just how dormant American conservatism was. Whether or not this accurately described the mood of the general American populace, the notion of an overbearing liberalism (in the contemporary sense) that provided the ideological foundation of an overly strong state pervaded much of the conservative literature of the time. Russell Kirk, himself a significant intellectual in conservative circles, had an even more ominous view of the state of conservatism in America and in the West generally: "By and large, radical thinkers have won the day. For a century and a half, conservatives have yielded ground in a manner which, except for occasionally successful rear-guard actions, must be described as a rout." There existed a strong sense of defeat among many conservatives as they felt swept up in a current of radical changes that had accumulated over time and that threatened Western civilization with destruction.[20]

---

[19] Ibid., 109, 243.

[20] Russell Kirk, *The Conservative Mind from Burke to Santayana* (Chicago: Henry Regnery Co., 1953), 4, hereafter cited as *Conservative Mind*.

TRADITION AND ORDER

The succession of Harry Truman to the presidency after the death of Franklin Roosevelt seemed to insure the continuation of the New Deal. Though the Republicans gained control of Congress in the midterm elections of 1946, many conservatives were not consoled. Statist structures, particularly in the executive branch, were firmly entrenched, and the American government was preoccupied with the task of demobilization, rebuilding war-torn Europe, and dealing with its soon-to-be former ally, the Soviet Union. The innovations of the Roosevelt era became permanent fixtures on the landscape of American government. Many intellectuals, both liberal and conservative, felt a sense of anxiety about the uncertainty of the postwar world.

One conservative thinker who captured the fears and anxieties of those on the American right was Richard Weaver. Weaver was born in Weaverville, North Carolina (the town was named for an ancestor) in 1910. Weaver entered the University of Kentucky in 1927, and upon graduation, joined the Socialist Party—a political affiliation found in the backgrounds of several conservative intellectuals. This faith in socialism was shaken considerably when, in 1933, Weaver began graduate studies in literature at Vanderbilt University, home to John Crowe Ransom and others of the Southern Agrarian literary movement. Weaver left Vanderbilt in 1936, not yet a conservative, but "'poised' between socialism and Agrarianism." He then embarked on a teaching career at Texas A&M University, but found himself increasingly alienated from left-liberal political philosophy. By the age of 30, the liberal mindset ceased to be meaningful to Weaver; he

left his teaching job and entered a Ph.D. program in literature at Louisiana State University to begin his education over again.[21]

Weaver's "reeducation" was deeply rooted in an examination of Southern history and culture. He became convinced that the South, though it was the losing side in the American Civil War, was in fact the right side. The South stood for chivalry and genteel civilization, the North, though more dynamic, stood for a crass materialism that was alien to the South. Significantly, for the purposes of this thesis, "the South, alone among the sections, has persisted in regarding science as a false messiah," in Weaver's view. A strong sense of reverence for the Old South pervaded most, if not all, of Weaver's writings. While this reverence reflected Weaver's search for a sense of order and a foundation for civilization based on a tangible tradition, Weaver also indicated a profound mistrust of the ability of science to provide that foundation. That mistrust was most explicitly stated in *Ideas Have Consequences*, and will be explored more thoroughly in the following chapter.[22]

Ideas Have Consequences (Weaver's original title was *The Fearful Descent*, which captures the pessimistic tone of the entire book) was Weaver's attempt to explain the roots of modernity and its destructive effects on Western civilization. Western man in the fourteenth century made "an evil decision which has become the efficient and final cause of other evil decisions." This evil decision was humankind's turn from a belief in transcendental, universal ideas to that of "nominalism", which denied the real existence

---

[21] Nash, *Conservative Movement*, p. 31.

[22] Richard M. Weaver, *The Southern Tradition At Bay: A History of Postbellum Thought*, ed. George Core and M.E. Bradford (New Rochelle, N.Y.: Arlington House, 1968), 30-31, hereafter cited as *Southern Tradition*.

of universals; the culprit behind this subversive doctrine was William of Occam. Hence, humankind's search for truth was increasingly based in rationalism and materialism, which failed to satisfy that search, but human beings were hopelessly trapped by their faith in rationalism and its most significant manifestation, science.[23]

Weaver was not the only conservative who clamored for recognition of the value of tradition. A professor of history at Michigan State College (now Michigan State University), Russell Kirk also sought a sense of old values that had timeless appeal to those who felt civilization was in danger. Kirk was born in 1918 in Plymouth, Michigan. Early in life, he became disenchanted with the utilitarian spirit of "assembly-line" life, particularly after his experiences as an undergraduate at Michigan State College and as a worker at Ford's River Rouge automobile plant. Kirk's service in the army during World War II engendered in him a deep suspicion of the New Deal; he had opposed American entry into World War II and believed that New Dealers in Washington sought to keep the war going to ensure continued American prosperity. At war's end, Kirk even predicted that a new enemy, the Soviet Union, would have to be created to justify continued militarization of the United States.[24]

Kirk's search for an American conservative tradition that stood in opposition to liberal utilitarian modernity culminated in his book *The Conservative Mind from Burke to Santayana* (1953). The book represented an effort to discover the source of "conscious conservative" thought and trace its development over 150 years up to Kirk's own era. Not surprisingly, Kirk identified the root of American conservatism in British politics,

---

[23] Weaver, *Ideas*, 2, 3.

[24] Nash, *Conservative Movement*, 62, 63.

particularly in the ideas of the British statesman Edmund Burke. Kirk opened *The Conservative Mind* with a statement of basic conservative "canons":

> Belief that a divine intent rules society as well as conscience, forging an eternal chain of right and duty...Affection for the proliferating variety and mystery of traditional life, as distinguished from the narrowing uniformity and equalitarianism and utilitarian aims of most radical systems...Conviction that civilized society requires orders and classes. The only true equality is moral equality; all other attempts at levelling lead to despair...Persuasion that property and freedom are inseparably connected and that economic levelling is not economic progress...Faith in prescription and distrust of "sophisters and calculators"...Recognition that change and reform are not identical...Society must alter...but Providence is the proper instrument for change...

Opposed to these canons were the ideas of radicalism, which, particularly since 1790, espoused "meliorism", "contempt for tradition", "political levelling", and economic "levelling". Kirk identified Burke as a conservative *and* a liberal; he was "anti-imperialist" in terms of British foreign affairs and "an ally of Smith" in economics. Burke championed liberty, but liberty that relied upon "tradition and private guidance" and therefore he opposed "doctrinaire alteration", such as the French Revolution, as actually harmful to liberty because of its sense of upheaval and not preservation.[25]

To Kirk, 1790 was a significant year in the history of conservatism because in that year Burke published his *Reflections on the Revolution in France*, which was the definitive statement of Burkean conservatism. This Burkean tradition took hold in the recently liberated American colonies; Kirk cited John Adams as one who, "more than anyone else...taught the value of good and practical laws, transcending the passions of the hour...he kept the American government one of laws, not of men." Despite the appeal of the "levelling agrarian republicanism" of Thomas Jefferson, "what was best in

---

[25] Kirk, *Conservative Mind*, 8, 9, 12, 15.

Federalism did not wholly die after 1800." In fact, it continued through much of the nineteenth century, specifically in the South. John Randolph, "the most singular great man in American history," exemplified Southern conservatism. This conservatism, in turn, reflected Kirk's conservative "canons", especially a "preference for the slow processes of natural change." Continuing this tradition was the South Carolina senator John C. Calhoun, who, according to Kirk, "demolish[ed] Jefferson's abstract equality and liberty...accept[ed] Randolph's warning against the tyrannical tendencies inherent in the manipulation of positive law by callous majorities." What really mattered in American politics was the sense of "concurrent majorities" and a "balancing and compromising of interests."[26]

Despite the intellectual gifts of statesmen like Randolph and Calhoun, conservatism in the United States (and in other Western civilizations) had been put on the defensive over time due to seductive collectivism. Yet conservatism was not conquered. In the last chapter of *The Conservative Mind*, Kirk observed a "recrudescence of conservatism." Radical movements, such as the French Revolution, repeatedly failed to bring out the wholesale changes sought by the revolutionaries. Liberalism had either collapsed or been absorbed into socialism. Hence, Kirk wrote that intelligent conservatives must first and foremost resist a planned society and take advantage of the "growing unpopularity" of radicals. Conservatives needed to reaffirm morals, defend property, local liberties, and national humility—virtues eroded by radical passions. Conservatives held the key to

[26] Ibid., 63, 64, 151, 152.

whether or not democracy, in the future would be "a democracy of degradation or a democracy of elevation."[27]

Yet another "traditionalist" voice in this period spoke of a need to recover lost personal and civic virtue and also looked to a European for inspiration. This time, it was Mount Holyoke College history professor Peter Viereck, who opened his book *Conservatism Revisited* with the question, "What are the values we can live by in the post-war crisis?" Displaying sentiments similar to those of Kirk, Viereck wrote that an abstract political philosophy became "clearer through an analysis of some actual historical figure who tried to put the theory into practice." Viereck's "lasting symbol" of conservatism was the Austrian foreign minister Klemens Metternich. Viereck found in Metternich the "conservative principles *par excellence*": "proportion and measure... preservation through reform; humanism...a fruitful nostalgia for the permanent beneath the flux...and obsession for unbroken historic continuity." If these ideas seemed ephemeral to the reader, Viereck distilled his brand of conservatism even further when he wrote that " the core and fire-center of conservatism...is a humanist reverence for the dignity of the individual soul."[28]

Viereck pointed to "Professor" Metternich as a teacher of these values and virtues. Metternich's skillful "Concert of Europe" diplomacy illustrated his belief in liberty grounded in order. Liberal ideas, at least with respect to central Europe in Metternich's day, would only "cause anarchy because they were no more than words and good intentions" that did not have the backing of "traditions of voluntary order". At the same

---

[27] Ibid., 398, 413, 414, 428.

[28] Viereck, *Conservatism Revisited*, 20, 31, 32, 33.

time, Metternich's German Confederation was "decentralized and unmilitarized" and hence did not pose an absolutist threat to its citizens or to its neighbors. Metternich did prefer greater liberty, such as that he found in England, but his philosophy was one of "evolutionary growth" rather than liberty to be brought about by revolution, which would rapidly decay. Legitimate authority was vital, for "Metternich was too good a monarchist and too good a 'socialist' to believe a country was free if its individuals had unlimited freedom." For Viereck, as for Weaver and Kirk, the balance between order and freedom was the crux of the issue.[29]

Historian George Nash identifies Weaver, Kirk, and Viereck as members of a particular strain of conservative thought. Nash calls them the "traditionalists", though in the late 1940s and early 1950s, they were known as the "new" conservatives. They represented a shift within the conservative community because their arguments did not emphasize economics as did those of many conservatives at the time. There were significant contrasts between the "new" conservatives and the economic libertarians. Thinkers in both streams of thought identified private property as key to a conservative philosophy: Weaver opined that private property was "the last metaphysical right" remaining in the current age, and Kirk, as we have seen, considered private property as one of his conservative "canons". Yet Weaver, Kirk, and Viereck all displayed a profound mistrust of commercialism. Weaver wrote that his sense of property was in no way "a defense of that kind of property brought into being by finance capitalism" because corporate property "becomes a fiction useful for exploitation" and undermined the individual's ties to his or her own well-being. Kirk, for his part, called for "strict

[29] Ibid., 85, 97.

surveillance of the leviathan business" and decried America's contribution to the world of "the cheapest music, the cheapest comic-books and the cheapest morality that can be provided." Viereck was, perhaps, the most stridently anticapitalist of the three. In advocating cooperation with social democrats, Viereck wrote, "When did we ever have laissez-faire [capitalism], and why is any merely material and economic system more sacred than the moral duty of compassion for want?" Viereck believed that "the world through trial and error will come to see *the economic necessity of an antieconomic philosophy*, the material necessity of antimaterialism."[30]

This conflict over economics, or rather the importance of economics to political liberty, created some tension within the conservative movement. It was, in the eyes of conservative journalist Frank Meyer, "a paradox of consensus and divergence" between those who "stress the concepts of tradition and authority and those who stress the concept of freedom." Freedom, of course, meant freedom from the state as exemplified in a free-market economic system. Respect for authority, on the other hand, acted as a bulwark against populist demagogues. Those who emphasized authority did not necessarily believe, however, that liberty suffered; as Kirk wrote in *What Is Conservatism?*, a collection of essays edited by Meyer, "a man who accepts tested authority, and acknowledges the beneficent influence of prescription and tradition, is conventional; but he is not servile." Journalist M. Stanton Evans countered that government was simply "men in the exercise of power" and that the desire for order and authority, while

---

[30] Weaver, *Ideas*, 131, 132, 133; Kirk, *Conservative Mind*, 424, 426. Kirk outlined, on page 422, a hypothetical business board of directors that includes representatives of "the investor, of management, of the plant community, and of the communities in which the enterprise is situated"; Viereck, *Conservatism Revisited*, 39, 44, emphasis original. Note the opposition to Hayek's statement in *The Road to Serfdom* that political and social goals were essentially inseparable from economics.

admirable, must take into account that "if men are evil, then potential aristocrats are evil, too." The German economist Wilhelm Röpke added, in another essay published in the same volume, that it was "evident that education in economic freedom is inseparable from education in liberty itself in the highest moral sense."[31]

Meyer's contribution to the debate over this fissure was to try to reconcile the "libertarian" and the "traditionalist" positions through a formulation that came to be known as "fusionism." Although Meyer saw the differences between the conservative camps—and *What Is Conservatism?* attempted to bring those camps together—Meyer chose to stress the similarities. Meyer noted a conservative consensus on the concept of an "objective moral order", an emphasis on the individual (whether the concern was with individual freedom or individual duties), skepticism towards the state and "planning," a reverence for the Constitution, and a general devotion to Western civilization. Meyer's fusion was not totally successful, however; Kirk continued to attack Meyer on the grounds that he sought to define liberty in too abstract a sense, and Duke University professor John Hallowell stated that despite Meyer's emphasis on individual persons, he was "'singularly unconcerned about the problems of persons.'" Traditionalists like Kirk and Weaver saw Meyer's fusion as problematic because, though they did have serious contempt for "mass" society, they believed that healthy individualism made for a healthier conservative *community*. Meyer's attempt at a harmonized conservative theory

[31] Frank S. Meyer, "Introduction," *What Is Conservatism?*, 3-4, on 4; Russell Kirk, "Prescription, Authority, and Ordered Freedom," *What Is Conservatism?*, 23-40, on 30; M. Stanton Evans, "A Conservative Case for Freedom," *What Is Conservatism?*, 67-77, on 74; Wilhelm Röpke, "Education in Economic Freedom," *What Is Conservatism?*, 78-87, on 87.

still fell short in their eyes in giving short shrift to the duties of human beings to each other and to their traditions.[32]

The tension between tradition and freedom created considerable difficulty among conservatives in forming a unified front against American liberalism. Part of the problem lay in assessing to what extent American conservatism was or was not "traditional." Liberal scholars like Louis Hartz, identified "*the* American tradition as the *liberal* tradition." American conservatism was, hence, an exception to tradition, if it truly existed at all. Clinton Rossiter, in his *Conservatism in America* (1962), claimed there was an American conservatism, but it was a particular form that sought to preserve the best aspects of American liberalism. This stood in opposition to Kirk's view that Burke was the intellectual father of both British and American conservatism and that a conservatism ideologically distinct from liberalism existed in both nations, with Burke as the link between the two. The discussion of whether tradition and order or freedom is the embodiment of American conservatism was thus complicated by the lack of agreement on what "tradition" actually signified.[33]

The issue of freedom carried its own complexities. Did freedom mean a negative "freedom from" or a positive "freedom to?" Most conservatives in this period, concerned as they were with the welfare state, preferred the former. Freedom meant freedom from an encroaching state, particularly with respect to property rights, though this implied a positive freedom to acquire property and dispense it as one wished. These property rights

---

[32] Nash, *Conservative Movement*, 161, 162; Frank S. Meyer, "Consensus and Divergence, " in Meyer, *What Is Conservatism?*, 219-232, on 230-231.

[33] Arthur Aughey, et. al., *The Conservative Political Tradition in Britain and the United States* (Rutherford, NJ: Farleigh Dickinson University Press, 1992), 3-10.

were philosophically grounded in historical "prescription" (as Burke described it), or "natural rights," a more common basis in the American context. Linked closely with freedom and property rights was the conservative ambivalence about democracy. All American conservatives hailed the wisdom of the Constitution and supported democracy, but they were often careful to temper their views with concerns about tyrannical majorities that could infringe on sacred rights that were not subject to democratic authority. Nevertheless, conservatives often appealed to populist sentiments by claiming they represented a true majority of conservative Americans opposed to the policies of decadent liberal elites.[34]

Despite these differences, there was a sense among many American intellectuals, both liberal and conservative, that a genuine conservative movement was in the making. Leading liberal intellectuals such as Arthur Schlesinger, Jr. and Louis Hartz took note; Schlesinger even praised Viereck's work as a respectable American conservatism. This praise, as well as Viereck's oft-stated belief that liberals were not enemies of conservatives at all, but natural allies against extremism, cost Viereck credence among conservatives. Coupled with his contributions to volumes such as *The Radical Right*, edited by Columbia University sociologist Daniel Bell, Viereck gained a reputation as a sort of "closet liberal" and became estranged from conservative intellectual discussions.[35]

---

[34] Ibid., 49 and chapters 3 and 7. Aughey and co-authors advance the nuanced thesis that conservatism is an "inner vision" that "looks within the traditions, customs and conventions of a political community for its imagery and inspiration and attempts to give those practices an authoritative statement" (p. 14). Concerning "tyrannical" majorities, it should be noted that Wilmoore Kendall, a conservative political scientist, did not fear a tyrannical majority but argued that majority rule was vital to maintaining the health of a society by defining and enforcing a society's norms. He thus denied the desirability of an open society (p. 43).

[35] Hartz, in *The Liberal Tradition in America*, argued United States is a fundamentally liberal nation and, by implication, there can be no "real" American conservatism. Other observers attempted to analyze and understand the reemerging conservative movement. See Daniel Bell, ed., *The Radical Right:* The New

Viereck was certainly not to be found on the pages of *National Review*, William F. Buckley, Jr.'s conservative magazine, founded in 1955 and intended to be a mass media voice for conservatives. Buckley had garnered some degree of fame before *National Review* from his diatribe against his collegiate alma mater, *God and Man at Yale* (1951). Buckley detected during his years at Yale an anti-Christian and collectivist bias that he believed was corrupting Yale; he scandalized liberal reviews by calling for Yale alumni to bring back to the campus their own countervailing orthodoxy. While Buckley himself was not the conservative theoretician that Kirk or Meyer was, he *was* able to bring together conservatives and ally them behind *National Review*; other libertarian and conservative publications had suffered considerably from an overly narrow focus. Peace did not always reign; the pages of *National Review* often featured as many arguments among conservatives as agreements. Nevertheless, the contributors were united in their belief that the enemy of the American right was American liberalism, and they saw liberals as ideological cousins of leftist radicals. Clearly, by the mid-1950s, a revived, discernable conservative intellectual community had emerged.[36]

The "Nightmare In Red"

The postwar global order presented Americans, and particularly conservative Americans, with a rather stark picture of the future. The wartime friendship between the United States and the Soviet Union dissolved as both sides sought to gain political

---

American Right *Expanded and Updated* (Garden City, NY: Doubleday & Co., Inc., 1963). Note in particular Richard Hofstadter's essay, "The Pseudo-Conservative Revolt," 63-80, and his follow-up, "Pseudo-Conservatism Revisited—A Postscript," 81-86. Hofstadter interpreted postwar conservatism as a sort of collective anxiety over social status and prestige.

[36] Nash, *Conservative Movement*, 127-128.

advantage in a Europe striving to recover from the ravages of World War II. The Soviet presence in eastern Europe appeared to be a violation of the Yalta agreements, in the eyes of Americans. Soviet pressure on Turkey in 1946, communist governments in places like Czechoslovakia and Poland, and leftist governments in western Europe convinced many Americans of a real Soviet threat. Winston Churchill spoke of an "iron curtain" dividing East and West; Truman began to conduct a foreign policy of Soviet "containment" to block the expansion of Soviet influence.[37]

Anticommunism became *the* defining conservative issue in the postwar period. However conservatives differed on issues of *laissez-faire*, tradition and authority, freedom and duty, they were united in their opposition to the "Red menace." Every conservative writer in this period made at least some reference to the "totalitarian" government of the Soviet Union. To Weaver, it was the logical outcome of the abandonment of transcendental ideas for nominalism; to Hayek the result of exuberant faith in rational planning; to Meyer the endpoint of the march to a totalizing mass state. *National Review* thundered against Soviet communism in every issue. Despite this unity, most conservatives were not consumed with the problem of communism and the specific challenge it presented to the United States; rather, it was one part of an overall theoretical conflict about the future of Western civilization.

One conservative in particular, however, made anticommunism his specialty. James Burnham, professor of philosophy at New York University and a leading American Trotskyist in the 1930s, had moved right by the early 1940s and was firmly in the conservative anticommunist camp by the 1950s. Burnham's definitive statement of

---

[37] Kirkendall, *Global Power*, 16.

anticommunism was published in 1947, with the title *The Struggle for the World.* To Burnham, the presence of atomic weapons made the need for a secure world all the more imperative; he had no faith in a "world government" to provide that security. Rather, Burnham saw a better alternative:

> The discovery [*sic*] of atomic weapons has brought about a situation in which Western civilization, and perhaps human society in general, can continue to exist only if an absolute monopoly in the control of atomic weapons is created. This monopoly can be gained and exercised only through a World Empire...
>
> It should not require argument to state that the present candidates for leadership in the World Empire are only two: the Soviet Union and the United States.

Americans, wrote Burnham, should not be squeamish about the notion of an empire, because its "connotations of extreme tyranny and despotism" were not justified; in fact, "Athens and England, two of the greatest imperial powers in history, are the two most democratic governments so far known."[38]

Furthermore, the United States should be aware that the Soviet Union, propelled by its communist ideology, harbored no reluctance to establish its regime at the center of a world empire. "The ultimate goal of communist, and therefore of Soviet, policy is conquest of the world," Burnham pronounced. The United States must challenge the Soviet Union aggressively, suppress communism at home (since communism, according to Burnham, used Western freedom to destroy the West), and create a World Empire, the first step of which would be political union with the British Commonwealth. Most conservatives were not as militant as was Burnham, but he became a leading, if not *the*

---

[38] James Burnham, *The Struggle for the World* (New York: John Day Company, 1947), 54, 55, hereafter cited as *Struggle*. Burnham's break with Trotsky can be found in Leon Trotsky, *In Defense of Marxism Against the Petty-Bourgeois Opposition* (New York: Pioneer Publishers, 1942). Note in particular Burnham's letter on 207-211.

leading, anticommunist. Burnham believed that the Cold War was really the Third World War; appropriately, he titled his *National Review* column, "The Third World War," and wrote extensively in that column about the threat of communism as well as the liberal inability to deal forcefully with it.[39]

While Burnham may have been the conservative foreign policy impresario, at least among the *National Review* set, he did not dominate conservative thinking about communism. In 1948, Whitaker Chambers, a Soviet agent in the 1930s, accused a former State Department official, Alger Hiss, of passing secret documents to him while still a Soviet agent. The ensuing series of hearings, and Hiss' conviction on perjury charges in 1950, catapulted Chambers to center stage. In 1952, Chambers published his autobiography, *Witness*, which became a best-seller. In the meantime, shortly after the Hiss conviction, Senator Joseph McCarthy began his hysterical campaign against Communist Party members he claimed had infiltrated the United States government. McCarthy received considerable support from many conservatives, some of which came from none other than Buckley and his brother-in-law L. Brent Bozell. In 1952, they published *McCarthy and His Enemies*, a book that defended McCarthy's crusade and, while criticizing occasional "blunders," Buckley and Bozell "concluded that the senator was fundamentally correct." Conservatives began letter-writing campaigns and formed organizations (such as the Joint Committee Against Communism) that featured speaking engagements by McCarthy's assistant Roy Cohn. In the minds of McCarthy's intellectual

[39] Burnham, *Struggle*, 90, 190, 210.

supporters, the liberal reaction to McCarthy was itself as hysterical as the liberals claimed McCarthy was.[40]

Nevertheless, some on the right began to express reservations or even outright hostility to McCarthy. One was Viereck, who saw in McCarthy a populist threat to civil liberties; the Wisconsin senator pandered to the masses who were ignorant of proper American traditions, and that made McCarthy *anticonservative*. Sociologists Will Herberg and Robert Nisbet also saw McCarthy's followers as xenophobic, radical populists who had no regard for stability. Even the anticommunist hero Whitaker Chambers had serious doubts about McCarthy. To Chambers, McCarthy's recklessness endangered genuine anticommunism by encouraging a liberal reaction to him. Chambers labeled McCarthy a "rabble rouser" who could not think; McCarthy had only one strategy, "to attack."[41]

The conservative conflict over McCarthy illustrated the problems faced by the conservative movement mentioned above. In the face of a liberal orthodoxy that they believed was firmly in control of American society, some conservatives sought any rallying point they could find. It was the weakness of the conservative movement at the time that gave some license to attach their hopes for real impact on the American political psyche to McCarthy. The criticism of those like Viereck and Nisbet also reflected the basic theoretical differences among postwar conservatives. Viereck's critique of McCarthy's populism was consistent with the "new conservative" distrust of "mass man"

---

[40] Nash, *Conservative Movement*, 99, 100. On McCarthyism and anticommunism, see Ellen Schrecker, *The Age of McCarthyism: A Brief History with Documents* (Boston: Bedford Books, 1994) and John Earl Haynes, *Red Scare or Red Menace?: American Communism and Anticommunism in the Cold War Era* (Chicago: Ivan R. Dee, 1996).

and respect for old aristocratic values, particularly those of restraint. McCarthy's censure in 1954 allowed conservatives to reunite in their opposition to communism as a foreign threat, but the specter of McCarthyism continued to haunt conservative anticommunism for some years afterward.

SUMMARY

Conservatives, immediately following the Second World War, saw themselves as classic underdogs in the fight for the intellectual soul of America. *National Review* featured a regular column called "The Liberal Line", usually authored by the conservative political scientist and theorist Willmoore Kendall; in it, he lampooned the liberal orthodoxy that appeared to dominate American thought. Writers like Russell Kirk and Richard Weaver emphasized the importance of ideas rather than political movements; certainly their ideas were political in nature, but to Weaver and Kirk, conservatives needed to counter the thought that lay at the *root* of leftist political movements rather than on the movements themselves. This thought included "the unreasoning forces of industrialism, centralization, secularism, and the levelling impulse." Though it is true that the Republican Party scored congressional victories in 1946 and captured the presidency in 1952 and again in 1956, politics was still subordinate to a much larger mission. In the words of Meyer, "the skills and techniques of political organization have their place in society, but they are only secondary auxiliaries for a movement whose duty it is radically to transform the *consciousness* of an age." Meyer's focus on "consciousness" is a classic statement of "Old Right" intellectualism; it is not surprising that many of the Old Right were highly educated men (though a few women, such as

---

[41] Nash, *Conservative Movement*, 100, 101, 102.

Buckley's sister Priscilla, wrote on conservative ideas) who held academic positions or pursued careers as journalists rather than in government.[42]

Perhaps a more fundamental fissure appeared in the early 1960s with the rise of Arizona senator Barry Goldwater. Goldwater is largely considered a "New Right" phenomenon: part of a conservative movement that was more populist in nature. Interestingly, that media voice of the Old Right and center of so many intellectual debates, the *National Review*, may have helped the growth of a New Right. Precisely because it was on the newsstands with liberal classics like *The New Republic* and *The Nation*, a latent vein of popular conservative opinion was tapped. Buckley himself participated in the formation of Young Americans for Freedom; the organization first met in his home in 1960, two years before the foundation of the leftist Students for a Democratic Society. Old Right thinkers assisted Goldwater's campaign right from the start: the economist Milton Friedman served as Goldwater's economic adviser, Russell Kirk wrote some of Goldwater's speeches, and L. Brent Bozell, co-author of *McCarthy and His Enemies*, was the ghost writer for Goldwater's *The Conscience of a Conservative*.[43]

Despite Lyndon Johnson's landslide victory over Goldwater in the presidential election of 1964, conservatives had made it onto the American political stage in a way that they could not in 1945. Much of this had to do with a formulation of a serious conservative ideology, held together by the cement of anticommunism. Thus,

---

[42] Kirk, *Conservative Mind*, 4; Frank S. Meyer, "The Horizons of Conservatism", in Frank S. Meyer, *The Conservative Mainstream* (New Rochelle, NY: Arlington House, 1969), 78, emphasis added.

[43] Nash, *Conservative Movement*, 272.

conservatives increasingly confronted a number of social and intellectual issues, such as education, economic and foreign policy, and the state of morals in America. One of these issues was that of the place of science in American thought. The Cold War American state brought about massive changes in the scientific infrastructure of the country; beyond this, many conservatives saw not only structural changes, but a change in *Zeitgeist* that had been developing for some time. Science had become an integral part of Western thought; should not conservatives, who saw themselves as the champions of the West, embrace science as the best the West had to offer the world? As we will see in the following chapter, conservative feelings about science were deeply ambivalent as they sought to make sense of a powerful innovative force that brought about such fundamental changes in America.[44]

[44] Though I have only briefly covered the American conservative movement (up to 1964) here, there are a number of works on American conservatism. See, for example, Charles W. Dunn and J. David Woodward, *American Conservatism from Burke to Bush: An Introduction* (Landham, MD: Madison Books, 1991) and Paul Gottfried and Thomas Fleming, *The Conservative Movement* (Boston: Twayne Publishers, 1988).

Chapter 2
The Intellectuals on Science: Hayek, Weaver, and *National Review*

The conservative movement in postwar America, as we have seen, grew slowly. First and foremost, it was an intellectual opposition movement to the "dominant liberal orthodoxy." Though the Republican Party cast itself as the domain of conservatives, and though, by the 1940s, the GOP continued to gain strength at the expense of the Democrats, conservative intellectuals remained pessimistic about their place in the American body politic. A national political presence on the part of the postwar American right surfaced with the candidacy of Arizona senator Barry Goldwater in 1964. By then, however, the nature of the right wing had begun its transformation from a community of mostly eastern-based intellectuals to a New Right based in the South and West. Yet the Old Right had given an intellectual impetus to the New; as social and cultural critics, the intellectuals of the right indicted many of the trends in American life they saw as philosophically harmful and the product of liberals who were leading America astray.

Conservatives, in voicing their suspicions, tended to use very broad language in their writings about science and scientism. Science was not only characterized by the specific content of various disciplines, but also by a mode of thought that separated it from other intellectual endeavors. It was the scientific way of thinking that appeared more threatening to conservatives than any particular theory or hypothesis, with perhaps the exception of Darwinian evolution. To conservatives of a libertarian bent, the increased influence of science harbored the potential for abrogation of the liberties (especially economic) of Americans because of the temptation to manage American society along scientific lines. Those who were more traditionalist-minded saw in science a threat to

long-standing traditions such as religion and status from an egalitarian-inspired scientific outlook that regarded these traditions as either useless or abhorrent. Because of this emphasis on science as *Weltanschauung*, there was little criticism of scientific disciplines or content, especially in the natural sciences. Physicists were not dangerous as physicists *per se*; rather, they became dangerous when their scientific training led them to believe that they had superior insight into all of humankind's problems. Conservatives, however, often targeted the content of the social sciences. These disciplines dealt with social phenomena not easily objectified; hence, they made easy targets for conservatives looking for ideological biases. The fact that many natural scientists also looked upon the social sciences with some contempt made conservative attacks easier.[1]

Conservatives of all stripes remarked on scientism. Often these remarks were nothing more than passing commentary as part of a diagnosis of the ills in American society. Some conservatives, however, were more explicit in their critiques of science and their works reflect the efforts of conservatives to come to terms with science in the postwar era. Conservative critiques varied in tone and emphasis, which paralleled the broader conservative philosophies that particular writers espoused. Nash's categorization of conservative thinkers, therefore, helps to place critiques of scientism in the overall context of a writer's own place in the conservative movement. In this manner, one can view Hayek's antiscientism as part of his libertarianism, and Weaver's as part of his traditionalism. In turn, one can then look to publications like *National Review* to gauge

[1] A classic statement of the division between scientific thinking and "traditional" humanistic thinking is C. P. Snow, *The Two Cultures and the Scientific Revolution* (New York: Cambridge University Press, 1959). A conservative response can be found in "Operation Snow Removal," *National Review*, 27 March 1962, 194.

the overall importance of science to conservative thought, since *National Review* became a significant focal point for conservative discussion.

HAYEK AS A LIBERTARIAN

Though Friedrich Hayek's professional training was in economics, he exhibited considerable interest in the sciences. This owed to his family's intellectual background. His paternal grandfather was a zoologist who taught at the University of Vienna, his father was a doctor and a botanist, his two brothers taught anatomy and chemistry, and his son and daughter became, respectively, a doctor and an entomologist. His early education included a heavy emphasis on biology, especially evolution and genetics, and he later became interested in psychology. After his service in World War I, he acquired his education in law, economics, and political science, though he continued to study psychology. Hayek even wrote a book on theoretical psychology later in his career.[2]

Hayek's most notable work that addressed the problem of scientism was his book, *The Counter-Revolution of Science*. Published by The Free Press in 1952, the collection of essays originally appeared in several parts: in the journal *Economica* for the year 1941 and the years 1942-1944, and in the June 1951 issue of the journal *Measure*. *The Counter-Revolution of Science* was representative of Hayek's general intellectual approach to issues that concerned many conservatives; he represented in this case the "libertarian" strain of conservative thought due to his emphasis on the problem of state power and authority. The book comprised Hayek's effort to define scientism ("a

[2] McCormick, *Keynesian Avalanche*, 37-38. On Hayek's interest in psychology, see F. A. Hayek, *The Sensory Order: An Inquiry into the Foundations of Theoretical Psychology* (Chicago: University of Chicago Press, 1963).

mechanical and uncritical application of habits of thought to fields different from those in which they have been formed"), the history of scientistic thought, and the intellectual program of those who advocated scientism.[3]

In order for the reader to understand scientism and why it was pernicious with respect to the practice of the social sciences, Hayek outlined the method of the natural sciences and its development. The natural sciences, in their struggle for legitimacy, faced three obstacles: the medieval tradition of analyzing other people's opinions, particularly from the past; the belief that ideas possessed some transcendent reality; and the belief that natural events were animated by a human-like mind. Natural scientists, however, overcame these impediments, and established a new way of learning about nature, with a particular outlook:

> This process of re-classifying "objects" which our senses have already classified in one way, of substituting for the "secondary" qualities in which our senses arrange external stimuli a new classification based on consciously established relations between classes of events is, perhaps, the most characteristic aspect of the procedure of the natural sciences.

The aim of science, as expressed through this method, was to "produce a new organization of all our experience of the external world," and importantly for the scientist,

---

[3] F. A. Hayek, *The Counter-Revolution of Science: Studies on the Abuse of Reason* (Glencoe, IL: The Free Press, 1952), preface, hereafter cited as *Counter-Revolution*. Though Hayek is put in the "libertarian" camp here, he also had "traditionalist" leanings in the sense that he placed some positive value on the growth of culture and institutions over time. See Gray, *Hayek on Liberty*, 129-134 and Kukathas, *Hayek and Modern Liberalism*, 174-191 for discussion of Hayek's "traditionalist" conservatism versus his economic libertarianism. Kukathas argues against Hayek's being a conservative, whereas Gray sees a more nuanced fusion of Hayek's moral and economic thought.

study of the things that comprise such experience should be "independent of what men think or do about them."[4]

The social or moral sciences, however, were concerned with different questions. They addressed "the relations between men and things or the relations between man and man." The facts of the social sciences were primarily the opinions and actions of other human beings and the effects of these. These can be distinguished from the material facts of the natural world and because of this, the method of the social sciences is necessarily "subjective" as opposed to the "objective" approach of the natural sciences. Hayek pointed to examples from his own field, economics, as a clearer illustration of this difference. Hayek wrote that "the objects of economic activity cannot be defined in objective terms but only with reference to a human purpose." A commodity, for example, has certain value imparted to it not because of some intrinsic property, but because of how people think of that commodity and how they use it. Hence, the "subjective" factors that natural scientists endeavor to avoid were the very data that social scientists incorporated in their work.[5]

Hayek enumerated three characteristics of the scientistic approach of modern social science: objectivism, collectivism, and historicism. Objectivism entailed sundry attempts to dispose of the workings of the human mind that we have come to know subjectively. As an example, practitioners of behaviorist psychology maintained that the

---

[4] Hayek, *Counter-Revolution*, 17-18, 20, 23. As we will see below, Weaver also saw scientific thought and "transcendent" ideas as opposed to one another, but Weaver much more forcefully advocated a return to idealism than did Hayek.

[5] Ibid., 25, 31. This is suggestive of the most prominent aspect of Austrian School economics: the subjectivity of value. Hayek expanded this notion of subjectivity to encompass the entire method of the social sciences. See Gray, *Hayek on Liberty*, 16-21.

best scientific way of understanding human beings was to study only observed behavior and avoid any analysis of introspective thought, since it could not be observed in the same way. Behaviorists, however, were actually assuming that people classify things in similar ways, (e.g., their subjects are actually seeing what behaviorists think the subjects see and are reacting to it), because behaviorists were working on the belief that they were dealing with minds similar to their own, which could not be objectively proven and was therefore subjective. We do not know anything about the actual physical basis of behavior, which behaviorists ought to study if they really wanted objectivity, but the social sciences do not necessarily need to do so because the mental constructs (opinions, ideas, actions) themselves are the components of study. The objectivist approach is further reinforced by a sense that qualitative data is not useful and that only what can be statistically measured is of significance. Hayek wrote that the desire for numeric objectivity is responsible for "the study of the most irrelevant aspects of the phenomena" in question and, in addition, results in "assignments of numerical values which are absolutely meaningless."[6]

Hayek then turned his pen on the "collectivism" of scientistic social sciences, which he defines as the tendency to treat phenomena such as "society", "class", etc. as wholes that are particular social objects whose behavior can be generalized by particular laws. With respect to the natural sciences, collectivism was an understandable tendency because natural scientists sought "empirical regularities" and hence to explain these regularities by general rules. Social phenomena, however, did not exist as "given" wholes as did natural phenomena; the key difference was that the collective terms people

[6] Hayek, *Counter-Revolution*, 44, 45, 50, 51. As an example, Hayek stated that the behaviorist ought to study "the effects of a light wave of a certain frequency on a particular point of the retina of the human eye" (p. 45), if the behaviorist truly desired to be consistently objective.

used to describe social phenomena, e.g., "nation" or "economy", rose from what people thought about what constitutes these groups rather than any natural, observable existence. Social sciences, then, "constitute these [social] wholes by constructing models from the familiar elements—models which reproduce the structure of relationships between some of the many phenomena which we always simultaneously observe in real life." Those who favored a scientistic methodology ("positivists from Condorcet to Mach") ignored the "inside" view of social phenomena because they believed that regularities were obscured at close levels of observation and were made apparent from a more "distant" view of social facts as wholes. The problem with this positivist desire, according to Hayek, was that we could not avoid making meaningful studies of society without some conception as what "things *mean* to the acting men," and this was ascertained only by some understanding of the individual relationships that made up what appeared to be social wholes.[7]

A concept that followed from scientistic collectivism Hayek called "historicism." The fact that Hayek assigned historicism to an improper view of social study may strike one as unbecoming a conservative thinker who ought to revere history. Hayek made a distinction between an older form of historicism and the newer, scientistic historicism in order to resolve this contradiction. Early historicism was characterized by an emphasis on "the singular or unique character of all historical phenomena which could be understood only genetically as the joint result of many forces working through long stretches of time." That is, historical events arose from relationships between many things and were of a constitutive nature that made each event resistant to explanation by a

[7] Ibid., 53, 56, 59.

historical theory. The newer historicism advocated the precise opposite: that, in fact, history should be a theoretical "science" that allowed us to generalize about social wholes. Hayek wrote that a major flaw in a theoretical view of history was that historical events were not themselves singular *objects* of thought (though they are singular *events*), but only became so by the questions people asked about these events. The various questions one asked about a historical period or event reflected the multitude of forces that shaped that event and hence, the difficulty in generalizing about history. Hayek maintained that totalizing theories of history gained credibility at around the same time that scientistic social sciences did because of the desire to emulate the natural sciences; indeed, historians did not propose theories of history, but social scientists like Marx did. Hayek countered this impulse by declaring that "our historical knowledge is based [on the fact that] history can never carry us beyond the stage where we can understand the working of the minds of the acting people because they are similar to our own," and not on empirical rules that apply throughout history.[8]

Parts Two and Three of *The Counter-Revolution of Science* comprised Hayek's historical study of the origins and influences of scientism. Hayek clearly named the source of "the scientistic hubris." This was a "body of professional scientists and engineers which grew up in Paris and more particularly from the new institution which embodied the new spirit as no other, the *Ecole polytechnique*." The *Ecole polytechnique*

[8] Ibid., 64-65, 70, 74, 79. Hayek attributed any confusion between "old" and "new" historicism to the work of the German historian Friedrich Meinecke, who used the label "historicism" in his description of older styles of history. See Friedrich Meinecke, *Historicism: The Rise of a New Historical Outlook*, trans. J. E. Anderson, trans. revised by H. D. Schmidt (London: Routledge and K. Paul, 1972). Hayek attributed the actual sense of historicism, i.e., the newer version that he criticized, to the work of the founder of the Austrian School, Carl Menger. Menger's attack on the new historicism was an integral part of the *Methodenstreit* out of which grew the Austrian School. See Raimundo Cubeddu, *The Philosophy of the Austrian School* (New York: Routledge, 1993).

was a product of the rationalist *Zeitgeist* of the French Revolution; the profound radicalism of the French Revolution was of such power that its effects were still felt in the twentieth century. Hayek then focused on two key figures, Henri de Saint-Simon and Auguste Comte, and their historical impact. In Hayek's view, Saint-Simon and his student Comte embodied the scientistic philosophy that became attractive for many of those who wished to understand social phenomena. Hayek examined Saint-Simon's life and his works (including *Lettres d'un habitant de Genève à ses contemporains*, *Mèmoire sur la science de l'homme*, and *Réorganization de la société européenne*) and analyzed Saint-Simon's interest in scientific techniques as applied to social organization. The danger of Saint-Simon lay in his desire to organize society along "scientific" lines, which will become both beneficial and necessary as morals and politics become "positive" sciences. Hayek found the connection particularly apparent (and appalling) in Saint-Simon's statements that those who would not obey his hypothetical central planning body "will be treated by the others as a quadruped," and that "the vague and metaphysical idea of liberty" served to "impede the action of the masses on the individual." To Hayek, this was the socialist outcome that followed from a scientistic concept of the social sciences.[9]

Even more influential a thinker than Saint-Simon was Comte. Hayek identified Comte's most important works as the *Cours de philosophie positive*, a six-volume work released between 1830 and 1842, and *Système de politique positive*, whose four volumes were published between 1851 and 1854. Like Saint-Simon, Comte sought a "positive" science of humankind, as opposed to the theological and metaphysical systems of thought that characterized earlier human intellectual endeavors. Comte is often credited with

[9] Hayek, *Counter-Revolution*, 105, 110, 121, 124, 136.

coining the term "sociology," which was to be based on the positive development of the natural sciences, so that all sciences can be unified by a single method. Hayek wrote that this could be possible if Comte's goal was "to explain mental phenomena in physical terms," but this was what Comte explicitly rejected because of his contention that "higher" sciences (like sociology) could not be completely reduced to more basic sciences like physics. This did not prevent Comte from advocating a scientistic sociology with the founding principle of "recognizable laws, not only of the growth of individual minds, but of the development of the human race as a whole." The key for Comte, if we are to believe Hayek, was not the data of the natural sciences, but the method. Hayek emphasized the positivism and collectivism of Comte because Hayek believed that Comte's view of individual rights as immoral followed directly from Comte's scientism. Comte's thought, which theorized society as a "collective being" led Comte to describe "most of the characteristic features of a totalitarian view of society."[10]

Hayek's historical treatment of nineteenth-century positivism was quite extensive, but limited to France and, to a lesser extent, Germany. Hayek linked Comte, Hegel, Marx, and Engels in an effort to illustrate the spread of positivism across the Continent. Hayek identified John Stuart Mill as "an expounder of Comtean doctrine," as evidence of positivist thought in the United Kingdom. Hayek had very little to say about Comte in

---

[10] Ibid., 168, 170, 174, 179, 184. Hayek was not original in his criticism of Comte; Comte's ideas generated considerable discussion during the nineteenth century. See, for example, John Stuart Mill, *Auguste Comte and Positivism* (London: N. Tubner, 1866). Though modern sociology does not reflect Comte's purely positivistic vision, he continued to be viewed as a founder of the social sciences. An example of this can be found in Timothy Raison, ed., *The Founding Fathers of Social Science* (Baltimore, MD: Penguin Books, 1969). See also Mary Pickering, *Auguste Comte: An Intellectual Biography* (New York: Cambridge University Press, 1993), and Robert C. Scharff, *Comte After Positivism* (New York: Cambridge University Press, 1995) for more recent views of Comte and his legacy. For an analysis of modern positivism, see Leszek Kolakowski, *The Alienation of Reason* (Garden City, NY: Doubleday & Co., 1968)

the American context; his mention of the United States amounted to little more than a passing reference to Comte's influence on the economist Thorstein Veblen. Hayek's foray into intellectual history provides considerable insight into the history of French positivism in the nineteenth century, but Hayek's claim that the *Ecole polytechnique* was the source of scientism oversimplified the issue. Hayek did not take into account ways in which national styles may have engendered views of science, positivist and otherwise, in specific national contexts independent of the work of Comte. While the prestige of the *Ecole polytechnique* may have been significant, to identify it as the source of positivistic hubris is not fully convincing in the American context, for example, because the social and economic conditions in the United States were considerably different than those of Europe in the early and mid-nineteenth century. Hayek ignored the cumulative effects that specific conditions had on scientific (and scientistic) thought in America and in other nations.[11]

The Counter-Revolution of Science attracted some attention from Hayek's contemporaries, especially in the academic journals. The reviews, by and large, were guardedly positive. In *The American Journal of Sociology*, reviewer Joseph B. Gittler wrote that the book "should be read by all social scientists" because it focused on an issue "that many writers have neglected." Gittler was not, however, totally convinced by Hayek's critique of scientism and concluded that "we still await cogent and concrete contributions to the problem of understanding social man." Robert Bierstedt, writing for

[11] On science in the United States, see, for example, Ronald L. Numbers and Charles E. Rosenberg, eds., *The Scientific Enterprise in America: Readings from* Isis (Chicago: University of Chicago Press, 1995). On national styles of science, see Mary Jo Nye, *Science in the Provinces: Scientific Communities and Provincial Leadership in France, 1860-1930* (Berkeley, CA: University of California Press, 1986); and Nathan Reingold, "The Peculiarities of the Americans or Are There National Styles in the Sciences?"

American Sociological Review, credited Hayek's argument with "a certain degree of sophistication," adding that "it merits careful reflection." In the end, Bierstedt found Hayek's case to be "exaggerated" and that Hayek approached a sort of "methodological and, ultimately, sociological agnosticism." *The Annals of The American Academy of Political and Social Science* found Hayek's work to be "excellent", but thought Hayek's criticism of planning to be as one-sided as his argument in *The Road to Serfdom*. Finally, *Saturday Review* believed Hayek's position to be "inconsistent," since he seemed to argue that current sociology was both "futile" and, at the same time, "dangerous." Hayek's book certainly generated interest, but the long shadow of *The Road to Serfdom* colored the impressions of his reviewers.[12]

Hayek's attack on scientism was less an analysis of science and more of a caution against certain kinds of social policy inspired by scientism, which was essentially the case for almost all of conservative antiscientism. Few contemporary commentators on Hayek deal with his exposition of the methods of the natural and social sciences in of itself; rather, Hayek's work "is to be viewed and understood as a whole." In *The Counter-Revolution of Science*, Hayek was more concerned with the effects of a particular view and application of scientific methodology—scientism—than with a broad analysis of scientific method and philosophy. Furthermore, Hayek, in 1952, appeared to dismiss the

---

Science In Context 4 (1991): 347-366.

[12] Joseph B. Gittler, review of *The Counter-Revolution of Science: Studies on the Abuse of Reason*, by F. A. Hayek, *The American Journal of Sociology* 58 (November 1952): 314-315, on 315; Robert Bierstedt, review of *The Counter-Revolution of Science* by F. A. Hayek, *American Sociological Review* 17 (October 1952): 629-630, on 629, 630; C. J. Friedrich, review of *The Counter-Revolution of Science* by F. A. Hayek, *The Annals of The American Academy of Political and Social Science* 284, 208-209; "The Abuse of Reason," review of *The Counter-Revolution of Science* by F. A. Hayek, *Saturday Review*, 11 October 1952, 40-41, on 41.

idea that there can be any social facts at all, which is what Bierstedt presumably meant when he commented on Hayek's "sociological agnosticism." It is, for example, possible that "people can be mistaken in their beliefs about the world and social scientists must be able to say what is true and false about people's beliefs." Hayek's grand project, however, was to advance a return to classical liberalism (which we would call conservatism today), not construct a philosophy of science. This led him to ignore, in *The Counter-Revolution of Science*, the differences of method *within* the natural sciences. He set up a dichotomy between the natural and social sciences that, while, effective in demonstrating their differences, is too stark. His exploration of the social sciences, however, stemmed from his belief that they were instrumental, from the scientistic point of view, to a planned society. Hayek's main goal was to attack this instrumental foundation.[13]

Though Hayek displayed a profound mistrust of rationalism in *The Counter-Revolution of Science*, he was not wholly antirationalist, which makes his antiscientism even more nuanced and further illustrates his intellectual aims. What Hayek deplored was an excessive, "constructivist" rationalism as opposed to his skeptical "critical" rationalism. To Hayek, it was "the height of rationality to recognize the limits of human reason"; this reason was best employed "at the level of the individual." Hence, many individuals acting, or attempting to act, rationally can create a social order that is itself not rational in the sense that it is not consciously planned. Furthermore, Hayek's defense of classical liberalism depended to a certain extent on a "scientific" or "rational"

[13] Gray, *Hayek on Liberty*, 116; Norman Barry, *Hayek's Social and Economic Philosophy* (London: Macmillan Press, 1979), 25; on Hayek's intentions, see Kukathas, *Hayek and Modern Liberalism*, 19.

approach. In later works, especially, Hayek attempted to refute socialism, the intellectual opposite of classical liberalism "scientifically." While many antisocialists found socialism objectionable on moral grounds, Hayek sought an intellectual refutation of socialism, which necessarily incorporated rationalist elements as part of the argument.[14]

Hayek wrote in an era of considerable economic turbulence. The Depression profoundly affected the views of many towards capitalism. Hayek therefore sought a way to defend classical liberalism, and its accompanying capitalist economics, against what he saw as a wave of encroaching socialism. Nazi Germany and the Soviet Union in the 1930s and 1940s provided Hayek with ample reason to put forth his intellectual project. The postwar situation, given the rising influence of the Soviet Union in eastern Europe and the rise of social democratic politics in western Europe, made Hayek's defense necessary to many. American conservatives found Hayek's economic views convincing and appropriated them in their efforts to beat back American liberalism and communism. Yet Hayek's antiscientism did not constitute a significant part of the conservative project. Considering that *The Counter-Revolution of Science* was just one part of a broad outlook for Hayek himself, it is understandable that conservatives as a community absorbed Hayek's views according to their own priorities, which were dictated increasingly by the threat of socialism and communism.

---

[14] On critical and constructivist rationalism, see Gray, *Hayek on Liberty*, 10, 27-30; on Hayek's view of reason, see Barry, *Hayek's Social and Economic Philosophy*, 14-15, 195; on Hayek's scientific efforts to "disprove" socialism, see Roland Kley, *Hayek's Social and Political Thought* (Oxford: Clarendon Press, 1994), 18-19 and F. A. Hayek, *The Fatal Conceit: The Errors of Socialism* (Chicago: University of Chicago Press, 1989).

Weaver As A Traditionalist

Another outspoken critic of scientism, in a different vein, was Richard Weaver. In Chapter 1, Weaver's book *Ideas Have Consequences* was described as a sort of opening shot in the intellectual battle that postwar conservatives wished to fight. That it certainly was, but here we shall look more closely at a recurring theme in *Ideas Have Consequences* as well as Weaver's other writings—his deep suspicion of scientism. Weaver was not an original critic of science; his Southern Agrarian mentors at Vanderbilt, such as John Crowe Ransom, also looked upon science with some disdain. Weaver did gain entry into the postwar conservative intellectual community in a way his teachers did not, and this makes his critique of scientism more significant. Weaver's book attracted the attention of thinkers such as Reinhold Niebuhr, certainly no conservative in the eyes of the right. Weaver became a regular contributor to *National Review*, and published more works of traditionalist conservative thought until his death in 1963 at the age of 53.[15]

Weaver's concerns about the role of science in fomenting the ills of modern life appeared in his early writings, notably *The Southern Tradition at Bay*. A study of postbellum apologias for the Old South, *The Southern Tradition at Bay* was Weaver's

---

[15] Niebuhr's comment on *Ideas* as a "profound diagnosis of the sickness of our culture" can be found on the back cover of the 1962 edition. Niebuhr, a liberal Protestant theologian often featured in journals like *The New Republic*, exhibited skepticism towards the optimistic Enlightenment view of human nature, a skepticism often found in conservative writing. See, for example, Reinhold Niebuhr, *Moral Man and Immoral Society: A Study in Ethics and Politics* (New York: Scribner's, 1932). The definitive statement of the Southern Agrarian thought to which Weaver pays homage can be found in Twelve Southerners, *I'll Take My Stand: The South and the Agrarian Tradition* (New York: Harper and Row, 1930). Analyses of Agrarian thought can be found in Christopher M. Duncan, *Fugitive Theory: Political Theory, the Southern Agrarians, and America* (Lanham, MD: Lexington Books, 2000), and Paul Keith Conkin, *The Southern Agrarians* (Knoxville, TN: University of Tennessee Press, 1988).

doctoral dissertation written while at Louisiana State University, and was published posthumously as a book in 1968. The book demonstrated very clearly Weaver's view of the South, both in the antebellum and postbellum periods, as a fundamentally conservative region. More importantly, the South, though defeated in war, had much to teach America. Weaver wrote that "I expect to speak of the South therefore as a minority within the nation, whose claim to attention lies...in something I shall insist is higher—an ethical claim which can be described only in terms of the mandate of civilization." In opposition to the rapid and chaotic forces unleashed by industrialism in the North, the South's values were those of distinction and gentility, which, according to Weaver, were sorely lacking in modern America.[16]

One of the characteristics of the Old South's intellectual life was the notion of piety, the deeply felt sense that "it is not for us either to know all or to control all." Piety, particularly towards nature, is a protective value in that it allows human beings to accept the vicissitudes and contingencies of the natural world. Science is "impious to the extreme" and in fact "encouraged a warfare between man and nature...in which without clearly defined war aims, we seek the overthrow of an opponent." The greatest danger of this warfare mentality was a sense that humankind can dispose of restraints that regulate human behavior; since nature functions as a constraint on human action and humans have had to adapt to nature, the "overthrow" of nature removes nature's constraints, leading to "vainglory, egotism, and impatience." Weaver warned that after a certain point, victories

[16] Weaver. *Southern Tradition*, 29. The literature on the history of the South is voluminous. William J. Cooper, Jr. and Thomas E. Terrill, *The American South: A History* (New York: Alfred A. Knopf, 1990) is a single-volume general history of the South with an extensive bibliographical essay.

over nature are Pyrrhic; the price of victory and domination over nature is the destruction of civilization and the rise of barbarism.[17]

To Weaver, the Old South represented particular humane values that were lost after the South's defeat in the Civil War. These values were best illustrated in the Southern attitude toward education. The education of the Southerner depended upon his or her place in Southern society, and the most extensive education was reserved for the planter aristocracy because their minds were "disposed to the virtuous and the honorable." This upper-class education was humanistic in nature in order to instill "the classic qualities of magnificence, magnanimity, and liberality"; such education specifically avoided specialization because "specialization is illiberal in a freeman." Though not made explicit in this statement, it is clear that Weaver had in mind the specialized nature of scientific education. That sort of education was for the masses that needed to earn a living through vocational training; broad, non-specific education was best suited to the upper classes because their fixed role was that of leadership in Southern society.[18]

Though *The Southern Tradition at Bay* is essentially a work of literary criticism, Weaver's repeated references to science and technology indicated a deeper message. By studying even "the lost causes," one can find in such cases as the American South "things ...which speak for something more than a particular people in a special situation." What is the lesson to be learned from the Southern "lost cause"? First, that the North, "by its ready embrace of science and rationalism, impoverished itself." Second, the Old South

---

[17] Weaver, *Southern Tradition*, 32-33. The similarity between Weaver's comments about a scientific "war" on nature and more recent scholarship on the relationship between science and nature is both curious and interesting. See Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (San Francisco: Harper & Row, 1980).

was "*the last non-materialist civilization in the Western world.*" Considering the profitability of the cotton economy for the planter elite in the antebellum period, this claim is problematic; what was important for Weaver, however, were the metaphysical foundations for a society. A culture is bound to fail without proper philosophical grounding, and the South illustrated this best. The Old South disappeared because "no Southern spokesman was ever able to show why the South was right *finally*." It was this quest for a metaphysics of right to which Western society, and the United States in particular needed to return; a new non-materialist society would save humankind from "a future of nihilism, urged on by a demoniacal force of technology."[19]

Recent scholarship calls into question Weaver's assessment of the Old South as a bulwark of antiscience and antitechnology sentiment. Certainly the South was underrepresented in the ranks of American scientists during the antebellum period and for a considerable time in the postbellum age. The South's rural society made it more difficult for those interested in science to meet and exchange ideas, in contrast to the increasingly urbanized North. Southerners, however, explored a wide variety of scientific knowledge. They established scientific societies (however small or short-lived), sent their children to Northern schools where science was prominent in the curriculum, and even saw in many cases a harmonic relationship between religion and science in the natural theology tradition. Much of this interest in science grew not after the Civil War, when Southern apologists claimed that Northern ways were imposed on the South, but before the war, as early as the 1830s. None of this is to say that science did not take root

---

[18] Weaver, *Southern Tradition*, 75, 79.

[19] Ibid., 388, 389, 391. Emphasis Weaver's.

in the North to a greater extent than in the South; Weaver was right, for example, to point out the privileged place that classical education continued to hold in Southern universities. Weaver's treatment of the place of science in the Old South, however, may have been unduly essentialized and simplified. Weaver maintained that the social conditions in the Old South represented something particular about the Southern mind that set it against science. Yet there were important historical exceptions to Southern antiscientism that render Weaver's interpretations lacking. Weaver's sources in *The Southern Tradition at Bay* were largely apologias that portrayed an idealized vision of the Old South. In fairness to Weaver, he recognized this, but nonetheless saw a cultural expression of worthy ideals mixed in with romanticism.[20]

Weaver continued to stake out a position against scientism in his later works. *Ideas Have Consequences* was Weaver's most polemical writing on the decay of Western civilization. Unlike *The Southern Tradition at Bay*, *Ideas Have Consequences* was much less historical in nature and not concerned exclusively with the American South, but the deep mistrust of science and technology found in *The Southern Tradition at Bay* resonated throughout the whole of *Ideas Have Consequences*. The enthusiastic embrace

---

[20] See Ronald L. Numbers and Janet S. Numbers, "Science in the Old South: A Reappraisal," in *Science and Medicine in the Old South*, eds. Ronald L. Numbers and Todd L. Savitt (Baton Rouge, LA: Louisiana State University Press, 1989), 9-35, hereafter *Science in the Old South*, for a general discussion of science in the South. The relationship between religion and science in the South, often an amicable one, is highlighted in E. Brooks Holifield, "Science and Theology in the Old South," *Science in the Old South*, 127-146, and helps to add a scientific dimension to Weaver's notion of piety that he may have overlooked.

One may object to this criticism of Weaver on the grounds that he should not be expected to have been aware of research that was not available in his own time. This is a fair point, but even in Weaver's day, some historians of the South sought evidence of a favorable disposition toward science there. See Thomas Cary Johnson, *Scientific Interests in the Old South* (New York: D. Appleton-Century, 1936), an attempt, by a Southerner, to counter the view that the South was an intellectual and scientific backwater. It is possible, perhaps likely, that Weaver would have considered Johnson's book an accommodation to the postbellum modernist tide sweeping over the South, rather than the humanist defense of the South Weaver preferred. On the lessons to be learned from the Old South, see Weaver's epilogue to *Southern Tradition*.

of science and rationalism—the "ideas"—progressively led Western civilization down the road of decay and moral idiocy—the "consequences".[21]

As mentioned in Chapter 1, Weaver traced this path back to the English theologian and philosopher William of Occam. Occam's denial of universals, according to Weaver, led to a denial of everything transcending experiences and, ultimately, the denial of truth. This event represented a shift from the previous medieval worldview, a severing of humankind from the fixed truths that were only obtainable by careful thought and speculation beyond what is observed in nature. Now that transcendent reality had been banished, there was a need to replace it with another mode of inquiry. Some, such as Francis Bacon, sought to find truth in a careful study of nature, i.e., science, with the consequence being that only what exists in the physical world is significant for human existence. Following on the heels of this empiricism is materialism; if humanity is defined by what is physical, then material causes are behind human problems and these problems have material solutions. Weaver made it plain that this shift in human thought was in his eyes not merely a mistake, but actually evil.[22]

Weaver elaborated on the decline of the West throughout most of the book. Modern life was characterized by a decline in "sentiment", by which Weaver meant "an intuitive feeling about the immanent nature of reality." This sentiment undergirded the entire body of beliefs and thought for any human being. Weaver believed that intuitive sentiment must be established as a first principle, after which reason played its appropriate role.

---

[21] Weaver, *Ideas*, p. vi.

[22] Ibid., 2, 3, 4. Others whom Weaver cited as having led the West down the path of rationalism and materialism include the English philosophers Thomas Hobbes and John Locke.

Hence, neither sentiment nor reason alone provided a proper philosophical foundation for any society. In the modern West, however, empiricism backed by reason won the day. Emphasis on observable facts and physical sensation clouded human judgment and left humankind open to corruption. Weaver provided as an example of this the inability of modern society to recognize and discourage obscenity. Weaver defined obscenity as that which is unfit for public display; it need not be "gross animal functions" but can also be any sort of "intense suffering and humiliation."[23]

The barriers to display of obscenity, according to Weaver, had eroded. Not surprisingly, science aided this erosion: "[I]t has been left to the world of science and rationalism to make a business of purveying of the private and the offensive." Weaver enumerated such examples as tabloids, news coverage of crime (particularly violent crime), gruesome accidents and other instances that are scenes of what ought to be private grief. Technology aided this "conspiracy"; through technological advances, dissemination of information was made easier, cheaper, and more accessible to a mass market. Supporters of the mass media maintained that modern journalism provides people with the "raw stuff of life", but Weaver countered that it is this very raw stuff of life that needed to be refined within the context of proper sentiment. Universal standards that aided in judging what was private and what was public were lost, with the result being a sense of immediacy for sensation and not sober reflection.[24]

---

[23] Ibid., 18, 28. Weaver used "empiricism" and "rationalism" interchangeably in his critique of science, since science depended both on empirical data and forms of reasoning to interpret that data.

[24] Ibid., 29. Weaver and other conservative commentators did not make sharp distinctions between science and technology. To Weaver, technology was the predictable outcome of scientific materialism and rationalism. It was the instrumental aid to a mindset that sought knowledge only in the surrounding material world; hence the proliferation of means to provide any and all information possible.

Weaver further indicted science, technology, and rationalism in his discussion on the place of hierarchy in civilization. Like other traditionalist conservatives such as Kirk, Weaver placed a high value on rank and distinctions between human beings. A natural hierarchy grounded in "common assumption about ends" supported a strong, stable society; at the top of this hierarchy stood the good man of knowledge, "the natural trustee of authority." Weaver charged that since the fourteenth century, this order disintegrated, replaced by an organization based on "capacities to consume." This "utilitarianism" even found sympathy in universities, and Weaver quoted former Harvard president James B. Conant's statement that "the chief contribution of American universities had been the idea of equality of all useful labor." Weaver wryly commented that such a statement "is the grand solution of socialism, which is itself the materialistic offspring of bourgeois capitalism."[25]

Considering the strong identification of support for capitalism with conservatism generally, it may appear curious that Weaver criticized capitalism. This seeming incongruity illustrates the different streams of conservative thought outlined in the previous chapter. Since the middle classes were buffered by the upper classes above them and the lower classes below, they grew attached to material comforts as representative of their achievements. Therefore, the bourgeoisie promoted a worldview that elevated material prosperity to that of the highest good. The middle classes enlisted science in the service of this goal, which Weaver made clear when he wrote that "the final

[25] Ibid., 36-37. It was perhaps not mere coincidence, at least to Weaver, that James B. Conant's academic training was in the sciences. Furthermore, Weaver identified crass consumerism with the middle class; the upper classes served the role of a sort of nobility charged with leadership of society and the lower classes served as a labor force too concerned with the means of survival to care much about anything else.

degradation of the Baconian philosophy is that knowledge becomes power in the service of appetite." Rather than the foundation of the good society, as Hayek contended, capitalism (buffeted by science) broke down the order of society, in Weaver's view. Herein lay a major fissure within the conservative movement: liberty vs. order. "Libertarians" such as Hayek saw liberty as the highest good, from that, order followed. Weaver took the reverse view; an established hierarchical social order was necessary before there could be any liberty, otherwise an unfocused "equalitarianism" resulted, and liberty became immoral libertinism. Significantly, the abuses of science were seen as threats to *both* principles (liberty and order), depending on the emphasis of the speaker.[26]

Weaver believed that scientism led humans to confuse means with ends. This, he wrote, is a form of "fanaticism" which, through science and technology, placed human souls in peril. Weaver went so far as to say that science engendered a sort of psychopathology among modern humans. The effects of this psychosis were far-reaching. Coupled with scientism, the additional specializing impulse of industrialism created an unreflective mass of workers directed by a technocratic elite. The atomic bomb project, according to Weaver, even went to the length of making ordinary workers criminals. Propaganda and minute specialization conspired to keep workers ignorant of what it was that they were producing; these workers might have refused to contribute had they known that "their efforts were being directed to the slaughter of noncombatants on a scale never before contemplated." Yet the psychosis of scientism and specialization allowed these workers to produce their components without moral judgment, and certainly without guilt. If Weaver's previous words on the danger of atomic energy and its direction were

[26] Ibid., 38, 40.

not enough, he told the reader that atomic science is "the final discovery of Prometheus", invoking our memory of that mythical titan's harsh punishment for giving fire to humans against Zeus's wishes.[27]

Weaver highlighted a few more tangible effects of scientism. In an interesting precursor to present-day challenges to the so-called liberal media by the American right, Weaver devoted considerable commentary on what he called "the Great Stereopticon", or the mass media. This "Great Stereopticon" was aided and abetted by technology; indeed, its power derived directly from technology: "All of us in the West who are within the long reach of technology are sitting in the audience. We are told the time to laugh and the time to cry, and...the audience grows ever more responsive to its cues." The combined influence of the Great Stereopticon and philosophical fragmentation manifested itself among ordinary citizens through what Weaver called "the spoiled-child psychology." Science contributed mightily to this social phenomenon because it told humankind "there is nothing [it] cannot know," and from this followed the notion that "there is nothing [it] cannot have." This view of entitlement was particularly evident in the life of the urban dweller. The urbanite was told that he or she had a right to material comfort, but when faced with the toil of daily life, was led to believe by materialist demagogy that forces conspired to deny him or her the easy life. It was a worship of comfort that was "an aspect of our decision to live wholly in this world" and turn away from non-material truths. Before this comfort for all could be achieved, society needed to turn to greater discipline, or else slide into decay. Weaver pointed out that one source of discipline—

[27] Ibid., 60-65.

Soviet communism—confronted the Western world, but that the West had to find another if it did not want to choose the path of totalitarianism.[28]

Weaver's concluding thoughts on strategies to counter the decline of the West fomented by materialism and science concerned, as the title of the final chapter indicates, "piety and justice." In this chapter, Weaver set up two opposing structures: science and technology on one hand, and "the order of nature" on the other. The ideas examined here were, at their heart, a reiteration of very similar themes Weaver explored in *The Southern Tradition at Bay*, and this serves to illustrate vividly the vision of the good society inspired by Weaver's conception of the antebellum American South. In *Ideas Have Consequences*, Weaver wrote that piety was "discipline of the will through respect." This respect entailed an acceptance of the ultimate mystery of nature, which allowed human beings to appreciate "the substance of the world" while at the same time keeping a healthy distance so that one may engage in proper contemplation of what lay beyond the material world. For Weaver, the desire on the part of science to dominate and control nature signified, ironically, an obsession with nature that imprisoned the observer. Piety also took the form of "acceptance of other beings." Acceptance of nature allowed one also to accept ways of living different from one's own; conversely, the drive to dominate nature was easily extended to a drive to dominate other human beings. Egalitarians who pled for tolerance did not understand that piety must play a role, but their scientific inclinations obstructed this understanding. The best hope for humankind, according to Weaver, is that there comes some "passionate reaction" in the future against "the reality

[28] Ibid., 93, 113, 124-128.

of evil." Weaver counseled a preparation for such a "revival" now in "this waning day of the West."[29]

Ideas Have Consequences brought together a number of themes prominent in postwar conservative thought. Weaver's harsh indictment of egalitarianism, evident in his criticism of state planning, was indicative of a conservative reaction against the New Deal, despite the fact that attempts to expand the New Deal had failed by 1948. The vital role of private property is also familiar, as we have seen in Hayek's work, but more importantly for Weaver, property also engendered moral virtue because maintaining property requires thrift and hard work, characteristics that have intrinsic value. Weaver's notion of piety speaks to the strong influence of religion in conservative thought, especially among traditionalists. Weaver's anticommunism is clear when he spoke of communism as a source of enforced discipline, when he referred to the "logical clarity" of communists, and the materialism of communism. Since science and materialism were closely linked in Weaver's writing, the logical precision of communist theory represents a sinister challenge to the West, rather than something to be emulated. Even in a work that criticized modern *Western*, particularly American, culture, the shadow of communism still loomed in the background. Though Weaver traced the decline of the West to a point over 600 years in the past, *Ideas Have Consequences* was more properly a response to the more immediate cultural, political, and social changes brought about during the 1930s and 1940s.[30]

---

[29] Ibid., 171, 172, 173, 175, 187. Weaver cited, as an example of impiety towards nature "the foolish notion of the 'equality' of the sexes." Women were compelled (perhaps due to the decline of chivalry) to move out of their "natural sphere" and into a drab working existence. See ibid., 177-180.

[30] Ibid., 9, 122, 124.

Ideas Have Consequences produced a strong response, both favorable and unfavorable. No less than seventeen reviews of the book were written, and no subsequent work of Weaver's garnered as much attention. Reactions on the part of left-liberal reviewers ranged from annoyance to outrage. Howard Mumford Jones, writing for the *New York Times*, labeled the book a "sincere, fanatical, and, for my money, irresponsible piece of writing." Antioch College philosophy professor George Geiger was more choleric, describing his review as a "violent reaction" to a "pompous fraud"; he went on to pronounce *Ideas Have Consequences* as "essentially an evil book." Reviewers of the religious, particularly Catholic, press were much more positive. *Commonweal* took the book to be "in goodly company, engaged upon a godly work." *Catholic World* lauded Weaver's "unanswerable logic and lucidity." Weaver clearly struck a nerve in a postwar world still struggling to come to terms with the devastation of World War II, the wider implications of the atomic bomb, the economic changes brought about by the New Deal, and the gathering storm of the Cold War.[31]

In a later work, Weaver surveyed the effects of specific scientific developments on humankind's perception of itself. This, for Weaver, was the heart of the matter. Weaver considered human existence to be defined by the perception among humans that they

---

[31] Howard Mumford Jones, "Listing Mankind's 'Wrong Turnings'," review of *Ideas Have Consequences* by Richard M. Weaver, *New York Times Book Review*, 22 February 1948, 4, 25, on 4; George R. Geiger, "We Note...The Consequences of Some Ideas," review of *Ideas Have Consequences* by Richard M. Weaver, *Antioch Review* 8 (1948): 251-254, on 251; W. A. Orton, review of *Ideas Have Consequences* by Richard M. Weaver, *Commonweal*, 14 May 1948, 119-120, on 120; John Fermatt, review of *Ideas Have Consequences* by Richard M. Weaver, *Catholic World*, June 1948, 278-279, on 279. Weaver's favorable view of the Middle Ages and Church thought of that era may account for the reviews of the Catholic press; Weaver's own religious activity was limited to attending the Christmas services of the Episcopalian Church each year. Some in the Protestant press saw in Weaver an affinity for the Catholic Church; in the May 5, 1948 issue of *Christian Century*, a reviewer castigates Weaver on the grounds that he advocated "a return to the medieval papacy."

have inherent freedom and dignity other creatures do not have. Yet science increasingly undermined this view. In the fifteenth and sixteenth centuries, the discovery that the earth was not the center of the universe led some to infer that "man has a very small significance in the totality" of existence. This devaluation set the stage for next great stage in "the reconsideration of man," Darwin's theory of evolution. Evolution damaged the exceptionalism of the human being by placing humans "squarely in the animal kingdom." If humans were but higher animals, then there was little to keep them from practicing a higher barbarism. Weaver attacked the theory of evolution itself by claiming that it begged the question by assuming naturalistic causes; that it could not eliminate prescription in accounting for genetic mutations; and that evolutionary explanations of human language rested upon "feeble analogies."[32]

The observable result of the devaluation of humankind, Weaver wrote, was the decline of culture, especially high culture. The first cultural casualty of the advance of science was "high tragedy," which "began to disappear from our Western literature at the end of the seventeenth century, which was the very time that science first staked out its great claims." Because tragedy "presents a universe still unknowable," it was not compatible with the scientific perspective that everything is ultimately knowable. The novel in the twentieth century was fading as an art form because the novel increasingly portrayed "the abnormal, the aberrant, and even the criminal." Weaver did not predict the death of literature, but warned that it is dependent on the belief that human beings "are unconditioned," by which he meant that human action is not merely predetermined by

[32] Richard M. Weaver, *Visions of Order: The Cultural Crisis of Our Time* (Baton Rouge, LA: Louisiana State University Press, 1964), 135, 136, 137-142.

natural causes. Any proper study of humankind, of which literature was a part, stemmed from the knowledge that "no person in the practice of living really thinks of himself as... elements to which he is reducible chemically." Weaver called for a renewed understanding of the "real image of man," which included examination of "human life, with all its moods, impulses, choices and means, failures and successes."[33]

In Weaver's view, culture and rhetoric were closely intertwined. Weaver's significance to the conservative movement and as a thinker generally stems from his cultural criticism and rhetorical theory; Weaver's writings on these two topics made up by far the bulk of his work. Some exploration of Weaver's theories of culture and rhetoric is useful for understanding his attitudes toward science. Weaver wrote that rhetorical force reified "some prime mover of human impulse." Certain terms manifested this prime mover and were esteemed above others; Weaver called these "god terms." In the modern era, Weaver identified the ultimate god term as "progress," noting that that use of the word "will validate almost anything." God terms that support the concept of progress included "fact" and "science" which have taken on importance because instead of acquiring knowledge through "divine revelation or through dialectic," humankind in the modern era employed a "system of verification through correspondence with physical reality." Science was now regarded as "the undiluted essence of knowledge."

Standing in opposition to the god terms of modern rhetoric were the "devil terms" such as "Nazi," "fascist," and "Communist." Weaver singled out the word "prejudice" as

[33] Ibid., 146-151. The reader may be troubled by Weaver's dependence on generalities and abstractions. Weaver admitted that his argument was difficult to prove empirically, but stated that even empirical evidence relied on "reference to underlying principles" (p. 148). As a neo-Platonist, Weaver considered first principles that could not be ascertained empirically far more important. This is one of the most salient characteristics of Weaver's entire body of scholarship.

one that has unfairly become a devil term. "Prejudice," fundamentally, meant any judgment made before the all the facts are in, not unlike a scientific hypothesis in Weaver's view. It was now, however, used to discredit any sort of value judgment, especially with respect to human beings. Such rhetoric served well the scientistic worldview, a philosophy that eschewed value judgments or makes such judgments but tried to conceal the fact through rhetoric.[34]

As seen in our discussion of Hayek, social sciences often aroused conservative ire, and Weaver offered his own particular brand of criticism. Conservative critiques of social science often displayed the theme of scientific doctrines being applied outside their proper sphere of influence. Weaver's article in *Scientism and Values* (1960), titled "Concealed Rhetoric in Scientistic Sociology," focused on the language that social scientists employ and argued that such language betrayed a desire to co-opt the prestige of natural science and a melioristic bias in approaching social problems. *Scientism and Values* was a part of the William Volker Fund Series in the Humane Studies, a series of books dealing with various problems and containing articles written by, generally, conservative scholars. William Volker, a furniture distributor from Kansas City, Missouri, established the William Volker Charities Fund in 1932 to contribute financially to "charitable, educational, and scientific purposes." Though not explicitly a conservative organization, the Volker Fund provided an outlet for conservative thinkers in a time when

[34] Richard M. Weaver, *The Ethics of Rhetoric* (Chicago: Henry Regnery Co., 1953), 211-232. Chapter 2 in *Ethics of Rhetoric* ,"Dialectic and Rhetoric at Dayton, Tennessee", is another good example of Weaver's suspicion of science evinced through his rhetorical analysis of the arguments for both the prosecution and the defense in the Scopes trial of 1925. Weaver contrasted "empirical fact" (employed by the defense) unfavorably with "dialectical truth" (employed by the prosecution).

many conservatives believed that most philanthropic and mass media agencies embraced liberal views.[35]

Weaver's importance to postwar conservatism lay principally in his work as a social critic rather than as an "activist" of the *National Review* set. An intensely private person, he did not move in the intellectual circles of many postwar conservatives. Weaver did, however, contribute articles and book reviews to *National Review*. His writings reveal a desire to seek first principles and root causes, and, in a time of conservative uncertainty, he appealed to those who wished to establish a conservative foundation. A biographer of Weaver, Fred Young, writes that "they [conservatives] sought him out and not the other way around." Weaver was a philosopher of culture and rhetoric and it was in this capacity that Meyer viewed Weaver as "the *fons et origo* (source and origin)" of the modern conservative movement. Meyer's characterization of Weaver's importance had the benefit of hindsight; writing from the perspective of the early 1970s, Meyer could look back and assess the impact of Weaver on a growing conservative movement. During his own lifetime, however, Weaver remained somewhat of an outsider. Willmoore Kendall captured that sentiment when he wrote that Weaver was "more eulogized than heard."[36]

---

[35] Brochure describing Volker Fund, Eric Voegelin Papers, box no. 42, Hoover Institution Archives. The William Volker Charities Fund was dissolved in 1964.

[36] Fred Douglas Young, *Richard M. Weaver, 1910-1963: A Life of the Mind* (Columbia, MO: University of Missouri Press, 1995), 125; Bernard K. Duffy and Martin Jacobi, *The Politics of Rhetoric: Richard M. Weaver and the Conservative Tradition* (Westport, CT: Greenwood Press, 1993), 202, hereafter cited as *Politics of Rhetoric*. Duffy and Jacobi's book provides accessible summary and analysis of virtually the entire range of Weaver's work.

Weaver's book reviews for *National Review* include, for example, "Easy Conclusion," review of *Towards a Science of Peace* by Theodore L. Lentz, *National Review*, 26 November 1955, 29; "Flesh for a Skeleton," review of *Number: The Language of Science* by Tobias Dantzig, *National Review*, 28 March 1956, 26; "On Social Science," review of *The Proper Study of Mankind* by Stuart Chase, *National Review*, 9 May 1956, 20; "Science and Sentimentalism," review of *In Search of Man* by André Missenard, *National*

It is, in a sense, paradoxical that Weaver received such honorifics from thinkers like Meyer. Weaver's conservatism did not fit neatly in any stream of conservative thought during his life, and even less so today. His strong identification with the virtues of the past permits one to call him a "traditionalist," but his sense of tradition was both more expansive and narrow than that of his fellows. Weaver harkened back to a broad Western medieval tradition that he believed was embodied in the regional culture of the antebellum American South. Liberty entailed a freedom to play one's appropriate role in society; though Weaver decried the growth of state power, it is hard to imagine he would advocate a minimal state incapable of enforcing the social order he felt necessary for a culture to survive. Weaver defended private property, but certainly made no fetish of capitalism, the defense of which, both at home and abroad, became an increasing priority for postwar American conservatism. A profound religiosity pervaded Weaver's work, yet his intellectualism separated him from the populist New Right, strongly influenced by evangelical Protestantism, that arose in the mid-1960s.

Weaver's enemies, however, were the same as those of other conservatives. Weaver attacked communism and cultural degradation. Progressive, Deweyite education represented a force of modernism supported by "romantic enthusiasts, political fanatics, and unreflective acolytes of positive science," a view to which conservatives were sympathetic. Another target of Weaver's was the General Semantics movement in linguistics. General Semanticists sought to purge language of all subjectivity and tendency; to Weaver this was nothing less than scientistic heresy that would destroy the cultural role of rhetoric. Most conservatives were not linguists or even rhetorical

---

Review, 7 December 1957, 524-525.

theorists like Weaver, but his attack on semantics on the basis of respect for an older rhetoric spoke to the more general consternation with which conservatives received liberal "innovators." Weaver wrote in a time of "well-entrenched social liberalism," at least to conservatives, and his "iconoclastic, incisive, and trenchant" criticism of modern society appealed to conservatives looking for kindred spirits. No wonder that conservatives at the time claimed Weaver as one of their own.[37]

Weaver's critique of scientism did not rest mainly on criticism of specific scientific content. Weaver saw a place for science, but it was to be "below that of philosophy and theology." When Weaver employed the terms "science" and "technology" in his cultural criticism, he really meant the broader notion of scientism. When Weaver disputed specific scientific content, he was less successful. For example, in his discussion of evolution, he suggested that because mutations occur in species far ahead of a time when they are of adaptive use, there could be some sort of "providence" indicative of an "inscrutable purpose" that scientists could not explain. Weaver also questioned the usefulness of small adaptations; that is, early, "rudimentary forms" of now fully-developed organs, such as the eye. Weaver wondered if early forms of adaptive organs could not have really helped an organism survive against a broad array of natural forces. Rather than accept the evolutionary argument that adaptation requires a long period of time, Weaver maintained that "imagination" could introduce causes of change that do not

---

[37] Weaver, *Visions of Order*, p. 115; Duffy and Jacobi, *Politics of Rhetoric*, 6. On Weaver's critique of General Semantics, see Duffy and Jacobi, *Politics of Rhetoric*, 159-173. There has been revived interest in Weaver, and not always among conservative intellectuals. See Eugene Genovese, *The Southern Tradition: The Achievement and Limitations of an American Conservatism* (Cambridge, MA: Harvard University Press, 1994) for a sympathetic overview and discussion of Southern conservatism; Joseph Scotchie, ed., *The Vision of Richard Weaver* (New Brunswick, NJ: Transaction Publishers, 1995) for sympathetic, even hagiographical, essays on Weaver and his impact.

depend on time. On the questions of both mutation and infinitesimal change, Weaver disputed evolutionary explanations, but here he shifted the basis of the argument away from evolution as science and toward evolution as metaphysics. This shifting of the question allowed Weaver to stack the deck in his favor by stating, essentially, that science could not prove that non-natural causes of species change do *not* exist.[38]

Weaver, hence, did not fully understand the science behind evolution, which explains his need to invoke speculative arguments against it. Weaver's ultimate aim, however, was not to debate science, but to attack a particular philosophy of science. His cultural criticism that encompassed a serious discomfort with scientism has faded from modern conservatism by and large. Perhaps this is because Weaver's overall traditionalist conservative program did not lend itself fully to the conservative priorities of the day. Weaver opposed socialism and communism, but his emphasis on freedom—the conservative antithesis of communism—was much more muted than that of Hayek. Many conservatives deemed arguments about freedom, especially economic freedom, as much more valuable to the general conservative cause. Weaver's agrarian, and anticapitalist, sympathies looked anachronistic and ineffective to conservatives trying to articulate a coherent philosophy that could focus on something virtually all Americans recognized, the threat of communism. Hayek's arguments commanded a fair amount of attention in his own day, and a considerable amount of attention since the 1970s; the literature by and about Hayek is quite large. Weaver is only beginning to be rediscovered, and even so on a much smaller scale.

---

[38] Duffy and Jacobi, *The Politics of Rhetoric*, 133; Weaver, *Visions of Order*, 140-141.

THE GATHERING: *NATIONAL REVIEW*

As noted earlier, conservatives in the early Cold War period did not maintain a mass media product explicitly dedicated to disseminating conservative ideas. This changed in 1955, when William F. Buckley, Jr. founded *National Review*, a journal of conservative opinion that was to serve as a focal point for a conservative voice within the media. Many significant figures in the postwar American conservative community, such as Frank S. Meyer, Richard Weaver, Russell Kirk, and James Burnham, served as contributors, editors, or both. Though *National Review*'s circulation remained small in its early years, its importance to the conservative movement should not be underestimated. *National Review* brought together, in print, leading conservative thinkers in a publication aimed at a wider audience than magazines such as *The Freeman* and academically-oriented journals such as *Modern Age*. In its early years, *National Review* also brought to light the different currents of conservatism—especially libertarian and traditionalist conservatism —as well as the efforts to reconcile these sometimes conflicting moods.

The Freeman, originally Albert Jay Nock's magazine, was revived in 1950 by John Chamberlain, a former editor of *Life*, Henry Hazlitt, a columnist for *Newsweek* who wrote on economic issues, and one of Nock's former editors, Suzanne LaFollette. The founders of the new *Freeman* marshaled financial support from a number of individuals; probably the most important source of funds came from businessman Alfred Kohlberg, who had been financing the anticommunist magazine *Plain Talk*, but switched his support to *The Freeman*. With money and an editorial board in place, *The Freeman* set out to defend its vision of classical liberalism against the American left. The magazine called for "decentralization of political power" and was especially focused on issues of economics

and the free market. Despite this auspicious start, *The Freeman* suffered from internal disputes regarding editorial policy, and most of the original editorial board resigned. As a result of this breakdown, Leonard Read, who headed the conservative Foundation for Economic Education, bought *The Freeman*, and made it into a journal of free market economic philosophy, which it remained up to the present day.[39]

Conservatives, however, were not content to depend on *The Freeman* as an outlet for their ideas. William F. Buckley, Jr., who achieved some notoriety due to *God and Man at Yale* and *McCarthy and His Enemies*, was able to make use of his connections to other conservatives to aid him in his own project of establishing a new conservative magazine. Buckley set about raising money for his new magazine and put together an editorial board from the conservatives he had met over the course of several years, including Willi Schlamm (formerly of *The Freeman*), Willmoore Kendall, James Burnham, John Chamberlain, Frank S. Meyer, and a number of others. Initially, the founders proposed the name *National Weekly* (also the name of the publication's parent corporation), but that name had already been claimed, so the editors settled on *National Review*. Full editorial control was vested in Buckley at the suggestion of Schlamm, who feared a repeat of the *Freeman* collapse. *National Review* then went to press, and its first issue appeared on November 19, 1955.[40]

In the efforts of *National Review*'s contributors to forge a coherent conservative opposition to what they believed was an ever-encroaching liberal state and a decaying moral order, some discussion about science played a role. These discussions not only demonstrate the search for an identity on the part of conservatives, but the ambiguous

[39] William A. Rusher, *The Rise of the Right*, 2nd ed., (New York: National Review Books, 1993), 21-22.

feelings that conservatives had about science. Coverage of scientific issues in *National Review* ranged from book reviews to columns to occasional essays on science and scientists, especially those well known to the public. Anxieties about science and technology are prominent in these articles; it is not surprising that social sciences are sometimes singled out for conservative disapprobation. Viewed against the background of unprecedented growth in government support for science, the tension conservatives felt regarding science can be seen as part of an overall effort to come to grips with the Cold War American state and society.

As we have seen in the works of Hayek and Weaver, articles in *National Review* often dealt with science holistically, portraying science as a philosophy as well as an intellectual quest. An article that illustrates the nervousness with which conservatives approached science appeared as one of Frank S. Meyer's "Principles and Heresies" columns in 1956. Meyer criticized what he called "the bigotry of science." Meyer defined this bigotry as "the demand that all activities of the intellect which do not follow the methods of the sciences...be cast into outer darkness as infantile or superstitious." Conservatives ought to have been troubled by this because the bigotry of science acted as "a buttress to the constraining power of Liberal ideology." Like Hayek, Meyer took care to point out that he was not opposed to science *per se*; the method of the sciences was not wrong, rather "its application to areas unamenable to its characteristic virtue" of finding the causal principles behind natural phenomena. Those who looked to science as a kind of savior of the human race engaged in "science-worship" that was misguided because the

---

[40] Ibid., 28-30.

deeper issues involved "defects of moral understanding and will" that science could not solve.[41]

In a "Principles and Heresies" column of 1958, Meyer dealt with a specific scientific topic, that of space exploration, but discussed this in the overall context of appropriate values and goals. Meyer wrote that he found space exploration an impressive demonstration of "human material triumph," but was suspicious that space sciences were not simply being applied for immediate necessities ("our war with the Soviet Union"); they were instead part of a desire "to make of our skill in enginry an end in itself." The enthusiasm for space exploration ought to have been tempered by the understanding that entry into space "will do nothing to change the essential problems of human existence." Meyer listed some of these as decay of education, social control of the nation by "the lowest common denominator of our people," and the preponderance of "the manipulators of the masses." If idealism was not enough, Meyer pointed out the expense of space projects, which were funded by tax dollars from citizens who may simply not care. State support for incursions into space constituted an expansion of state power that could go well beyond its "proper functions"; Meyer warned that "it is an axiom, theoretically derivable," that state expansion "buttresses evil and undermines the good." What Meyer suggested was that science should not be pursued for its own sake, but only if its ends "derive from the values we espouse." In light of the problems facing humankind, Meyer's dictum was to "say No to the temptation of power over other universes."[42]

---

[41] Frank S. Meyer, "The Bigotry of Science," *National Review*, 8 March 1956, 234. See also Frank S. Meyer, *In Defense of Freedom: A Conservative Credo* (Chicago: Henry Regnery Co., 1962), for discussion, with a libertarian bent, of scientism and its social applications.

[42] Frank S. Meyer, "Hey, Wait A Minute," *National Review*, November 8, 1958, 307.

National Review continued on the well-traveled conservative path of attacking the social sciences. Many articles and columns brought to bear conservative calumnity upon the liberal excesses of these disciplines. Frank Meyer once again struck out against these excesses in another column series, "The Scholarly Journals." In 1956, Meyer criticized sociological analyses of political trends, in particular those that addressed the American right. Meyer accused sociologists of applying the concept of "mass delusion" to Americans who advocate right-wing political causes as a way to rationalize the fact that "millions of Americans are in principled opposition to their position," which favored "the welfare state, Deweyite education," and so forth. A specific study that Meyer targeted is *The Authoritarian Personality*, published by T. W. Adorno and colleagues in 1950. This study attempted to find a correlation between political and economic views and tendencies toward authoritarianism; scores high in "political and economic conservatism" supposedly correlated with a tendency toward "fascistic" views. To Meyer, this was nothing more than "the social scientist's need of a construct to explain to his emotional satisfaction the 'irrational' obstinacy of those who do not accept the blessings of the welfare state." Invocation of "the authoritarian personality" harnessed social science in the service of liberalism and discounted the genuine feelings of the American people who opposed it. It was, in fact, a kind of mass delusion on the part of the social scientists themselves.[43]

National Review found another villain in sex researcher Alfred Kinsey. An editorial in the September 8, 1956 issue of *National Review* criticized the work of Kinsey, who died on August 25 of that year. The editorial considered the attention given to Kinsey's

[43] Frank S. Meyer, "Symptoms of Mass Delusion," *National Review*, 8 February 1956, 23-24, on 24.

famous studies, *Sexual Behavior in the Human Male* (1948) and *Sexual Behavior in the Human Female* (1953), to be "prurience, hardly distinguishable from the perennial gobbling of 'dirty books' and 'filthy pictures'," but noted that "[o]ne might pass over [that] fact." The *National Review* editors regarded the greater evil to be Kinsey's equation of love with sex, which created "a crude and cruel parody of the nature of the human being." By eliminating questions of the moral and metaphysical love that is linked with sex, Kinsey destroyed "the real man and plunge[d] into the desolate materialism of our time." Furthermore, what Kinsey concluded in his study with respect to sexually aberrant behavior is not even new; this has been "known to every poet and prophet since the beginning of time." Kinsey, however, ignored the traditional humanistic knowledge of the nature of humankind and, ever the good meliorist, argued against strict attitudes toward sexual aberrance. What this demonstrated was Kinsey's "confusion between the moral and empirical order, between values and facts," and if that was not enough, the editors warned that "the disciples of Lenin draw out the final meaning of Dr. Kinsey's implicit principles." Conservatives saw an intellectual as well as a political threat (which were linked to one another) from communism hiding under the cloak of scientistic social science.[44]

Scientists also bore the brunt of criticism from the writers and editors of *National Review*. J. Robert Oppenheimer, for example, was singled out in various *National Review* articles as a clear illustration of what was wrong with the American scientific community, especially those who worked in atomic physics. Not surprisingly,

---

[44] "Love Among the Ruins," *National Review*, 8 September 1956, 7. See also Russell Kirk, "Those School Psychological Tests," *National Review*, 30 June 1964, 539, for a critque of the application of psychological testing in education.

Oppenheimer was castigated for being "intimately and intricately connected with numerous Communists by ties of blood, and by love and money;" the author of the March 1956 article concluded that "it is not surprising that Communists got our atomic information and materials." The same author, in an August 1956 book review, described "the most important victory which the United States has scored since V-J Day" as "the revoking of Robert Oppenheimer's security clearance." For good measure, the review went on to state that "it was as vital to remove Oppenheimer as it once was vital, in another country, to remove Rasputin." Oppenheimer stood as a symbol of an atomic elite that purported to know what was best for the American people through opposition to nuclear weapons, a liberal weakness that ran against the opinion of Americans. *National Review* writers expressed distress, but not surprise, that scientific and academic elites chose to ignore Oppenheimer's purported disloyalty: Buckley deplored the decision of Harvard University to invite Oppenheimer to deliver the William James Lectures of 1957. In a 1959 editorial, *National Review* ridiculed the award of $90,000 to Oppenheimer by the National Science Foundation, due to the revocation of his security clearance as a government advisor in 1954. Scientists like Linus Pauling (who was active in the antinuclear movement) did not escape the attention of *National Review*, either; viewed through the lens of the Cold War, *National Review*'s suspicion of scientists was rooted in a convergence of anticommunism, a qualified antiscientism, and a form of antielitism.[45]

---

[45] Medford Evans, "How Possible Is Secrecy?" *National Review*, 14 March 1956, 11-13, on 11, 12; Medford Evans, "The Arrogant Atomic Elite," review of *Atomic Energy and Congress* by Morgan Thomas and Robert M. Northrop, *National Review*, 18 August 1956, 18-19, on 19; William F. Buckley, Jr., "Where Angels Fear to Tread," *National Review*, 22 February 1956, 23; "What so False as Truth Is, False to Thee?" *National Review*, 31 January 1959, 479-480; see also "Couldn't it Happen Here?" *National Review*, 5 July 1958, 54, and Isabel Paterson, "The Oracles are Dumb," *National Review*, 23 May 1956, 10-13, 16.

Linus Pauling and *National Review* had an especially unpleasant conflict that serves to illustrate the contentious relationship between conservative journalists and left-liberal scientists. Pauling sued *National*

The varying currents and priorities of scientific thought produced shifting views on the importance of science. *National Review* articles tended to support the development of scientific knowledge in the service of national defense. Medford Evans wrote that a reason to oppose Adlai Stevenson in the 1956 presidential election is that he "acts as part of...the orthodox Liberal effort to make sure that we are not stronger than others," and accuses Stevenson of an "anti-security, anti-[Atomic Energy Commission Chairman Lewis]Strauss line on atomic energy." Science *did* have its value when applied to the cause of opposing the Soviet Union; liberals like Stevenson supposedly had the idea of scientific utility in reverse, and they were identified with science in the service of social meliorism and materialism but not with science for defense. *National Review* hailed the launch of the satellite Explorer in 1958 as a "return to sanity." Its modest performance reminded us that technological superiority does not equal superiority, yet with intelligence, the United States may "stay ahead" of the Soviet Union. Anthony Harrigan, in a 1963 article, argued that the United States should pursue chemical warfare in Southeast Asia; by employing its "industrial and technical know-how," the United States could gain an advantage in Southeast Asia against guerilla warfare. Harrigan, anticipating objections to chemical warfare as inhuman, wrote that gas warfare (particularly with newer, non-lethal gases) was actually more effective and more humane than nuclear weapons and even small arms.[46]

Review for libel after the magazine suggested in 1962 that Pauling was a communist sympathizer. The suit was dismissed in 1966; *National Review* covered it extensively its May 3, 1966 (pp. 403-407) and May 17, 1966 (pp. 459-466) issues.

[46] Medford Evans, "The Difference Is Atomic," *National Review*, 3 November 1956, 9-11, on 10; "Welcome, Explorer; Thanks, Mr. Baldwin," *National Review*, 15 February 1958, 151; Anthony Harrigan, "The Case for Gas Warfare," *National Review*, 9 April 1963, 283, 298, on 298. See also "Reflections from Space," *National Review*, 13 March 1962, 154-155, 157 for an editorial view of John Glenn's space flight.

The attitude of *National Review*'s writers toward science is made clearer when one compares *National Review* articles about science with articles from liberal journals. A leading liberal magazine, *The New Republic*, often contained material with a much different view of science. *The New Republic*, like most other journals of the time (including *National Review*), made explicit links between science and a robust national defense; editors opined that "we shall need some degree of national defense," and that "science must play an important part in keeping us at least abreast of developments in other countries." Yet *The New Republic*, in another issue, advocated scientists functioning "as their [politicians'] colleagues in the planning of policy," a far cry from *National Review*'s suspicion of an arrogant scientific elite. In supporting a national science program, *New Republic* editors stated that "we do not see how this main job can be done by anything less than government itself." The magazine offered stories on science from scientists such as Julian Huxley (listed as a contributor on the masthead) and Edward U. Condon. Huxley's article "A Scientist Goes to Russia" emphasized the high quality of most science in the Soviet Union, in contrast to critics who maintained that Marxism tainted science in the Soviet Union.[47]

The Nation, another left-liberal magazine, featured articles and editorials similar in tone to those of *The New Republic*. In the wake of the Hiroshima and Nagasaki bombings, British physicist J. D. Bernal wrote that "sooner or later, however, it will be

---

See also Medford Evans. *The Secret War for the A-Bomb* (Chicago: Henry Regnery Co., 1953). Evans was an employee of the AEC, but resigned out of the belief that the AEC was too lax with respect to security. *The Secret War for the A-Bomb* combines multiple themes of anticommunism, the need for military strength and secrecy, and attacks on scientists whom Evans deemed to be subversive.

[47] "Science and National Defense," *TNR*, 1 January 1945, 7; "Science and Democracy," *TNR*, 11 June 1945, 807; "A National Science Program," *TNR*, 30 July 1945, 116; Julian Huxley, "A Scientist Goes to Russia," *TNR*, 30 July 1945, 125-127; E. U. Condon, "Contemporary Science," *TNR*, 13 February 1950, 11-15.

possible to use atomic power economically to provide directly or indirectly for immediate human wants." He added the caveat that "the control of atomic energy...should be from the start a fully international control," in order to reduce the dangers posed by atomic energy. In later years, atomic energy remained of special interest at *The Nation*; the June 18, 1955 issue was devoted to analyses of various components of President Dwight Eisenhower's Atoms for Peace program. *The Nation* also had a regular science correspondent, Leonard Engel, who wrote on topics ranging from atomic energy to medicine. As was the case with *The New Republic*, *The Nation*'s contributors voiced optimism with respect to science. They were confident that science could do much to improve human life. They also linked this view of science with an internationalist ethos as evinced by *Nation* writer Freda Kirchwey's belief that "Russia should be given full information about the atomic bomb."[48]

The difference between the liberal magazines and *National Review* provides some insight into the conservative critique of science during the Cold War. In a sense, the idea of science and liberalism as natural allies is confirmed; the liberal journals tended to voice a more optimistic view of science and technology and tended to cover scientific issues more frequently and thoroughly than did *National Review*. Conservatives struck out at liberal iconography wherever they saw it. Science, viewed as the bastion of progressively-minded physicists and sociologists, was both a fair and inviting target. The fact, however, that conservatives took a hard line on defense and scientific bolstering of

---

[48] J. D. Bernal, "Everybody's Atom," *Nation*, September 1, 1945, 201-204, on 202, 203; for examples of Engel's work, see Leonard Engel, "Can Science Survive the Atom?" *Nation*, 28 January 1950, 84-85 and "Wonder Drugs: Plus and Minus," *Nation*, 2 December 1950, 502-503.; Freda Kirchwey, "Russia and the Bomb," *Nation*, 17 November 1945, 511-512, on 512.

defense, should come as no surprise to observers of American politics. In the context of conservatives' overarching anxieties about the place of science in modern America, the advocacy of science in the service of the military, but the suspicion of science in other realms of American life speaks to a struggle over priorities within the conservative movement. Richard Weaver regarded atomic weapons as barbaric, yet the editors and most contributors to *National Review* consistently supported their construction. Conservatives, aware that communist theorists presented Marxism as a scientific philosophy of society, expressed alarm at Western society's embrace of science, a temptation that could easily lead the West down the road of totalitarianism and defeat. The more immediate political struggles—against liberal orthodoxy and its inability to effectively oppose communism—gradually took center stage in the minds of conservatives.[49]

Ironically, communism defeated the conservative critique of science. Anticommunism united conservatives of all stripes, whether libertarian or traditionalist. This produced greater unity among conservatives, but at the cost of foregoing the critique of scientism as a major conservative project. Communism, the political manifestation of Marxism, that most "scientific" philosophy, was to be defeated by a militant West. This required a strong military posture, which was impossible without science. World War II had seen to that. Criticism of science on the part of conservatives faded, to be taken up by thinkers on the left, creating an exchange of positions on science between conservatives and leftists many could not foresee in the 1950s.

---

[49] For Weaver's view of the atomic bomb, see Weaver, *Ideas*, 64.

Summary

By the early 1960s, the emergence of a distinctly conservative intellectual community was clearly evident. Throughout the Roosevelt era, conservatives were not absent, but were certainly weakened. They increased their visible intellectual activity beginning in the late 1940s and proceeded to gain in visibility throughout the 1950s by capitalizing on liberal disarray and tapping into latent feelings of restlessness and discontent. The Soviet Union provided conservatives with an ideal foreign target that they easily transported to the United States in their search for communists at home. The heady days for American liberalism in the 1930s steadily gave way to anxiety during the Cold War era; for conservatives, the same period represented an opportunity to consolidate, refine their philosophy, and grow in influence.

The place of science in American life piqued the interest of conservatives as part of their overall intellectual program. Science fit within the varieties of conservative thought in different ways. Those who, like Hayek, emphasized economic issues, saw in modern science a drift toward scientism in which the scientific method was exalted as the proper foundation upon which to organize a society. This had the effect of engendering, especially in the social sciences, a planning ethos that could easily be utilized by the state to curtail, and eventually destroy, human liberty. This was most evident in the economic field and this was dangerous because it was through economics that human beings made their ends achievable.

Traditionalists like Weaver viewed science through a different lens. Reflecting his overall concern with the decline of long-standing institutions and cultural practices, Weaver saw science and technology as destructively innovating forces when not reined in

by cultural mores. Indeed, Weaver believed that science was itself increasingly defining and shaping culture to the detriment of the West generally and the United States specifically. Weaver and other traditionalists shared with the economic conservatives a desire to maintain and protect private property, but their desired function for property was different than that of the libertarians. They emphasized property as a cultural and social stabilizing force rather than its economic role. Hence, a rampant scientism threatened a traditional social order, characterized by some degree of hierarchy, and from that grew a threat to property. Erosion of property rights was more of a symptom, rather than the root cause of decaying liberty brought about by excessive faith in science. Fundamentally, the "good society," to someone like Weaver, was based on order and virtue embodied in traditions, which were too often subverted by science.

Conservatives gathered on the pages of *National Review*, which eventually became the most successful of the conservative media, though this was by no means certain in the early years of the magazine. Here the varying, and often conflicting, streams of conservative thought found expression. The discussions about science in *National Review* illustrated the ambiguity and tension that many conservatives felt with respect to science. Science, both writ large and in the more specific case of the social sciences, embodied liberal faith in social change and innovation. *National Review* was set up as an explicit rejoinder to prevailing thought among liberals. Conservatives' criticism of science and scientism therefore fit into their larger "war" on liberal ideology. Yet this criticism was not without qualifications.

National Review writers and correspondents, with exceptions (such as Weaver), ardently supported defense expenditures. In this way, conservatives tacitly accepted the

importance of science. *National Review*, however, was a publication staffed by non-scientists. This leaves open the question as to what extent conservative scientists forged links with other conservative intellectuals and to what extent conservative scientists supported general conservative critiques of science. Did scientists themselves play a role in a growing conservative movement against scientism? In the next chapter, how conservative scientists figured into the broader conservative intellectual program, and their relationship with conservative antiscientism, will be addressed.

Chapter 3
Scientists and Conservatism

Conservative intellectuals demonstrated ambivalence about science during much of the Cold War period. They feared left-liberal scientism, which to their minds was evident in melioristic social sciences and the increasing participation of scientists from all fields in American political life. At the same time, conservatives did not engage in a full-bore attack on scientism, and they even found science useful for some purposes. This ambivalence reflected larger differences between conservatives over what sort of conservatism they ought promote. Because of this, anticommunism provided the glue that cemented the postwar American conservative movement. But what of scientists and their role? What sort of links did conservatives forge with scientists, and how did this affect the conservative critique of scientism?

The conclusion of the Second World War presented the United States with a number of challenges: demobilization, the reconstruction of Europe, and deteriorating relations with its wartime ally, the Soviet Union. The United States clearly emerged as the world's most powerful nation; by war's end, for example, the nation's gross national product had risen by 56 percent in real terms compared with the nation's GNP when the United States entered the war. Allies and enemies in both Europe and Asia, all of whom were economic rivals of the United States, had been either severely weakened or virtually destroyed by the war. The U.S. government turned its attention to the problem of how the postwar world would be defined, domestically and internationally, and who would define it.[1]

---

[1] John Dumbrell, "Cold War America, 1945-1960," in *America's Century*, 133-157, on 133.

The place of science in postwar America did not escape attention amid broader debates on domestic and foreign policy. The Allied victory in World War II, and the role in that victory played by the development of the atomic bomb in 1945 exemplified the importance of science to the military. Many scientists were now concerned with the continuation of federal support for science; a previously penurious scientific community saw federal funding rise to $500,000,000 by the end of the war, up from $48,000,000 at the start. By 1944, Vannevar Bush, as chair of the wartime OSRD, began considering plans for a peacetime scientific agency. Bush, in *Science—The Endless Frontier*, recommended the creation of a National Research Foundation to develop a national science policy and provide funding, in the form of grants and contracts, to universities and industrial laboratories in order to support research deemed in the national interest.[2]

As early as 1942, however, a West Virginia Democratic senator, Harley M. Kilgore, had proposed legislation to establish an Office of Technological Mobilization, a heavily centralized government research agency. Bush, Conant, and Compton objected strongly, fearing too much state influence. Senator Warren G. Magnuson, a Democrat from Washington, introduced a bill in 1945 to create a National Science Foundation based on Bush's recommendations in *Science—The Endless Frontier*. Kilgore's plan differed from the Magnuson bill in a few key areas, such as the distribution of funds and the question of whether or not to include the social sciences. The ensuing debate over the nature of the NSF continued for another four years; when the NSF was finally established in 1950, it

[2] Kevles, *The Physicists*, 341. Not all scientists, however, desired extensive federal funding. See Ronald E. Doel, *Solar System Astronomy in America: Communities, Patronage, and Interdisciplinary Science, 1920-1960* (Cambridge, UK: Cambridge University Press, 1996), chapter 6, on the views of many American astronomers who feared that federal support would undermine astronomy as an integrated discipline.

did not fully satisfy either Kilgore's or Magnuson's supporters, but it was closer to Magnuson's plan.[3]

The long NSF debate, as well as the creation of the Atomic Energy Commission (AEC) in 1946, were two examples that illustrated the importance of science and science policy in postwar America. Bush's report captured the feelings of scientists and policymakers on all sides of the issue of science policy: science was indispensable to the future prosperity of the United States. The Cold War that ensued after World War II served to reinforce the need to bring science to the forefront of American life. America's commitment to global anticommunism at almost any cost shaped the formation of science and scientific institutions in the United States throughout the 1950s and 1960s. The sense of urgency on the part of many Americans, and particularly conservative Americans, added yet another wrinkle to the already tense relationship between conservatives and science.[4]

---

[3] An official history that provides an overview of the NSF's formation can be found in J. Merton England, *A Patron for Pure Science: The National Science Foundation's Formative Years, 1945-57* (Washington, D. C.: National Science Foundation, 1983). For analysis of the NSF debate, see Daniel J. Kevles, "The National Science Foundation and the Debate over Postwar Research Policy, 1942-1945: A Political Interpretation of Science—The Endless Frontier," *Isis* 68 (1977): 5-26 and Jessica Wang, "Liberals, the Progressive Left, and the Political Economy of Postwar American Science: The National Science Foundation Debate Revisited," *Historical Studies in the Physical and Biological Sciences* 26, no. 1 (1995): 139-167.

[4] For a general history of the AEC, see Richard G. Hewlett and Oscar E. Anderson, Jr., *The New World, 1939/1946*, vol. 1, *A History of the United States Atomic Energy Commission* (University Park: Pennsylvania State University Press, 1962; reprint, Washington, D. C.: U.S. Atomic Energy Commission, 1972); Richard G. Hewlett and Francis Duncan, *Atomic Shield 1947/1952*, vol. 2 , *A History of the United States Atomic Energy Commission* (University Park: Pennsylvania State University Press, 1969; reprint, Washington, D. C.: U. S. Atomic Energy Commission, 1972); Richard G. Hewlett and Jack M. Holl, *Atoms for Peace and War, 1953-1961: Eisenhower and the Atomic Energy Commission*, vol. 3, *A History of the United States Atomic Energy Commission* (Berkley, CA: University of California Press, 1989).

SCIENTISTS AND ANTICOMMUNISM

The deteriorating state of relations between the United States and the Soviet Union had significant repercussions in terms of U.S. foreign policy. The United States government was alarmed by the extension of Soviet influence in eastern Europe; furthermore, the postwar economic crisis brewing in much of western Europe carried with it the risk that Communist parties in those nations would gain power. The United States took an increasingly hard-line anticommunist stance in the international arena. Perhaps the clearest expression of this tendency in the years immediately following World War II came in the form of the Truman Doctrine. Truman, in a speech at Baylor University, declared that the United States would support "free peoples" resisting subjugation by "armed minorities" or "outside pressures". The Truman Doctrine, however, was an expression of a broader U. S. anticommunist policy known as "containment". The architect of containment was the head of the State Department's Policy Planning Staff, George Kennan. Writing under the pseudonym "X" in the July 1947 issue of *Foreign Affairs*, Kennan called for a "vigilant" policy to limit "Russian expansive tendencies."[5]

Containment became the bedrock of U.S. foreign policy, and most if not all U.S. actions in the international realm were in some way linked to it. U.S. concerns over a vulnerable western Europe resulted in two major intiatives: the European Recovery Plan (ERP, more commonly known as the Marshall Plan, after Secretary of State George

---

[5] Geoff Stoakes, "The Foreign Policy of a World Power," in *America's Century*, 303-330, on 318-319. Containment, and even "rollback", became institutionalized in U.S. foreign and military policy with the adoption of the recommendations of NSC-68, the now-famous National Security Council document, written in 1950, that called for a massive military buildup. See Ernest May, ed., *American Cold War Strategy: Interpreting NSC-68* (Boston: Bedford Books, 1993). Historian Michael Hunt analyzes American foreign policy in terms of American desire to define a national ideology and export that ideology. See Michael H. Hunt, *Ideology and U. S. Foreign Policy* (New Haven, CT: Yale University Press, 1987).

Marshall), and the establishment of the North Atlantic Treaty Organization (NATO). The Marshall Plan, passed by Congress in 1947, provided for massive economic aid to European nations in order to rebuild European economies and restore trade. In 1949, the U.S. Senate ratified the NATO treaty, which formally committed the United States to the military defense of western Europe against the Soviet Union. The world situation, in the eyes of American policymakers, did not improve: the Soviet Union exploded its first atomic bomb in 1949, and the Communists gained victory over the Nationalists in China that same year. In 1950, communist North Korea invaded U.S.-backed South Korea. Those inclined to see Soviet-led Communist plans for world conquest at work were not easily dissuaded in the face of such developments. Besides the political and military maneuvering, containment also had a scientific component. Given the prestige of science worldwide, as well as its increasing importance to the polices of both superpowers, the United States supported international science programs in key Cold War battlegrounds (such as western Europe) in order to counter Soviet influence. [6]

The events unfolding on the global stage had a powerful effect on science within America's borders. The Atomic Energy Act, authored by a Democratic senator from Connecticut, Brien McMahon, passed Congress and was signed into law in 1946. It created the AEC, a civilian organization, but opposition by conservative lawmakers

---

[6] Stoakes, "The Foreign Policy of a World Power," 319-320. The Soviets were invited to take part in the Marshall Plan, but they found the conditions attached to participation, such as access to economic records, objectionable enough that they refused and forbade other nations under Soviet control to participate. See Walter LaFeber, *America, Russia, and the Cold War, 1945-1996* (New York: McGraw-Hill, 1997), 59. LaFeber draws the conclusion that American conditions were formulated to ensure Soviet rejection. On American participation in international science, see Allan A. Needell, "Rabi, Berkner, and the Rehabilitation of Science in Europe: The Cold War Context of American Support for International Science 1945-1958," in Francis H. Heller and John Gillingham, eds., *The United States and Integration of Europe* (New York: St. Martin's Press, 1996), 289-305.

necessitated an amendment to the original bill that gave the armed services a role in making AEC policy through a Military Liaison Committee (MLC). The MLC, as well as secrecy provisions added to the bill, illustrated the lens of anticommunism through which lawmakers saw atomic energy policy. Supporters of the McMahon bill envisioned free exchange of scientific information between nations, including atomic information. Members of Congress, aware of the power of atomic weapons, and mindful of (as well as helping to inflame) the growing Cold War conflict with the Soviet Union in Europe, considered atomic energy a special case with special value. It could not be separated from the demands of national security, even if the AEC's intended principal role was not military.[7]

The existence of atomic weapons helped to ensure that there would be an additional urgency attached to postwar debates over science, foreign, and defense policies. Scientists, particularly physicists, became increasingly active in political discussion surrounding such issues as nuclear policy and scientific organization. Motivated by various concerns, physicists began to form organizations designed to educate the general public on nuclear issues and influence public policy. Not surprisingly, these groups were often centered around sites of research on the atomic bomb: the Atomic Scientists of Chicago, the Association of Oak Ridge Scientists, and the Association of Los Alamos Scientists. Though not concerned with broad political goals at the outset, these scientist

[7] Stoakes, "The Foreign Policy of a World Power," 320; J. Wang, *Age of Anxiety*, pp. 18, 21. During consideration of the McMahon bill, Canadian authorities arrested 22 people on charges of furnishing classified atomic information to the Soviet Union, convincing some members of Congress that greater secrecy was needed (J. Wang, p. 25). Other security-related legislation included the McCarran Internal Security Act (1950), which required Communist Party members to register with the federal government and the McCarran-Walter Act (1952), which barred "subversive" immigrants from entering the United States and authorized deportation of Communist-affiliated immigrants. See Kirkendall, *Global Power*, 77.

groups exhibited a "commitment to international cooperation in science...optimistic faith in the capacity of people to act rationally for the greater good, and their belief that science could serve as a model for rational decision making." Such beliefs were generally identified with left-liberal politics.[8]

Militantly anticommunist forces in government closely watched for a communist threat within the country. Perhaps the most notorious of these was the House Committee on Un-American Activities (HUAC), which took a leading role in ferreting out supposed subversive and Communist Party elements in American society. Scientific groups and organizations did not escape this scrutiny, given the increasingly important role scientists played in foreign and security affairs. HUAC members sought evidence that scientists' groups wished to undermine the security of the United States and that scientists' support of particular legislation, such as the McMahon bill, was simply an extension of their dangerous leftist politics. Both Edward U. Condon and Harold C. Urey, scientists prominent in the movement for civilian (and international) control of atomic energy, were the targets of personal attacks by members of HUAC in order to discredit the McMahon bill. Scientists and scientists' groups continued to be harassed by both HUAC and the FBI, which often engaged in illegal surveillance and used informants to report on "questionable" scientists, through the late 1940s and 1950s.[9]

---

[8] J. Wang, *Age of Anxiety*, 13.

[9] Kirkendall, *Global Power*, 72, 76; J. Wang, *Age of Anxiety*, 45-48, 58-67. Condon and Urey were significant targets because of their stature within the American scientific community; Condon was director of the National Bureau of Standards (a position from which he would resign later due to political pressure), and Urey was a Nobel laureate. See also Jessica Wang, "Science, Security and the Cold War: The Case of E. U. Condon," *Isis* 83 (1992): 238-269.

SCIENTISTS AND THE CONGRESS OF CULTURAL FREEDOM

The ideological conflict between the United States and the Soviet Union was as much a conflict between intellectuals as it was a conflict between governments. One organization in the West that exemplified this was the Congress for Cultural Freedom, a vehemently anticommunist group formed in Berlin in June 1950. The Congress' collection of American and European intellectuals read like a Who's Who of the educated elite: Ignazio Silone, André Malraux, Arthur Schlesinger, John Dos Passos, and Tennessee Williams were among the attendees of the founding convention. Honorary presidents of the Congress included such notables as Benedetto Croce, John Dewey, and Bertrand Russell. In 1951, an affiliated American organization, the American Committee for Cultural Freedom (ACCF) was assembled; it included Norman Thomas, J. Robert Oppenheimer, James Burnham, and, as chair, New York University philosophy professor Sidney Hook.[10]

Both the Congress of Cultural Freedom and the ACCF were an unusual alliance of intellectuals on both the left and right, including those who would later migrate to the right from the left. Clearly, an organization that could unite Thomas, the Socialist Party standard-bearer who had challenged Roosevelt in the 1930s, and Burnham, who by this time was working for the CIA and later became *National Review*'s resident foreign policy pundit, had a powerful mission. Hook claimed that the original Berlin conference was not just a gathering, but a "political affirmation." The Congress was to bring together

[10] Richard H. Pells, *The Liberal Mind in a Conservative Age* (New York: Harper & Row, 1985), 128-129, hereafter cited as *Liberal Mind*. Hook's presence further demonstrates the Congress' multi-ideological makeup; as a leading American leftist, Hook's philosophical writings were an attempt to reconcile Marxism with American pragmatism.

Western intellectuals in order to "recognize an Either-Or and take one stand or another." The mood of Hook and his fellows left no doubt as to what that stand should be: a stand for freedom and against communism.[11]

The Congress of Cultural Freedom was not a wholly independent organization. Although most of the members were unaware of it, the Central Intelligence Agency (CIA) provided the Congress with funds throughout the 1950s and early 1960s. These funds were distributed through false foundations set up by the CIA; the money financed many of the Congress' activities and the publication of its journal, *Encounter*. The United States government certainly found utility in supporting cultural warfare. Contact with the United States government was not limited, however, to CIA support. In 1951, meetings took place between several people affiliated with the ACCF, both scientists and nonscientists, to discuss "conflicts between science and political dogma in the Soviet Union," though neither the ACCF nor any other group officially sponsored the meeting. Among the significant participants in these meetings were James Burnham, the geneticist Hermann J. Muller, and Lawrence Hafstad, a physicist who headed the nuclear reactor development division of the AEC.[12]

Specifically, the purpose of the discussion at the August 2, 1951 meeting was to "consider possibilities of driving a 'wedge'...between Soviet scientists and senior political officials of the Soviet regime." Participants in the meeting agreed that there existed "an essential incompatibility" between the Soviet system and "the scientific

---

[11] Sidney Hook, quoted in ibid., 129.

[12] Ibid., 129; Minutes of meeting, August 2, 1951, James Burnham Papers, box 8, Hoover Institution Archives, hereafter cited as Burnham Papers. For a recent study on the Congress of Cultural Freedom and its connection to the CIA, see Frances Stonor Saunders, *The Cultural Cold War: The CIA in the World of*

method as we understand it." Furthermore, the philosophy of dialectical materialism was, in the opinion of the discussants, "basically incompatible with free scientific inquiry." Burnham suggested that there were two major paths of action with regard to dealing with Soviet science and scientists: first, somehow "deprive the Soviet regime of the maximum use of its scientists," and second, "establish some kind of fraternal relationship with the scientists in the Soviet sphere." Hafstad, in particular, believed that any actions that would produce either of the two results Burnham mentioned would be in the interests of the West; he went even further during the meeting and stated that "he would not be adverse to the destruction of Soviet scientific potential" since the Soviets were using that potential to make atomic weapons for use against the West in the event of armed conflict. Actions that the group considered included publishing articles in *Nature* and *Physical Review* and arranging a radio debate on scientific freedom between the French Nobel laureate physicist Frédéric Joliot-Curie, who was also a member of the Communist Party, and American physicist Isidor I. Rabi.[13]

A follow-up meeting took place on October 11, 1951. Hafstad indicated that Admiral Leslie Stevens, former military attaché to the Soviet Union, brought to Hafstad's attention some of the conflicts between "Communist political dogma" and science three years previous. Until Korea, however, there seemed to be little interest in these conflicts, Hafstad believed. With this in mind, the group discussed ways of "exaggerating" the conflict between Soviet state philosophy and science as a way of informing greater numbers of scientists about the dangers as well as making communism less attractive to

---

Arts and Letters (New York: The New Press, 2000).

[13] Minutes of meeting, August 2, 1951, Burnham Papers, box 8, 1, 2-3, 7, 9.

certain Western intellectuals. Participants in this informal meeting also referred to a meeting of the Congress of Cultural Freedom earlier in the year near Strasbourg. They remarked that the Congress was generally agreed that wavering Western scientists should have a decision forced upon them "whether to accept science or Communism," since the two were not compatible. Furthermore, many at the Congress believed that, as evidence of this, "100 percent of scientists working in the USSR were critical of the regime" and those that were not critical were "Party scientists who really are not genuine scientists at all." The challenge for the discussants at the informal October 11 meeting, therefore, appeared to be twofold: to engender disaffection for the Soviet regime among Soviet scientists and make communist ideology less attractive to vulnerable Western scientists and intellectuals. The methods considered to achieve these goals included using Western publications available to Soviet scientists to accentuate the differences between dogma and science and make use of unofficial radio programs and lecture tours to provide the "human touch" that Soviet emissaries supposedly lacked.[14]

Although the two meetings were confined to a small group, they illustrate some interesting connections. James Burnham, at the time of the meetings, was a CIA officer. Given that the Congress of Cultural Freedom received CIA support, Burnham's presence suggests an effort to subvert Soviet science on the part of the CIA that went beyond the measures discussed in the meetings. Hafstad's participation was not officially sanctioned by the U.S. government, but as director of reactor development for the AEC, he would certainly have had significant influence within that body as well as access to key policymakers. Coupled with the involvement of members of the ACCF, signs of a

[14] Minutes of meeting, October 11, 1951, Burnham Papers, box 8, 1, 2, 3, 7, 9, 10.

network of people and institutions, both formal and informal, become clearer. Although many scientists, such as Harvard astronomer and left-wing activist Harlow Shapley, were critical of U.S. government policies, there were many who were not only content to receive support from the government for research, but who also actively participated in anticommunist efforts, some of them state-supported.[15]

The Congress for Cultural Freedom sought to emphasize that "free science" and communism were incompatible. In July 1953, the Congress sponsored its International Conference on Science and Freedom in Hamburg, Germany. The purpose of the conference was to "protest against the treatement of science and scientists in the totalitarian countries" and "give a new substantiation to the conception of the freedom of science in the modern world." The conference organizers were dismayed by the idea that "science should vindicate itself by its contribution to national security or social welfare." Furthermore, the organizers wanted to promote "the sense of cultural obligation amongst the public to promote the progress of pure science and to respect its progress irrespective of where it leads." Thirdly, there was a growing fear that "prevailing scientific opinion" was being undermined and that without this control exercised by scientists, and not the state, "scientific life would quickly sink into oblivion."[16]

The charge that real science did not, and could not, exist in the Soviet Union due to communism is not supported by the historical record. Certainly Soviet scientists and engineers were repressed on an appalling scale; the physicists Andrei Sakharov and Lev

---

[15] Burnham, it should be noted, left the ACCF in 1954 "over the committee's growing disapproval of McCarthyism." See Pells, *Liberal Mind*, 344.

[16] Congress for Cultural Freedom and University of Hamburg, Program of International Conference on Science and Freedom (Hamburg, July 23-26, 1953), Sidney Hook Papers, box 157, Hoover Institution

Landau and the biologists Sergei Chetverikov and Nikolai Vavilov were only a few examples. Yet at the same time, American scientists who participated in scientific exchanges with the Soviet Union in the late 1950s and 1960s reported that in many areas, Soviet science ranked among the best in the world. In terms of financial support, the Soviet Union "devoted a larger share of its budget to the support of science and technology than any other industrialized nation in the world." Furthermore, the philosophy of dialectical materialism, which many in the West considered inimical to science, served to inspire some Soviet scientists whose work became internationally lauded, such as that of the psychologist Lev Vygotsky. The disaster of Lysenkoism in the field of genetics made for an excellent example of communism's abuse of science, but the interactions between science and communist politics were more complicated on the whole than the Congress of Cultural Freedom realized. Science was, however, not to be defended in its own right, but as part of an anticommunist cultural and intellectual arsenal.[17]

The Conference on Science and Freedom, though united on the importance of freedom to science (and *vice versa*), experienced an interesting split. University of Chicago sociologist Edward Shils, a participant in the conference, reported that "the matter-of-fact scientism of Professor [Henry] Mehlberg...stirred a tempest of excitement among the anti-positivists." In the ensuing discussion, "German idealism" was pitted

---

Archives.

[17] Loren R. Graham, *What Have We Learned About Science and Technology from the Russian Experience?* (Stanford, CA: Stanford University Press, 1998), 8-9, 53, 57-58. Graham challenges the widespread feeling in the West that science depends fully on political freedom; Graham argues scientific output in Russia has *declined* since the fall of communism because of lack of financial support, whereas the anticommunist argument should predict that science would flourish. See also Loren R. Graham, *Science in Russia and the Soviet Union: A Short History* (New York: Cambridge University Press, 1993).

against "American positivism." Though both groups "regarded truth about the universe and its laws as an intrinsic good," Shils commented that neither the idealists nor the positivists "remembered the reality of the scientific tradition and its authority in science." Shils wrote further that "the aspirations of the Positivists for the hegemony of the scientific method among all our intellectual processes...was combatted with much emotion." Though Shils believed the conference to be lively and fruitful intellectually, he also thought that the various discussions, such as the idealist/postivist split, diverted the conference from its central theme and impeded somewhat its central goal, which was "the development of the idea of the scientific community."[18]

Shils' report on the conference highlighted a number of issues concerning science in the context of the Cold War. The overriding matter at hand for the attendees was to articulate "the conception of the autonomous scientific community functioning in a pluralistic society." Those who sponsored the conference also wished "to denounce the harassment and deformation of science in the Soviet Union." The fact that the conference was held in a front-line state of the Cold War (West Germany) places it explicitly in the context of the Cold War. The "anti-totalitarian" orientation of the conference served as the impetus for the broader issue of the interplay of science and freedom. The subplot of the idealist/positivist split provided a glimpse into the various currents of discussion regarding the place of science (and scientists) in Western thought. Though Shils stated that the conference was "for the most part (but not entirely) free from any element of scientistic utopianism," clearly some took a more positivistic view towards scientific

[18] Edward Shils, "The Scientific Community: Thoughts After Hamburg," *Bulletin of the Atomic Scientists* (hereafter *BAS*) 10, no. 5 (May 1954): 151-155, on 153, 154.

epistemology than did others, and this created a tension. There were serious discussions about the philosophy of science, and this not only calls into question liberal unity on the issue of scientism, but also suggests that conservatives and conservative sympathizers played a role on the debate about scientism and this debate included scientists.[19]

Despite the divisions at the Conference on Science and Freedom, even the idealists and the positivists were attempting to "guarantee the autonomy and the integrity of the quest for scientific truth." With respect to conservative attitudes about science, this was a divergence from the critical attitudes of conservative intellectuals like Weaver, who felt that the truth humans ought seek was not scientific in nature. According to the participants in the two private meetings, and to most participants in the Conference on Science and Freedom, dialectical materialism (the Marxist idea that some sciences, like biology, are not reducible to more "basic" sciences like physics) stood in opposition to good Western science. Hence, science acted as a bulwark against communism and as an example of free intellectual activity. Though one cannot classify everyone involved in the Congress for Cultural Freedom as a conservative (certainly not Hermann Muller, who had lived in the Soviet Union in the 1930s), the presence of James Burnham indicated at least some support among conservatives for "free" science. We are then presented with a paradox: the view of the scientific mindset as the logical endpoint of communism versus the view of science, properly done, as anticommunist, since it cannot coexist with dialectical materialism, the Marxist philosophy of science. Conservatives could be found on either side of the issue. Admittedly, it is difficult to label anyone as a conservative

[19] Ibid., 153. As an additional illustration of the divisions at the conference, Hayek was skeptical on the contributions scientists could make to moral and social issues, whereas physicist Eugene Rabinowitch thought scientists might have unique qualifications to speak on such matters. The sense that science could

solely based on the criterion of anticommunism, since American liberals were strongly anticommunist as well. Nevertheless, the Congress of Cultural Freedom and the ACCF, as an alliance of conservatives and liberals and with its ringing endorsement of science presented a challenge to the suspicions about science among many conservatives. It also indicated the primacy of the anticommunist project, the ambiguity in the minds of some with respect to the place of science in the political order, and the utility of science to anticommunism. The anticommunist program made the debate about science and society a debate about freedom.

THE HUNGARIAN CIRCLE

Because anticommunism itself is not a completely sufficient criterion to evaluate leftist or rightist political views, one needs to examine such elements as rhetoric and self-descriptions in order to detect political inclinations where "classic" left- or right-wing associations are not explicit. Nevertheless, examining the debates between scientists about broad policy issues—including the connections scientists made with others, and the positions various scientists held—can, at least, provide one with an approximate location of the individual in question on the political spectrum. The necessity of making these approximations illustrates an interesting disconnect between conservative-leaning scientists and conservative intellectuals writing about science in this period. A group of Hungarian immigrants to the West, that I will call the Hungarian Circle, offers an opportunity to study how conservatism functioned, and did not function, among scientists in this period. Prominent figures in this circle include the chemist Michael Polanyi, the mathematician John von Neumann, and the physicists Leo Szilard, Edward Teller, and

---

change social conditions for the better was still powerful among some. See ibid., 153.

Eugene Wigner. With the exception of Szilard, the Hungarians exhibited a conservative tendency in political affairs, particularly with respect to anticommunism (they were often more strident than their liberal colleagues), and this extended to the connections they made with others and to some of their students. Most in the Hungarian Circle had high scientific stature and exerted considerable influence within government and among their peers. Wigner, for example, was a Nobel laureate; Teller was the "father" of the American hydrogen bomb; von Neumann served as an AEC commissioner.

Wigner's life offers insight into the character and views of the Hungarian Circle. A physicist, he was born in Hungary on November 17, 1902. Wigner's family was ethnically Jewish, but did not actively practice the Jewish faith; in fact, Wigner's early education took place in a Lutheran school. Though Wigner claimed he never personally experienced anti-Semitism in Hungary, he did see "how it was used to control the prospects of the Jews." Early in life, however, Wigner's greater dislike was for the Communists. Wigner recalled a communist government that came to power in Hungary in March of 1919. Wigner's family fled to Austria; when a conservative Hungarian admiral replaced the communist rulers in November of that year, Wigner's family "joyfully returned home." The new government fostered an anticommunist backlash that Wigner found "unreasonable." Wigner recalled about 5,000 executions and 70,000 incarcerations of known and suspected Communists. Even so, Wigner stated that his family's "primary feelings" were "joy and relief at the fall of the communists."[20]

---

[20] Andrew Szanton, *The Recollections of Eugene P. Wigner as told to Andrew Szanton* (New York: Plenum Press, 1992), 36, 42-43, 45, hereafter cited as *Recollections of Wigner.*

Wigner's strongly anticommunist political stance permeated his writings and thoughts on science and its relationship to democracy and national security. In August of 1955, a conference on the peaceful uses of nuclear power was held in Geneva, Switzerland. Many reports, such as those printed in the *Bulletin of the Atomic Scientists*, "emphasized above all the exhilaration of the first open exchange of ideas in purely scientific matters with Russian nuclear scientists." Wigner, along with University of Illinois physicist Frederick Seitz, wrote a letter to the *Bulletin* as "an important and timely corrective" to the more positive views of the Geneva conference. Seitz and Wigner were of the view that Eastern Bloc atomic research "profited greatly from Western work." Seitz and Wigner contrasted Western openness with the reluctance of Soviet physicists to divulge solutions to technical problems plaguing Western scientists. They concluded that "*if the other side learns all that we know, but we remain ignorant of what they discover, we will find it very hard to stay ahead in the game.*" Hence, openness in science, particularly in nuclear science, was not without risks. Seitz and Wigner close their letter with the statement that, if one assumes that reactors and weapons are linked, then the United States must be prepared to compete with a Soviet Union that intends to build reactors in Eastern Bloc countries. Otherwise, the West will pursue a policy of "atomic bombs for all Iron Curtain countries."[21]

In a later *Bulletin* article, Wigner softened his position on scientific secrecy, but voiced a distrust of the efficacy of disarmament proposals, citing Germany's secret rearmament between the two world wars. This suspicion is congruent with the opinion of

[21] Frederick Seitz and Eugene P. Wigner, "On the Geneva Conference: A Dissenting Opinion," *BAS* 7 (January 1956): 23-24, on 23, 24. Emphasis authors'. Seitz and Wigner stated, however, that they did not share the assumption that reactor technology necessarily leads to weapon technology.

many American conservatives at the time, and it lends support to Wigner's own statement that he, Teller and von Neumann "all became political conservatives." Wigner lamented that the United States did not do more to help "democratic elements" in eastern Europe resist communism. He chastised his fellow scientists for "ignoring Russian brutality"; he also "felt deeply" rebukes from other scientists concerning his vigorous support for America's war in Vietnam. Wigner also advocated a much more elaborate system of civil defense in the United States because he was convinced that the doctrine of mutually assured destruction would not hold. Soviet leaders, Wigner believed, were more willing to ensure massive loss of human life to ensure world control.[22]

Wigner serves as an interesting focal point for other conservative scientists and this may also shed some light on the importance of intellectual lineages. Wigner's teacher and fellow Hungarian, Michael Polanyi, also espoused political views that could be called conservative, at least with respect to other scientists. Polanyi, a physical chemist by training, became interested in politics and economics later in his life, after he took up residence in the United Kingdom. His specific interests in the political realm generally dealt with issues of scientific freedom and the role of science in a democracy. Polanyi's view of "planned" science can be summed up in his statement that "the pursuit of science can be organized in no other manner than by granting complete independence to all mature scientists." In the Soviet Union Polanyi saw a dangerous inclination to guide science to fulfill Marxist aims, with the result that science was shackled and progress stunted. Throughout the 1950s, Polanyi wrote critiques of Marxism through its

---

[22] Eugene P. Wigner, "Recall The Ends—while pondering means," *BAS* 17 (March 1961): 82-85; Szanton, *Recollections of Wigner*, 226, 260, 288-297, 299.

relationship to science. In addition, Polanyi was an active member of the Congress of Cultural Freedom and was a key participant in the Hamburg Conference on Science and Freedom in July 1953. At that conference, Polanyi proclaimed that "totalitarianism is the supreme threat to cultural freedom today." Liberalism stood in opposition to Marxist dictatorship, but was hampered by "internal contradictions": individual freedom versus responsibility to the democratic body politic. Polanyi's answer to the problem of scientific freedom was to "invoke the power of a different authority to protect the free society and the pursuit of free scholarship within it," an authority constructed under a democratic state.[23]

Wigner may have had some influence on more junior scientists. Frederick Seitz, who co-signed the letter to the *Bulletin* offering a less celebratory view of the Geneva conference on atomic energy, was also Wigner's student. Seitz, early on, advocated an assertive stance against the Soviet Union. Seitz did not believe that "any genuinely broad compromise between the two systems [the West and the Soviet bloc was] possible without producing enormous changes in either or both." Seitz advised against "neutrality" in dealing with the Soviet Union; a proper Soviet policy combined "a vigorous program of international negotiation" and maintenance of "military strength...at a level so great that Russia will not be willing to attack us without grave danger to

[23] Michael Polanyi, "The Case for Individualism," *BAS* 5 (January 1949): 19-20, on 20, and "Protests and Problems," *BAS* 9 (November 1953): 322, 340, on 322. In the latter article, Polanyi does castigate "a harsh and stupid conservatism" that was aided by the "collapse of the intellectual Left." Nevertheless, Polanyi's anticommunist rhetoric was stronger than those in the *Bulletin* who were more cautious and were more interested in domestic political repression, such as editor Eugene Rabinowitch. It is reasonable to consider, therefore, Polanyi as more "conservative" than "liberal". Note, for example, Polanyi's invocation of authority, a common conservative theme. Polanyi's best statement of the democracy embodied in science can be found in Polanyi, "The Republic of Science." *Minerva* 1 (1962): 54-73. Of note is Polanyi's reference to the uncoordinated nature of scientific inquiry, which reflects his contact with Hayek and the impact of Hayek's economic ideas on Polanyi.

herself." Rather than be concerned about military encroachment in scientific research, Seitz wrote that "the time is ripe for physicists, and scientists in general, to devote a much larger fraction of their time to research of military interest." In a later article, Seitz went even further. Seitz opined that the military budget of the United States was "about half its proper value." In the face of a Soviet Union in "a predatory stage of development," it was necessary "to restrain Soviet aggression by any means which will be effective." This required more development of both defensive and offensive weapons in order to afford maximum effectiveness in deterring the Soviet Union, and the economy of the United States "should be capable of withstanding the strain of redoubled effort at this time."[24]

It is important not to overstate the influence Polanyi may have had on Wigner and, in turn, the influence Wigner may have had on Seitz. Polanyi and Wigner were fellow Hungarians who lived in Germany; Polanyi saw firsthand the rise of Nazism there and was compelled to leave because of it. Both were greatly troubled by the rise of communism in their homeland after World War II. Wigner developed a dislike for communism early in his life, before he met Polanyi. Nevertheless, Wigner's reverence for his teacher went beyond professional respect. Wigner viewed Polanyi as a close personal friend; in this light, it is hard to imagine that Polanyi's political views did not impact upon or reinforce Wigner's own. Wigner's view of Leo Szilard, a friend, fellow Hungarian émigré, and "staunch leftist," is more critical. Wigner went so far as to say that Szilard saw himself as a potential "dictator" because Szilard liked power. With

---

[24] Frederick Seitz, "Physicists and the Cold War," *BAS* 6 (March 1950): 83-89, on 84, 85, 86; Frederick Seitz, "Offensive or Defensive Weapons?" *BAS* 9 (November 1953): 325-327, 336, on 325, 327, 336. See also Frederick Seitz, *On the Frontier: My Life in Science* (Woodbury, NY: American Institute of Physics, 1994) for biographical details.

respect to Seitz, Wigner said little other than he felt Seitz to be a bright student; importantly, Wigner stated that he and Seitz "have kept up through the years, talking not only of physics, but of the nature of social and political dilemmas." Given the similarities between the views of Wigner and Seitz, especially on national defense, there seems to be an ideological continuity that was either engendered or enhanced by their professional relationship.[25]

Probably the most well-known of the Hungarian Circle is the physicist Edward Teller, the "father" of the American hydrogen bomb. Teller shared a number of similarities with his friend Eugene Wigner. Teller, like Wigner, came from an ethnically Jewish family. Teller also received his higher education in Germany, and came to the United States on a job offer from George Washington University (Wigner's offer had come from Princeton). Like Wigner, Teller's dislike of communism was long-standing. Teller's experience with military work in the United States began with his participation in the Manhattan Project, first at the University of Chicago's Metallurgical Laboratory and then at Los Alamos, New Mexico. Teller had serious doubts about the use of the atomic bomb on Japan, but did not make this publicly known, as he believed that scientists should not enter political debates. After the war, Teller changed his mind, and vigorously supported the development of the hydrogen bomb, in opposition to the AEC's General Advisory Committee (GAC), chaired by Oppenheimer. The AEC itself adopted the GAC's recommendation by a vote of 3-2; the GAC's vote was unanimous. This posed a serious obstacle to the development of the hydrogen bomb.[26]

---

[25] Szanton, *Recollections of Wigner*, 78-79, 166-167, 225-226.

[26] Stanley A. Blumberg and Louis G. Panos, *Edward Teller: Giant of the Golden Age of Physics* (New

Teller, however, had made powerful allies. One of these was AEC Commissioner Lewis Strauss, a staunch supporter of the hydrogen bomb. Another was Senator McMahon. Both Strauss and McMahon, with the assistance of Teller, lobbied President Truman heavily for a crash program to build a hydrogen bomb. Truman had also received favorable views on the hydrogen bomb from the Joint Chiefs of Staff. While Truman pondered all this conflicting advice, word came that a British scientist, Klaus Fuchs, had provided the Soviet Union with classified bomb information while he was working on the World War II atomic bomb project. This "capped the presidential decision-making process," since it was intolerable to Truman to have the Soviet Union take the lead in a nuclear arms race. Truman decided in early 1950 to instruct the AEC to go forward with the hydrogen bomb program.[27]

Besides Strauss, Teller had also made friends among others in the atomic energy establishment who were also supporters of increased weapons development, such as Ernest O. Lawrence and Luis Alvarez. Both worked with Teller at Lawrence Livermore National Laboratory near San Francisco. Teller increasingly found himself closer to the hawks of the scientific world and separated from the doves, such as fellow physicist Hans Bethe. This separation was made greater in 1954, when Teller testified to the AEC's Personnel Security Board that he believed that Oppenheimer was a security risk, despite the testimony of many of Teller's colleagues that Oppenheimer was not. How significant Teller's testimony was may never be fully known; however, the Personnel Security Board recommended that Oppenheimer's security clearance not be renewed and the AEC

York: Charles Scribner's Sons, 1990), 15, 24, 39, 65, 67, 84, 101, 102.

[27] Ibid., 102, 107, 109.

adopted that recommendation. Convinced that Teller's testimony was the key, his liberal colleagues "exiled" him, and Teller formed a new circle of associates made up of "conservatives, militarists, and a few old friends." To these conservatives, Teller assumed "heroic stature."[28]

Yet, according to Wigner, Teller was not "a conventional right-winger." Early in the Cold War, Teller had demonstrated support for arms control. He, in fact, believed that an American report on arms control did not go far enough in giving a proposed international group sufficient power to enforce arms agreements. Unlike most, if not all, conservatives, Teller even advocated a world government; the primary obstacle to this was not the United States, but the Soviet Union. By the 1950s, however, Teller's internationalist sentiments had faded, and he spoke out more often on the need to do more military research and to keep up with the Soviet Union in technical advances. Teller, along with Lawrence, campaigned against a nuclear weapons test ban during the Eisenhower administration, arguing that tests were necessary to develop "clean" nuclear weapons that produced less radioactive fallout. Furthermore, Teller believed that a test

---

[28] Ibid., 160-162. On Alvarez and Lawrence, see Luis W. Alvarez, *Alvarez: Adventures of a Physicist* (New York: Basic Books, 1987) and Herbert Childs, *An American Genius: The Life of Ernest Orlando Lawrence* (New York: E. P. Dutton & Co., 1968). On the stormy relationship between Lawrence and Oppenheimer, see Nuel Pharr Davis, *Lawrence and Oppenheimer* (New York: Da Capo Press, 1986). The seminal work on the revocation of Oppenheimer's security clearance is Philip M. Stern, *The Oppenheimer Case: Security On Trial* (New York: Harper & Row, 1969); see also U. S. Atomic Energy Commission, *In the Matter of J. Robert Oppenheimer: Transcript of Hearing before Personnel Security Board, Washington, D. C., April 12, 1954 through May 6, 1954* (Washington, D. C.: Government Printing Office, 1954). An interesting analysis of the rhetoric employed during the Oppenheimer case is found in Rachel L. Holloway, *In the Matter of J. Robert Oppenheimer: Politics, Rhetoric, and Self-Defense* (Westport, CT: Praeger, 1993). Holloway argues that Oppenheimer's accusers defined the rhetorical parameters of the case (which coincided with the sensibilities of the time on such matters as communism) and Oppenheimer failed in his defense because he confined it to those parameters.

ban could not be effectively monitored, a view many still espouse in the present day with respect to the Comprehensive Test Ban Treaty.[29]

The Hungarian Circle can arguably be placed on the right wing of the scientific community (again with the exception of Szilard). The Hungarians tended to be more concerned with national security than their more liberal colleagues. Although they tended to be anticommunist even before the Cold War, it is not mere coincidence that they advocated an assertive, even aggressive stance toward the Soviet Union after seeing communism established in their homeland after World War II. In their articles in journals like the *Bulletin* and in their support for robust civil defense, they demonstrated a profound detestation for Soviet communism, while their more liberal colleagues focused on domestic anticommunist hysteria, military control of science, and the prospects for world peace through some kind of accommodation. Anticommunism was an ideology of both left and right in the United States, but, as mentioned earlier, it more tightly bound conservatives together than it did liberals. Consequently, conservatives placed greater emphasis on anticommunism, military preparedness, and the Soviet threat. If anticommunism is an imperfect criterion for determining conservatism, one can distinguish among shades of gray by examining what issues are emphasized by scientists and how they are emphasized. In this light, the Hungarian Circle is more conservative than liberal. This may owe to the eastern European origins of the Circle; the Hungarians

---

[29] Edward Teller, "A Suggested Amendment to the Acheson-Lilienthal Report," *BAS* 1 (June 1, 1946): 5; "Atomic Scientists Have Two Responsibilities," *BAS* 3 (December 1947): 355-356; "Back to the Laboratories," *BAS* 6 (March 1950): 71-72; "The Nature of Nuclear Warfare," *BAS* 13 (May 1957): 162-165; "The Russian Challenge," *BAS* 14 (February 1958): 83-86; Zuoyue Wang, "American Science and the Cold War: The Rise of the U.S. President's Science Advisory Committee," Ph.D. dissertation, University of California-Santa Barbara, 1994, 141-142. On the nuclear test ban debate, see Robert A. Divine, *Blowing on the Wind: The Nuclear Test Ban Debate* (New York: Oxford University Press, 1978).

likely felt more strongly a sense of opposition to the Soviets than native-born scientists. How much of a connection there was between the Hungarians and other émigré scientist circles is unclear, but there existed, perhaps, a conservative group of scientists more numerous than heretofore recognized.

Scientists In Government

There were, of course, scientists who, relative to many of their colleagues, were conservative. They did not form explicitly conservative political groups, as did left-liberal scientists. Many found positions in government service, such as Vannevar Bush, Lloyd Berkner, and James Killian. Bush, though he served as an advisor to two Democratic presidents, was known for his conservative politics and tended to mistrust New Deal-style centralization. Both Berkner and Killian served as scientist-administrators during the Eisenhower administration, and were strong advocates of government support for science; Berkner in particular saw a great need for increasing support for defense-related science to bolster America's "critical weaknesses" in national defense. When not in government, conservative scientists participated in informal networks and groups, with the exception of the Congress of Cultural Freedom. Hafstad's meetings with Burnham and other intellectuals, and the Hungarian Circle demonstrate this. The postwar scientists' movement was mostly a left-liberal one; more conservative scientists registered an occasional dissent or, more often, tried to focus on other issues like the Soviet threat or lack of scientific freedom in communist nations.[30]

---

[30] J. Wang, *Age of Anxiety*, 30; Lloyd Berkner, "Science and National Strength," *BAS* 9 (June 1953): 154-155, 180, and "Science and Military Power," *BAS* 9 (December 1953): 359-365; James R. Killian, Jr., "Science and Public Policy," *BAS* 15 (April 1959): 168-172. See also James R. Killian, Jr., *Sputnik, Scientists, and Eisenhower: A Memoir of the First Special Assistant to the President for Science and*

Government service provided an opportunity for conservative scientists to exercise some influence in the political arena. Beginning in the early years of the Cold War, the United States government deemed scientific intelligence increasingly important to its foreign policy goals. The CIA (and its earlier incarnation, the Central Intelligence Group) was charged with the mission of providing scientific intelligence. Ohio State University chemist Wallace Brode was the first scientist chosen to head the effort to coordinate scientific intelligence in October 1947. Brode resigned his position as head of the scientific branch of the CIA's Office of Research Estimates (ORE) in October 1948; bureaucratic rivalries and lack of support from the Director of Central Intelligence, Roscoe Hillenkoetter, made Brode's position untenable. Brode's successors in the newly created Office of Scientific Intelligence (OSI) included the medical doctor William Machle and the chemist H. Marshall Chadwell. Both of these men also faced diffculties in bringing scientific intelligence fully under the auspices of the OSI. Yet the OSI represented a real desire within the U. S. government to bringing in scientific expertise in the service of Cold War policy goals. Scientists also aided the CIA in covert research, such as the MKULTRA project on controlling human behavior through various means. As part of MKULTRA, for example, the CIA funded a $3 million expansion to Georgetown University's medical facilities and secured the services of a researcher there as a contact point, to provide cover for CIA scientists, and to aid in recruitment of new scientists. The fact that Brode and his successors, as well as the lower-level CIA

Technology (Cambridge, MA: Massachusetts Institute of Technology Press, 1977) for a discussion of scientists as insiders in the government. See also Bruce L. R. Smith, *The Advisors: Scientists in the Policy Process* (Washington, D. C.: The Brookings Institution, 1992).

researchers, were selected to fill these sensitive posts suggests that Truman and Eisenhower found them sufficiently "conservative" to be trustworthy.[31]

During the early years of the CIA's existence, many viewed it as a bastion of the liberal Eastern Establishment. Considering the political conservatism of the CIA's top leadership, as well as its disparate attitudes toward left- and right-wing foreign governments, this suspicion was misplaced. In addition, with considerable pressure on government agencies to appear clean of any left-wing taint, scientists serving in sensitive CIA positions, scientists needed to be "safe," and therefore more conservative. The conservatism of many government agencies and the extensive connections between science and government are not new historical insights. The service of scientists who could be labeled as conservative does, however, illustrate differences between these scientists and conservatives who were not scientists. Frequent conservative criticism of the U. S. government's "weakness" towards the Soviet bloc did not take into account the conservatism of many who worked for the government, particularly scientists. Perhaps scientists could not, ultimately, be conservative in the eyes of the government's critics, since scientific expertise was associated with liberalism in the minds of many

---

[31] Ronald E. Doel and Allan A. Needell, "Science, Scientists, and the CIA: Balancing International Ideals, National Needs, and Professional Opportunities," in *Eternal Vigiliance: Fifty Years of the CIA*, eds., Rhodri Jeffreys-Jones and Christopher Andrew (London: Frank Cass, 1997), 59-81. Compare Brode's situation with that of E. U. Condon. Brode, as a cover, was given in October 1947 the position of Associate Director of the National Bureau of Standards, of which Condon was the head. The post was Brode's actual job from 1948 to 1958. Condon came under investigation by HUAC for his political views; Brode was instructed not to associate with Condon while still working for the CIA. Brode subsequently resigned his CIA post, but was not forced out of the NBS as Condon was.

Scientists also served in the State Department, another focal point of American Cold War anxieties. See Ronald E. Doel, "Scientists as Policymakers, Advisors, and Intelligence Agents: Linking Contemporary Diplomatic History with the History of Contemporary Science," in *The Historiography of Contemporary Science and Technology*, ed. Thomas Söderqvist (United Kingdom: Harwood Academic Publishers, 1997), 215-244; Allan A. Needell, "Truth Is My Weapon: Project TROY, Political Warfare, and Government-Academic Relations in the National Security State, *Diplomatic History* 17 (1993): 399-420.

conservatives, despite the conservative culture that existed in agencies such as the CIA. Unity between conservative scientists and non-scientists cannot necessarily be assumed from the historical record, even though both groups shared some common political goals.[32]

.SUMMARY

Like any group, the American scientific community displayed diverse political views. The increased activism on the part of American scientists appeared to many to be a new phenomenon, one that, in turn, reflected scientists' increased importance to the American state and that heralded the coming supremacy of science. The efforts of highly visible scientists to promote such causes as disarmament led conservatives to believe that liberals and leftists dominated the postwar American scientific community and that science would be employed to serve liberal goals. Yet these activists comprised only a small part of the total number of American scientists. Many other scientists were content to pursue their research, often with federal support and directed toward state goals such as military applications, without taking a critical stance. Other scientists, such as the Hungarians, went further and advocated more aggressive production of weapons to counter the Soviet Union. These distinctions make it difficult to characterize the American scientific community as mostly liberal or mostly conservative.

Historian Peter J. Kuznick has argued that scientists became increasingly active in politics during the 1930s, and that shift away from their aloofness in the 1920s set the stage for their involvement in postwar politics. Kuznick characterizes scientists as "a

[32] On the CIA's perceived liberalism and its actual politics, see Rhodri Jeffreys-Jones, *The CIA and American Democracy*, 2nd ed. (New Haven, CT: Yale University Press, 1998), 71-78.

basically conservative group when the Depression dawned," but "with a positive conception of its social role and contribution." The twin crises of economic depression and the fascist threat politicized and radicalized American scientists. Kuznick therefore brings to light the importance of the Depression, the New Deal, and World War II in the political organization of left-liberal scientists. We can, hence, look to the upheaval of the 1930s and 1940s as the formative era for American political thought on both the left and right, including scientists as an interested and active group in discussion and debate on broad issues of policy.[33]

The challenge to capitalism that the Depression presented convinced some scientists that the relationship between the state and society had to be changed. This took the form of support for the New Deal, or, in some cases, support for more radical change.. This lean toward left-liberalism is most apparent in the support that many scientists gave for planning in science policy; they favored Kilgore's plan for the organization of federal support for science over Bush's policy because they saw it as more democratic. These scientists participated actively in organizations such as the FAS and sought to orient American policy towards disarmament and international control of atomic energy. These liberal scientists, politicized during the crucial decade of the 1930s, adapted their beliefs to the exigencies of the postwar era. Scientists in this group included the Harvard astronomer Harlow Shapley and the physicist Szilard.

There existed also a conservative group of scientists, best represented by Bush. Bush's service to a liberal president appears ironic, given that Bush himself was a

---

[33] Peter J. Kuznick, *Beyond the Laboratory: Scientists as Political Activists in 1930s America* (Chicago: University of Chicago Press, 1987), 7.

conservative Republican and no enthusiast for the New Deal. As a scientist, however, he realized that World War II had changed the political economy of American science and he saw an opportunity, expressed in *Science—The Endless Frontier*, to ensure the continued health of American science through massive federal support. Bush combined this federal commitment to science with his own laissez-faire politics in his plan for a National Science Foundation essentially insulated from the public and run by scientists. Scientists like Bush, Berkner, Killian, and others committed themselves to the organization of science according to Cold War priorities, especially with respect to military involvement. Certainly many "rank and file" scientists who did not have the stature of a Bush accepted this arrangement and vigorously supported it.[34]

The problem of communism complicated the political constellation of American scientists. Even left-liberal scientists like Shapley were no friends of communism, despite their participation in organizations and movements that also included Communist Party members. The horrors of the Stalinist regime in the Soviet Union, however, made it difficult for leftist scientists to maintain their enthusiasm for drastic changes in American society. It also rendered them vulnerable to red-baiting from HUAC and Senator McCarthy. For these reasons, anticommunism was a staple of both liberal and conservative scientists. The measures that scientists advocated for coping with the postwar world, however, varied considerably. This provides an instrument, however

---

[34] There are a number of works on the relationship between the military and scientists who supported military funding and organization. See, for example, David H. DeVorkin, "The Military Origins of the Space Sciences in the American V-2 Era," in Paul Forman and José M. Sánchez-Ron, eds., *National Military Establishments and the Advancement of Science and Technology: Studies in 20th Century History* (Dordrecht, Netherlands: Kluwer Academic Publishers, 1996), 233-260; and Michael A. Dennis, "'Our First Line of Defense': Two University Laboratories in the Postwar American State," *Isis* 85 (1994): 427-455.

imperfect, for placing scientists in different points along the political spectrum. For example, left-liberal scientists remained unconvinced that nuclear arms could provide security to the United States and emphasized broad internationalism in foreign policy and in scientific exchange. Conservative scientists accomodated a strong military role in science policy, spoke of the need to be armed against Soviet expansionism, and were less likely to challenge the postwar institutional structure of American science.[35]

Despite the differences between scientists on these issues, scientists as a community were unified on the ability of science to better the human condition. This illustrates a divergence from conservative non-scientists like Weaver or Meyer, who voiced concern that the scientific *Weltanschauung* eroded human values. Even a "conservative" scientist like Wigner objected to communists on the grounds that they were not rational; Weaver, on the other hand, saw communism's danger in that it was entirely too rational. The effect of this was that conservative non-scientists and conservative scientists talked past each other on the issue of scientism. What brought them together was their shared anticommunism, and conservatives set aside their suspicions of scientism when they saw the role scientific research played in military developments and national defense generally. Conservative publications like *National Review* praised scientists such as Lawrence and Teller as patriots and heroes and sharply

[35] For a profile of two scientists on the liberal end of the spectrum and the events that shaped their thought, see S. S. Schweber, *In the Shadow of the Bomb: Bethe, Oppenheimer, and the Moral Responsibility of the Scientist* (Princeton, NJ: Princeton University Press, 2000). On the "scientists' movement" of the early postwar period, see Alice Kimball Smith, *A Peril and a Hope: The Scientists' Movement in America, 1945-47* (Chicago: University of Chicago Press, 1965).

criticized liberal scientists such as Oppenheimer and Urey as examples of an arrogant scientific elite that could not be trusted.[36]

Scientists did attempt to defend against charges of promoting a dehumanizing materialism, but such a defense turned out not to be as necessary as scientists may have thought. Scientists themselves did not join in the critique of scientism, since the fruits of scientific knowledge were apparent to all. Furthermore, both liberal scientists who favored a planning approach to science policy and conservative scientists who looked to a traditional individualist model believed that democracy was embodied in science. Conservative non-scientists, for their part, were willing to support the place of science in national defense, and without the participation of scientists themselves in a wider movement of antiscientism, the nascent critique of scientism faded from the Old Right intellectuals. Any concern about science and scientism on the part of American conservatives after 1964 tended to come from the more politically active and populist New Right.

---

[36] Szanton, *Recollections of Wigner*, 289. The shift from individualism in science to a "laissez-faire" communitarianism that combined liberal and conservative elements is discussed in David A. Hollinger, "Free Enterprise and Free Inquiry: The Emergence of Laissez-Faire Communitarianism in the Ideology of Science in the United States," in David A. Hollinger, *Science, Jews, and Secular Culture: Studies in Mid-Twentieth Century American Intellectual History* (Princeton, NJ: Princeton University Press, 1996), 97-120. Some argue that the power of scientific solutions has declined, despite the importance of scientific expertise in the United States. This shifted the role of science away from a "hyper" rationalism in public life to a more subdued private role. See Yaron Ezrahi, *The Descent of Icarus: Science and the Transformation of Contemporary Democracy* (Cambridge, MA: Harvard University Press, 1990).

Conclusion

Science and conservative politics experienced a complicated and sometimes contradictory relationship in the early Cold War. Conservatives were strong advocates of a powerful U.S. military; since nuclear arms became an integral part of the U.S. arsenal after World War II, conservatives advocated scientific research that they believed would strengthen America's nuclear weapon component. On the other hand, many conservatives feared that the scientific worldview eroded moral values and contributed to authoritarian government that destroyed the liberties of human beings. Intellectuals such as Hayek, Meyer, and Weaver were particularly outspoken about the need to guard against scientism. Hayek and Meyer tended to emphasize the threat to liberty; Weaver emphasized the decay of traditional values and structures. The contradictory impulses to support and criticize science, as well as the different *kinds* of criticism of science mirror the various strains of conservatism itself. Conservatives sought, as illustrated by Meyer's attempt at "fusionism", cohesion in the face of what they believed was a united left-liberal orthodoxy dominating politics in America.

The conservative critique of scientism, therefore, would seem to be a potent theoretical rallying point for conservative action. Yet a forceful critique of scientism across the spectrum of the American right did not emerge in this period. What happened? Did conservatives merely abandon their concerns? When one looks at the current period, with the teaching of evolution still under attack in American schools, this seems unlikely. Rather, anticommunism became the main priority of the American right during the Cold War. Many if not most American liberals and leftists were also hostile to communism,

but at the same time, they were concerned with taking strong government action to combat the social problems facing America. Conservatives were also concerned about the stability of American society and offered their own analyses and solutions, but anticommunism united the right wing in a way no other issue did.

As seen in Chapter 3, conservative intellectuals allied themselves with scientists who shared their vehement anticommunism. The overriding necessity of opposing communism on all fronts blunted any sort of conservative movement against scientism. A scientist's particular field also mattered somewhat; conservatives were less likely to be critical of a physicist as a physicist than a social scientist. It was more difficult to claim that nuclear physics was a form of political ideology than sociology and other "meliorist" social sciences. Conservatives who had spoken of a dangerously encroaching scientism had either moved on to other concerns or passed from the scene; for example, Meyer's primary interest had always been constructing a theory of conservatism, and Weaver died in 1964.[1]

The nature of both left and right in the United States was also undergoing changes in the late 1950s and early 1960s. On the left, there was a shift from a Marxist-oriented Old Left to a New Left. The New Left was based less in the working classes and more in the middle classes, especially students. Although economics were an important concern of

[1] Though conservatives often questioned the value of social science, this does not mean that there were no conservative social scientists. As mentioned in Chapter 1, Robert Nisbet was a sociologist and writer on conservative philosophy. See, for example, Robert Nisbet, *The Making of Modern Society* (Brighton, UK: Wheatsheaf Books, 1986). Some conservative social scientists took very active roles in contentious social issues. In the 1950s, Ernest van den Haag, a New York University sociologist, argued against integration in public schools on the grounds that black children would be harmed by the resentment of white children who did not want to associate with them. Furthermore, he claimed that prejudice could only reduced through social separation. See William H. Tucker, *The Science and Politics of Racial Research* (Urbana, IL: University of Illinois Press, 1994), 151-152.

both the Old and New Left, the New Left stressed social issues such as racism more strongly. The New Left employed cultural as well as economic critiques of American society; in this sense, the New Left rejected alliances with center-left liberals, unlike the Old Left in the Popular Front days of the 1930s. Science increasingly came under attack from the New Left on university campuses where military research was known or thought to exist.[2]

The American right also experienced changes. The early Cold War period saw the return of conservatives largely of an Old Right character. They were virtually all well-educated, upper- and upper-middle class white males from the eastern or midwestern United States, with the exception of some European immigrants. Although they were often critical of the place of experts in American society and especially American government, the Old Right was itself highly intellectual in character. The Old Right was not a highly organized political movement; Old Rightists certainly commented on politics and favored Republican candidates, but they tended to be concentrated in academia and in small media outlets and drew support mostly from the business community. By the mid-1960s, a New Right appeared on the scene. The candidacy of Goldwater in 1964 marked a watershed moment in the development of postwar American conservatism. Goldwater represented a new kind of conservative; first of all, he was a Westerner from Arizona. The locus of conservative action from 1964 onward shifted from the Old Right bastions in the Northeast and Midwest to the South and West. In 1964, Goldwater won only six states: his home state of Arizona and five southern states from the formerly Democratic "Solid South." The New Right was a grass-roots movement that was more populist and

[2] Kirkendall, *Global Power*, 210-213.

less intellectual in character. Many on the Old Right, though distrustful of liberal experts, nonetheless extolled the need for a sort of aristocracy to put a brake on the impulses of "mass man." The New Right made no such pretensions to aristocracy and in fact shunned it in favor of the common sense of the true conservative majority among "the people."[3]

This is not to say, however, that conservative suspicions of science completely faded from the scene. Conservatives still held some sciences, particularly the social sciences, in contempt, and the New Right added a new virulence to such criticism. The New Right's energies, however, moved away from intellectual debate about conservative theory and toward greater political organization in hopes of winning positions in government. These shifts among the left and the right had implications for attitudes toward science: the left increasingly criticized science and the abuse of science, whereas the right appeared to withdraw its criticism of science. Scientism became less of a concern, though the increased importance of religious groups in New Right political organizations suggests an implicit concern about scientism.

Conservatives in the postwar period fought battles on many fronts, but did not have the strength to maintain them all. The American right reacted against the New Deal at home and communism abroad. Conservatives exhibited anxiety about the direction of American culture and education. They were also concerned about the erosion of religion in American life. Yet, within a conservative framework, their discussions encompassed a diverse number of views on what conservative priorities should be and how they would

---

[3] On the New Right, see Jonathan Martin Kolkey, *The New Right, 1960-1968 with epilogue, 1969-1980* (Lantham, MD: University Press of America, 1983); Robert Alan Goldberg, *Barry Goldwater* (New Haven, CT: Yale University Press, 1995); Richard A. Viguerie, *The New Right: We're Ready to Lead* (Falls Church, VA: Viguerie Co., 1981); Alan Crawford, *Thunder on the Right: The "New Right" and the*

best be accomplished. The uniting thread, in a *de facto* sense, became the ideology of anticommunism. Explicitly or implicitly, conservatives understood that science was crucial to anticommunist goals. Despite the fact that some conservative intellectuals argued that to turn to science was simply to play into the hands of communists, conservative support for military spending and research undermined the antiscientistic critique. Liberals emphasized social policy, and conservatives rallied around anticommunism.

American reaction to communism in the postwar world, however, often blurred the distinction between liberals and conservatives, despite conservative attempts to portray liberals as (unknowingly) intellectual kinsmen to communists. Democratic Party liberals like Harry Truman and John F. Kennedy voiced their opposition to communism as strongly as any conservative cold warrior. This murkiness between conservative and liberal anticommunists was no less present in the scientific community. Because of this, the ideological spectrum in the Cold War period among scientists presents the historian with a continuum of shades of gray. The approaches that scientists offered to deal with the communist issue, and the application of their expertise to those various approaches, helps to define the blurred lines of ideology. The left-liberal scientists, who tended to be more publicly active and more highly organized politically, offer a good view of a combined anticommunism and social activism that differentiates them from the conservatives. The picture, however, is still somewhat hazy.

What is also unclear, perhaps more so, is the extent of the relationship between scientists and conservatives. Obviously, not every American scientist was on the left-

---

Politics of Resentment (New York: Pantheon Books, 1980); Geoff Andrews, et. al., eds., *New Left, New*

liberal end of the political spectrum during the Cold War. Some political exchange, mediated by such institutions as the Congress for Cultural Freedom, occurred between scientists and other intellectuals. Other avenues for political contact existed in government, as scientists (liberal and conservative) increasingly held important posts, particularly within the executive branch. I have tried to shed some light on scientists and their participation in the conservative project, but there are still open questions. How did conservative scientists organize themselves politically? Whom did they read among the conservative literati? In what ways might conservatism have influenced the thoughts of scientists in government in terms of specific scientific policy issues? How did conservative scientists reconcile science with their conservatism outside of anticommunism?

I have attempted in this study to explore what was and what might have been in the conservative movement with respect to science. Fears of environmental degradation, concern over destruction of traditional lifestyles (especially in the Third World), and critiques of genetically modified foods run through many leftist protests against the encroachment of scientific progress. Much of this anxiety, however, sounds very similar to conservative concerns in the early Cold War period. The exigencies of Cold War politics overtook any other developments in conservative political theory. Scientists, whether of the left or the right, and whether they faced criticism from the left or right, stalwartly defended the value of scientific progress in improving the human condition. They were, after all, members of an intellectual community. To enlist the aid of scientists in advancing a particular political program meant accepting the importance of science;

Right, and Beyond: Taking the Sixties Seriously (New York: St. Martin's Press, 1999).

one could hardly argue for less science and expect those who built their careers on science to support such an argument. During the Cold War, and even today, the interaction between science and politics did not necessarily consist only of principled, publicly-spirited critics on the left, and complacent acceptance of military funding on the right. The American right also had to come to grips with the growth of science coupled with suspicions of expanded state power and technocratic elitism. By exploring these relationships, we learn more not only about American conservatism, but also of American science.[4]

[4] The shift in conservative attitudes toward science became more apparent with the maturation of the conservative postwar movement. Historian Stephen Tonsor remarked on the "know-nothing Luddites" of the New Left and strongly advocated a better understanding of the place of science in modern society. Interestingly, he also noted that in criticizing science, the "New Left might have learned a great deal from the Old Right." See Stephen Tonsor, "Science, Technology, and the Cultural Revolution," *The Intercollegiate Review*, (Winter 1972-1973): 83-89. An example of a New Left approach to the "privileged" status of science, and its implications for power relations can be found in Stanley Aronowitz, *Science as Power: Discourse and Ideology in Modern Society* (Minneapolis, MN: University of Minnesota Press, 1988).

Bibliography

Archival Sources

James Burnham Papers, Hoover Institution Archives, Stanford, CA.

Sidney Hook Papers, Hoover Institution Archives, Stanford, CA.

Books And Articles

"The Abuse of Reason." Review of *The Counter-Revolution of Science* by F. A. Hayek. *Saturday Review*, 11 October 1952, 40-41.

Alvarez, Luis W. *Alvarez: Adventures of a Physicist.* New York: Basic Books, 1987.

Andrews, Geoff, et. al., eds. *New Left, New Right, and Beyond: Taking the Sixties Seriously.* New York: St. Martin's Press, 1999.

Aronowitz, Stanley. *Science as Power: Discourse and Ideology in Modern Society.* Minneapolis, MN: University of Minnesota Press, 1988.

Aughey, Arthur, et. al. *The Conservative Political Tradition in Britain and the United States.* Rutherford, NJ: Farleigh Dickinson University Press, 1992.

Ayers, Clarence Edwin. *Science: The False Messiah.* Indianapolis, IN: The Bobbs-Merrill Co., 1927.

Barry, Norman. *Hayek's Social and Economic Philosophy.* London: Macmillan Press, 1979.

Bell, Daniel, ed. *The Radical Right:* The New American Right *Expanded and Updated.* Garden City, NY: Doubleday & Co., Inc., 1963.

Berkner, Lloyd. "Science and Military Power." *Bulletin of the Atomic Scientists* 9 (December 1953): 359-365.

_____. "Science and National Strength." *Bulletin of the Atomic Scientists* 9 (June 1953): 154-155, 180.

Bernal, J. D. "Everybody's Atom." *The Nation*, September 1, 1945, 201-204.

Bernstein, Barton J. "The New Deal: The Conservative Achievements of Liberal Reform." In *Towards a New Past*, ed. Barton J. Bernstein, 263-288.

Bernstein, Barton J., ed. *Towards a New Past: Dissenting Essays in American History.* New York: Pantheon Books, 1968.

Bierstedt, Robert. Review of *The Counter-Revolution of Science* by F. A. Hayek. *American Sociological Review* 17 (October 1952): 629-630.

Birner, Jack and Rudy Van Zijp, eds. *Hayek, Co-ordination and Evolution: His Legacy in Philosophy, Politics, Economics, and the History of Ideas.* London: Routledge, 1994.

Blackburn, Simon, ed. *The Oxford Dictionary of Philosophy.* New York: Oxford University Press, 1994.

Blumberg, Stanley A. and Louis G. Panos. *Edward Teller: Giant of the Golden Age of Physics.* New York: Charles Scribner's Sons, 1990.

Brinkley, Alan. *The End of Reform: New Deal Liberalism in Recession and War.* New York: Alfred A. Knopf, 1995.

_____. *Liberalism and Its Discontents.* Cambridge, MA: Harvard University Press, 1998.

_____. "The Problem of American Conservatism," *American Historical Review* 8, (1994): 409-429.

Buckley, William F. Jr. "Where Angels Fear to Tread." *National Review*, 22 February 1956, 23.

Burnham, James. *The Struggle for the World.* New York: John Day Company, 1947.

Butler, Eamonn. *Hayek: His Contribution to the Political and Economic Thought of Our Time.* London: Maurice Temple Smith, 1983.

Capshew, James H. and Karen A. Rader. "Big Science: Price to the Present." In *Science After '40*, ed. Arthur Thackray, 3-25.

Chase, Stuart. "Back to Grandfather." *The Nation*, 19 May 1945, 564-566.

Childs, Herbert. *An American Genius: The Life of Ernest Orlando Lawrence.* New York: E. P. Dutton & Co., 1968.

Condon, E. U. "Contemporary Science." *The New Republic*, 13 February 1950, 11-15.

Congress for Cultural Freedom and University of Hamburg. Program of International

Conference on Science and Freedom (Hamburg, July 23-26, 1953), Sidney Hook Papers, box 157, Hoover Institution Archives, Stanford, CA.

Conkin, Paul Keith. *The Southern Agrarians*. Knoxville, TN: University of Tennessee Press, 1988.

Cooper, William J. Jr. and Thomas E. Terrill. *The American South: A History*. New York: Alfred A. Knopf, 1990.

"Couldn't it Happen Here?" *National Review*, 5 July 1958, 54.

Crawford, Alan. *Thunder on the Right: The "New Right" and the Politics of Resentment*. New York: Pantheon Books, 1980.

Cubeddu, Raimundo. *The Philosophy of the Austrian School*. New York: Routledge, 1993.

Davis, Nuel Pharr. *Lawrence and Oppenheimer*. New York: Da Capo Press, 1986.

Dawley, Alan. *Struggles for Justice: Social Responsibility and the Liberal State*. Cambridge, MA: Belknap Press, 1991.

Dennis, Michael A. "'Our First Line of Defense': Two University Laboratories in the Postwar American State." *Isis* 85 (1994): 427-455.

DeVorkin, David H. "The Military Origins of the Space Sciences in the American V-2 Era." In *National Military Establishments and the Advancement of Science and Technology*, eds. Paul Forman and José M. Sánchez-Ron, 233-260.

Divine, Robert. *Blowing on the Wind: The Nuclear Test Ban Debate*. New York: Oxford University Press, 1978.

_____. *The* Sputnik *Challenge*. New York: Oxford University Press, 1993.

Doel, Ronald E. "Internationalism After 1940." In *The Cambridge History of Science, volume 8: Modern Science in National and International Context*, eds. David N. Livingstone and Ronald L. Numbers, forthcoming.

_____. "Scientists as Policymakers, Advisors, and Intelligence Agents: Linking Contemporary Diplomatic History with the History of Contemporary Science." In *The Historiography of Contemporary Science and Technology*, ed. Thomas Söderqvist, 215-244.

_____. *Solar System Astronomy in America: Communities, Patronage, and Interdisciplinary Science, 1920-1960.* New York: Cambridge University Press, 1996.

Doel, Ronald E. and Allan A. Needell. "Science, Scientists, and the CIA: Balancing International Ideals, National Needs, and Professional Opportunities." In *Eternal Vigiliance*, eds., Rhodri Jeffreys-Jones and Christopher Andrew, 59-81.

Duffy, Bernard K. and Martin Jacobi. *The Politics of Rhetoric: Richard M. Weaver and the Conservative Tradition.* Westport, CT: Greenwood Press, 1993.

Dumbrell, John. "Cold War America, 1945-1960." In *America's Century*, eds. Iwan W. Morgan and Neil A. Wynn, 133-157.

Duncan, Christopher M. *Fugitive Theory: Political Theory, the Southern Agrarians, and America.* Lanham, MD: Lexington Books, 2000.

Dunn, Charles W. and J. David Woodward. *American Conservatism from Burke to Bush: An Introduction.* Landham, MD: Madison Books, 1991.

Dupree, A. Hunter. *Science in the Federal Government: A History of Policies and Activities.* Baltimore: The Johns Hopkins University Press, 1986.

Engel, Leonard. "Can Science Survive the Atom?" *The Nation*, 28 January 1950, 84-85.

_____. "Wonder Drugs: Plus and Minus." *The Nation*, 2 December 1950, 502-503.

England, J. Merton. *A Patron for Pure Science: The National Science Foundation's Formative Years, 1945-57.* Washington, D. C.: National Science Foundation, 1983.

Evans, Medford. "The Arrogant Atomic Elite." Review of *Atomic Energy and Congress*, by Morgan Thomas and Robert M. Northrop. *National Review*, 18 August 1956, 18-19.

_____. "The Difference Is Atomic." *National Review*, 3 November 1956, 9-11.

_____. "How Possible Is Secrecy?" *National Review*, 14 March 1956, 11-13.

_____. *The Secret War for the A-Bomb.* Chicago: Henry Regnery Co., 1953.

Evans, M. Stanton. "A Conservative Case for Freedom." In *What Is Conservatism?*, ed. Frank S. Meyer, 67-77.

Ezrahi, Yaron. *The Descent of Icarus: Science and the Transformation of Contemporary Democracy.* Cambridge, MA: Harvard University Press, 1990.

Fermatt, John. Review of *Ideas Have Consequences* by Richard M. Weaver. *Catholic World*, June 1948, 278-279.

Forman, Paul and José M. Sánchez-Ron, eds. *National Military Establishments and the Advancement of Science and Technology: Studies in 20th Century History.* Dordrecht, Netherlands: Kluwer Academic Publishers, 1996.

Friedrich, C. J. Review of *The Counter-Revolution of Science* by F. A. Hayek. *The Annals of The American Academy of Political and Social Science* 284: 208-209

Galison, Peter and Bruce Hevly, eds. *Big Science: The Growth of Large-Scale Research.* Stanford, CA: Stanford University Press, 1992.

Geiger, George R. "We Note...The Consequences of Some Ideas." Review of *Ideas Have Consequences* by Richard M. Weaver. *Antioch Review* 8 (1948): 251-254.

Geiger, Roger L. "Science, Universities, and National Defense." In *Science After '40,* ed. Arthur Thackray, 26-48.

Genovese, Eugene. *The Southern Tradition: The Achievement and Limitations of an American Conservatism.* Cambridge, MA: Harvard University Press, 1994.

Gilbert, James. *Redeeming Culture: American Religion in an Age of Science.* Chicago: University of Chicago Press, 1997.

Gittler, Joseph B. Review of *The Counter-Revolution of Science: Studies on the Abuse of Reason* by F. A. Hayek. *The American Journal of Sociology* 58 (November 1952): 314-315.

Goldberg, Robert Alan. *Barry Goldwater.* New Haven, CT: Yale University Press, 1995.

Gottfried, Paul and Thomas Fleming. *The Conservative Movement.* Boston: Twayne Publishers, 1988.

Graham, Loren R. *Science in Russia and the Soviet Union: A Short History.* New York: Cambridge University Press, 1993.

_____. *What Have We Learned About Science and Technology from the Russian Experience?* Stanford, CA: Stanford University Press, 1998.

Gray, John. *Hayek on Liberty.* 3rd ed. London: Routledge, 1998.

Greenberg, Daniel S. *The Politics of Pure Science.* New York: New American Library, 1967.

Hansen, Alvin H. "The New Crusade Against Planning." *The New Republic*, 1 January 1945, 9-12.

Harrigan, Anthony. "The Case for Gas Warfare." *National Review*, 9 April 1963, 283, 298.

Hartz, Louis. *The Liberal Tradition in America: An Interpretation of American Political Thought since the Revolution*. New York: Harcourt, Brace, and Co., 1955.

Hayek, F. A. *The Counter-Revolution of Science: Studies on the Abuse of Reason*. Glencoe, IL: The Free Press, 1952.

_____. *The Fatal Conceit: The Errors of Socialism*. Chicago: University of Chicago Press, 1989.

_____. *The Road to Serfdom*. Chicago: University of Chicago Press, 1944.

_____. *The Sensory Order: An Inquiry into the Foundations of Theoretical Psychology*. Chicago: University of Chicago Press, 1963.

_____. "Why I Am Not a Conservative." In *What Is Conservatism?*, ed. Frank S. Meyer, 88-103.

_____., ed. *Collectivist Economic Planning: Critical Studies on the Possibilities of Socialism*. London: Routledge & Kegan Paul, Ltd., 1935.

Haynes, John Earl. *Red Scare or Red Menace?: American Communism and Anticommunism in the Cold War Era*. Chicago: Ivan R. Dee, 1996.

Hazlitt, Henry, ed. *The Critics of Keynesian Economics*. Princeton, NJ: D. Van Nostrand Co., 1960.

Heller, Francis H. and John Gillingham, eds. *The United States and Integration of Europe*. New York: St. Martin's Press, 1996.

Hewlett, Richard G. and Oscar E. Anderson, Jr. *The New World, 1939/1946*. Vol. 1, *A History of the United States Atomic Energy Commission*. University Park: Pennsylvania State University Press, 1962. Reprint, Washington, D. C.: U.S. Atomic Energy Commission, 1972.

Hewlett, Richard G. and Francis Duncan. *Atomic Shield 1947/1952*. Vol. 2 , *A History of the United States Atomic Energy Commission*. University Park: Pennsylvania State University Press, 1969. Reprint, Washington, D. C.: U. S. Atomic Energy Commission, 1972.

Hewlett, Richard G. and Jack M. Holl. *Atoms for Peace and War, 1953-1961: Eisenhower and the Atomic Energy Commission.* Vol. 3, *A History of the United States Atomic Energy Commission.* Berkley, CA: University of California Press, 1989.

Hofstadter, Richard. *Anti-Intellectualism in American Life.* New York: Vintage Books, 1963.

_____. "The Pseudo-Conservative Revolt." In *The Radical Right*, ed. Daniel Bell, 63-80.

_____. "Pseudo-Conservatism Revisited—A Postscript." In *The Radical Right*, ed. Daniel Bell, 81-86.

Holifield, E. Brooks. "Science and Theology in the Old South." In *Science and Medicine in the Old South*, eds. Ronald L. Numbers and Todd L. Savitt, 127-146.

Hollinger, David A. "Free Enterprise and Free Inquiry: The Emergence of Laissez-Faire Communitarianism in the Ideology of Science in the United States." In *Science, Jews, and Secular Culture*, 97-120.

_____. *Science, Jews, and Secular Culture: Studies in Mid-Twentieth Century American Intellectual History.* Princeton, NJ: Princeton University Press, 1996.

Holloway, Rachel L. *In the Matter of J. Robert Oppenheimer: Politics, Rhetoric, and Self-Defense.* Westport, CT: Praeger, 1993.

Hunt, Michael H. *Ideology and U. S. Foreign Policy.* New Haven, CT: Yale University Press, 1987.

Huxley, Julian. "A Scientist Goes to Russia." *The New Republic*, 30 July 1945, 125-127.

Jeffreys-Jones, Rhodri. *The CIA and American Democracy*, 2nd ed. New Haven, CT: Yale University Press, 1998.

Jeffreys-Jones, Rhodri and Christopher Andrew, eds. *Eternal Vigiliance: Fifty Years of the CIA.* London: Frank Cass, 1997.

Johnson, Thomas Cary. *Scientific Interests in the Old South.* New York: D. Appleton-Century, 1936.

Jones, Howard Mumford. "Listing Mankind's 'Wrong Turnings'." Review of *Ideas Have Consequences* by Richard M. Weaver. *New York Times Book Review*, 22 February 1948, 4, 25.

Kevles, Daniel J. "The National Science Foundation and the Debate over Postwar Research Policy, 1942-1945: A Political Interpretation of Science—The Endless Frontier." *Isis* 68 (1977): 5-26.

_____. *The Physicists: The History of a Scientific Community in Modern America.* Cambridge, MA: Harvard University Press, 1995.

Kidd, Stuart. "The Great Depression and the New Deal." In *America's Century,* ed. Iwan W. Morgan and Neil A. Wynn, 80-109.

Killian, James R. Jr. "Science and Public Policy." *Bulletin of the Atomic Scientists* 15 (April 1959): 168-172.

_____. *Sputnik, Scientists, and Eisenhower: A Memoir of the First Special Assistant to the President for Science and Technology.* Cambridge, MA: Massachusetts Institute of Technology Press, 1977.

Kirchwey, Freda. "Russia and the Bomb." *The Nation*, 17 November 1945, 511-512.

Kirk, Russell. *The Conservative Mind from Burke to Santayana.* Chicago: Henry Regnery Co., 1953.

_____. "Prescription, Authority, and Ordered Freedom." In *What Is Conservatism?*, ed. Frank S. Meyer, 23-40.

_____. "Those School Psychological Tests." *National Review*, 30 June 1964, 539.

Kirkendall, Richard M. *A Global Power: America Since the Age of Roosevelt.* 2nd ed. New York: Alfred A. Knopf, 1980.

Kley, Roland. *Hayek's Social and Political Thought.* Oxford: Clarendon Press, 1994.

Kolakowski, Leszek. *The Alienation of Reason.* Garden City, NY: Doubleday & Co., 1968.

Kolkey, Jonathan Martin. *The New Right, 1960-1968 with epilogue, 1969-1980.* Lantham, MD: University Press of America, 1983.

Krutch, Joseph Wood. *The Modern Temper: A Study and a Confession.* New York: Harcourt, Brace, & Co., 1929.

Kukathas, Chandran. *Hayek and Modern Liberalism.* Oxford: Clarendon Press, 1989.

Kuznick, Peter J. *Beyond the Laboratory: Scientists as Political Activists in 1930s America.* Chicago: University of Chicago Press, 1987.

LaFeber, Walter. *America, Russia, and the Cold War, 1945-1996.* New York: McGraw-Hill, 1997.

Lapp, Ralph E. *The New Priesthood: The Scientific Elite and the Uses of Power.* New York: Harper & Row, 1965.

Leslie, Stuart W. *The Cold War and American Science: The Military-Academic-Industrial Complex at MIT and Stanford.* New York: Columbia University Press, 1993.

Leuchtenberg, William E. *The FDR Years: On Roosevelt and His Legacy.* New York: Columbia University Press, 1995.

_____. *Franklin D. Roosevelt and the New Deal, 1932-1940.* New York: Harper & Row, 1963.

"Love Among the Ruins." *National Review*, 8 September 1956, 7.

Manzione, Joseph A. "The American Scientific Community, the United States Government, and the Issue of International Scientific Relations During the Cold War, 1945-1960." Ph.D. diss., University of Michigan, 1992.

_____. "'Amusing and Amazing and Practical and Military': The Legacy of Scientific Internationalism in American Foreign Policy, 1945-1963." *Diplomatic History* 24, no. 1 (2000): 21-55.

May, Ernest, ed. *American Cold War Strategy: Interpreting NSC-68.* Boston: Bedford Books, 1993.

McCormick, B. J. *Hayek and the Keynesian Avalanche.* New York: Harvester Wheatsheaf, 1992.

Meinecke, Friedrich. *Historicism: The Rise of a New Historical Outlook.* Trans. by J. E. Anderson, trans. revised by H. D. Schmidt. London: Routledge and K. Paul, 1972.

Merchant, Carolyn. *The Death of Nature: Women, Ecology, and the Scientific Revolution.* San Francisco: Harper & Row, 1980.

Mill, John Stuart. *Auguste Comte and Positivism.* London: N. Tubner, 1866.

Minutes of meeting, August 2, 1951. James Burnham Papers, box 8, Hoover Institution Archives, Stanford, CA.

Minutes of meeting, October 11, 1951. James Burnham Papers, box 8, Hoover Institution Archives, Stanford, CA.

Meyer, Frank S. "The Bigotry of Science." *National Review*, 8 March 1956, 234.

_____. "Consensus and Divergence." In *What Is Conservatism?*, ed. Frank S. Meyer, 219-232.

_____. "Hey, Wait A Minute." *National Review*, 8 November 1958, 307.

_____. "The Horizons of Conservatism." In *The Conservative Mainstream.* New Rochelle, NY: Arlington House, 1969.

_____. *In Defense of Freedom: A Conservative Credo.* Chicago: Henry Regnery Co., 1962.

_____. "Introduction." In *What Is Conservatism?*, ed. Frank S. Meyer, 3-4.

_____. "Symptoms of Mass Delusion." *National Review*, 8 February 1956. 23-24.

_____, ed. *What Is Conservatism?* New York: Holt, Reinhart and Winston, 1964.

Morgan, Iwan W. and Neil A. Wynn, eds. *America's Century: Perspectives on U. S. History since 1900.* New York: Holmes & Meyer, 1993.

Nash, George H. *The Conservative Intellectual Movement in America since 1945.* Wilmington, DE: Intercollegiate Studies Institute, 1996.

"A National Science Program." *The New Republic*, 30 July 1945, 116.

Needell, Allan A. "Rabi, Berkner, and the Rehabilitation of Science in Europe: The Cold War Context of American Support for International Science 1945-1958." In *The United States and Integration of Europe*, ed. Francis H. Heller and John Gillingham, 289-305.

_____. "Truth Is My Weapon: Project TROY, Political Warfare, and Government-Academic Relations in the National Security State." *Diplomatic History* 17 (1993): 399-420.

Niebuhr, Reinhold. *Moral Man and Immoral Society: A Study in Ethics and Politics.* New York: Scribner's, 1932.

Nisbet, Robert. *The Making of Modern Society.* Brighton, UK: Wheatsheaf Books, 1986.

Numbers, Ronald L. *The Creationists*. New York: Alfred A. Knopf, 1992.

Numbers, Ronald L. and Janet S. Numbers. "Science in the Old South: A Reappraisal." In *Science and Medicine in the Old South*, eds. Ronald L. Numbers and Todd L. Savitt, 9-35.

Numbers, Ronald L. and Todd L. Savitt, eds. *Science and Medicine in the Old South*. Baton Rouge, LA: Louisiana State University Press, 1989.

Numbers, Ronald L. and Charles E. Rosenberg, eds. *The Scientific Enterprise in America: Readings from* Isis. Chicago: University of Chicago Press, 1995.

Nye, Mary Jo. *Science in the Provinces: Scientific Communities and Provincial Leadership in France, 1860-1930*. Berkeley, CA: University of California Press, 1986.

"Operation Snow Removal." *National Review*, 27 March 1962, 194.

Orton, W. A. Review of *Ideas Have Consequences* by Richard M. Weaver. *Commonweal*, 14 May 1948, 119-120.

Paterson, Isabel. "The Oracles are Dumb." *National Review*, 23 May 1956, 10-13, 16.

Pells, Richard H. *The Liberal Mind in a Conservative Age*. New York: Harper & Row, 1985.

Pickering, Mary. *Auguste Comte: An Intellectual Biography*. New York: Cambridge University Press, 1993.

Polanyi, Michael. "The Case for Individualism." *Bulletin of the Atomic Scientists* 5 (January 1949): 19-20.

_____. "Protests and Problems." *Bulletin of the Atomic Scientists* 9 (November 1953): 322, 340.

_____. "The Republic of Science." *Minerva* 1 (1962): 54-73.

Raison, Timothy, ed. *The Founding Fathers of Social Science*. Baltimore, MD: Penguin Books, 1969.

"Reflections from Space." *National Review*, 13 March 1962, 154-155, 157.

Reingold, Nathan. "The Peculiarities of the Americans or Are There National Styles in the Sciences?" *Science In Context* 4 (1991): 347-366.

Röpke, Wilhelm. "Education in Economic Freedom." In *What Is Conservatism?*, ed. Frank S. Meyer, 78-87.

Rusher, William A. *The Rise of the Right*. New York: National Review Books, 1993.

Saunders, Frances Stonor. *The Cultural Cold War: The CIA in the World of Arts and Letters*. New York: The New Press, 2000.

Scharff, Robert C. *Comte After Positivism*. New York: Cambridge University Press, 1995.

Schlesinger, Arthur M., Jr. *The Vital Center: The Politics of Freedom*. Cambridge, MA: The Riverside Press, 1949.

Schrecker, Ellen. *The Age of McCarthyism: A Brief History with Documents*. Boston: Bedford Books, 1994.

Schweber, S. S. *In the Shadow of the Bomb: Bethe, Oppenheimer, and the Moral Responsibility of the Scientist*. Princeton, NJ: Princeton University Press, 2000.

"Science and Democracy." *The New Republic*, 11 June 1945, 807.

"Science and National Defense." *The New Republic*, 1 January 1945, 7.

Scotchie, Joseph, ed. *The Vision of Richard Weaver*. New Brunswick, NJ: Transaction Publishers, 1995.

Seitz, Frederick. "Offensive or Defensive Weapons?" *Bulletin of the Atomic Scientists* 9 (November 1953): 325-327, 336.

_____. *On the Frontier: My Life in Science*. Woodbury, NY: American Institute of Physics, 1994.

_____. "Physicists and the Cold War." *Bulletin of the Atomic Scientists* 6 (March 1950): 71-72.

Seitz, Frederick and Eugene P. Wigner. "On the Geneva Conference: A Dissenting Opinion." *Bulletin of the Atomic Scientists 7* (January 1956): 23-24.

Shils, Edward. "The Scientific Community: Thoughts After Hamburg." *Bulletin of the Atomic Scientists* 10 (May 1954): 151-155.

Smith, Alice Kimball. *A Peril and a Hope: The Scientists' Movement in America, 1945-47*. Chicago: University of Chicago Press, 1965.

Smith, Bruce L. R. *The Advisors: Scientists in the Policy Process.* Washington, D. C.: The Brookings Institution, 1992.

Snow, C. P. *The Two Cultures and the Scientific Revolution.* New York: Cambridge University Press, 1959.

Sorrell, Tom. *Scientism: Philosophy and the Infatuation with Science.* London: Routledge, 1991.

Söderqvist, Thomas, ed. *The Historiography of Contemporary Science and Technology.* United Kingdom: Harwood Academic Publishers, 1997.

Stern, Philip M. *The Oppenheimer Case: Security On Trial.* New York: Harper & Row, 1969.

Stine, Jeffrey K. *A History of Science Policy in the United States, 1940-1985.* Washington, D. C.: Government Printing Office, 1986.

Stoakes, Geoff. "The Foreign Policy of a World Power." In *America's Century*, eds. Iwan W. Morgan and Neil A. Wynn, 303-335.

Szanton, Andrew. *The Recollections of Eugene P. Wigner as told to Andrew Szanton.* New York: Plenum Press, 1992.

Teller, Edward. "Atomic Scientists Have Two Responsibilities." *Bulletin of the Atomic Scientists* 3 (December 1947): 355-356.

_____. "Back to the Laboratories." *Bulletin of the Atomic Scientists* 6 (March 1950): 71-72.

_____. "The Nature of Nuclear Warfare." *Bulletin of the Atomic Scientists* 13 (May 1957): 162-165.

_____. "The Russian Challenge." *Bulletin of the Atomic Scientists* 14 (February 1958): 83-86.

_____. "A Suggested Amendment to the Acheson-Lilienthal Report." *Bulletin of the Atomic Scientists* 1 (June 1, 1946): 5.

Thackray, Arthur, ed. *Science After '40. Osiris* 7 [2nd series] (1992).

Tonsor, Stephen. "Science, Technology, and the Cultural Revolution." *The Intercollegiate Review* (Winter 1972-1973): 83-89

Trotsky, Leon. *In Defense of Marxism Against the Petty-Bourgeois Opposition.* New York: Pioneer Publishers, 1942.

Tucker, William H. *The Science and Politics of Racial Research.* Urbana, IL: University of Illinois Press, 1994.

Twelve Southerners. *I'll Take My Stand: The South and the Agrarian Tradition.* New York: Harper and Row, 1930.

U. S. Atomic Energy Commission. *In the Matter of J. Robert Oppenheimer: Transcript of Hearing before Personnel Security Board, Washington, D. C., April 12, 1954 through May 6, 1954.* Washington, D. C.: Government Printing Office, 1954.

Viereck, Peter. *Conservatism Revisited,* 2nd ed. New York: The Free Press, 1962.

Viguerie, Richard A. *The New Right: We're Ready to Lead.* Falls Church, VA: Viguerie Co., 1981.

Voegelin, Eric. Papers, Hoover Institution Archives, Stanford, CA.

Von Mises, Ludwig. *Omnipotent Government: The Rise of the Total State and Total War.* New Haven, CT: Yale University Press, 1944.

Wang, Jessica. *American Science in an Age of Anxiety: Scientists, Anticommunism, and the Cold War.* Chapel Hill, NC: University of North Carolina Press, 1999.

_____. "Liberals, the Progressive Left, and the Political Economy of Postwar American Science: The National Science Foundation Debate Revisited." *Historical Studies in the Physical and Biological Sciences* 26, no. 1 (1995): 139-167.

_____. "Science, Security and the Cold War: The Case of E. U. Condon." *Isis* 83 (1992): 238-269.

Wang, Zuoyue. "American Science and the Cold War: The Rise of the U.S. President's Science Advisory Committee." Ph.D. diss., University of California-Santa Barbara, 1994.

Weaver, Richard M. "Easy Conclusion." Review of *Towards a Science of Peace* by Theodore L. Lentz. *National Review*, 26 November 1955, 29.

_____. *The Ethics of Rhetoric.* Chicago: Henry Regnery Co., 1953.

_____. "Flesh for a Skeleton." Review of *Number: The Language of Science* by Tobias Dantzig. *National Review*, 28 March 1956, 26.

_____. *Ideas Have Consequences*. Chicago: University of Chicago Press, 1948.

_____. "On Social Science." Review of *The Proper Study of Mankind* by Stuart Chase. *National Review*, 9 May 1956, 20.

_____. "Science and Sentimentalism." Review of *In Search of Man* by André Missenard. *National Review*, 7 December 1957, 524-525.

_____. *The Southern Tradition At Bay: A History of Postbellum Thought*. Edited by George Core and M.E. Bradford. New Rochelle, N.Y.: Arlington House, 1968.

_____. *Visions of Order: The Cultural Crisis of Our Time*. Baton Rouge, LA: Louisiana State University Press, 1964.

"Welcome, Explorer; Thanks, Mr. Baldwin." *National Review*, 15 February 1958, 151.

"What so False as Truth Is, False to Thee?" *National Review*, 31 January 1959, 479-480.

Wigner, Eugene P. "Recall The Ends—while pondering means." *Bulletin of the Atomic Scientists* 17 (March 1961): 82-85.

Young, Fred Douglas. *Richard M. Weaver, 1910-1963: A Life of the Mind*. Columbia, MO: University of Missouri Press, 1995.

Zachary, G. Pascal. *Endless Frontier: Vannevar Bush, Engineer of the American Century*. New York: Free Press, 1997.