

cessfully made the challenge. He argued, and the failure of planned economies has demonstrated, that economics is neither politics nor engineering by other means.

*Socialism and War*, volume 10 of *The Collected Works of F. A. Hayek*, brings together Hayek's seminal contribution to the 'socialist calculation' debate with related essays and reviews from the crucible of the late 1930s and early 1940s. There are striking parallels between the period following the First World War and the present period of confusion after the undeclared end of the Cold War. There is one great difference: then it was capitalism that was apparently discredited, now it is socialism. We know now that in the first instance appearance was not reality; will the same prove true of socialism?

I would like to express my considerable appreciation to Bruce Caldwell for his clear and perceptive re-creation of the context of the original debate and of its continuing significance. We are grateful to Gene Opton for her careful preparation of the manuscript, and to Leif Wenar for his timely bibliographical assistance. Penelope Kaiserlian and Margaret Mahan of the University of Chicago Press and Alan Jarvis of Routledge have tactfully blended enthusiasm with patience to see this volume into print. *The Banker*, Blackwell Publishers for the *Economic Journal* and *Economica*, *Contemporary Review*, Macmillan Magazines Ltd. for *Nature*, Routledge, *The Spectator*, and the *University of Chicago Law Review* have kindly granted permission to reprint various of the essays and reviews here included. To the original sponsors of the Collected Works of F. A. Hayek project may we once again express our gratitude.

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## INTRODUCTION

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An odd pairing it seems at first, the conjoining of 'socialism' with 'war'. It would not have seemed so, though, for Friedrich A. Hayek. His most famous book, *The Road to Serfdom*,<sup>1</sup> was written during the Second World War and dedicated "To the socialists of all parties" in an attempt to cool the growing passion for state planning emerging at that time in Britain. Nor would Hayek's mentor, Ludwig von Mises, have found the association strange. Mises's first paper on socialism, which appeared in 1920, was a response to the view that the extensive economic planning undertaken during the First World War could and should be continued in peacetime. The seismic social upheavals produced by the two world wars (and, not incidentally, by the Depression that separated them) provided both opportunity and impetus for a variety of socialist experiments, from Soviet and Chinese Communism to National Socialism to an assortment of social democracies. In the twentieth century, socialism and war have been frequent cohabitants.

The papers and reviews collected in this volume document the lonely battle against socialism carried on by F. A. Hayek throughout the 1930s and 1940s. The materials, in roughly chronological order, cover three areas. First in order are his debates with the market socialists, which were carried on chiefly in British academic journals in the 1930s. Next come Hayek's responses to the onset of war, most of which appeared in short articles in weeklies and in book reviews. The third section contains a series of his papers examining the relationship between economic planning and freedom. Many of the reviews of the literature on capitalism and on the varieties of socialism that Hayek wrote during this crucial period are gathered in an Appendix to this volume.

The purpose of this introduction is to provide background for the materials collected here. The discussions that Mises participated in a genera-

<sup>1</sup>F. A. Hayek, *The Road to Serfdom* (London: Routledge and Kegan Paul; Chicago: University of Chicago Press, 1944; 50th Anniversary Edition, with a New Introduction by Milton Friedman, University of Chicago Press, 1994).

tion earlier provided the groundwork for Hayek's contributions to the market socialism debates, so we will examine them first. While the seeds of what would become Hayek's 'knowledge-based' critique of socialism are present in essays published in 1935, it was only after his exchange with Oskar Lange that they reached their mature form. Among Hayek's wartime contributions collected in the next section, special emphasis is given to Hayek's reaction to, and further development of, John Maynard Keynes's proposals in *How to Pay for the War*.<sup>2</sup> If his new emphasis on knowledge forever changed the way that Hayek viewed economics, an equally important part of his 1930s transformation was his move away from economics proper and towards social theory. Hayek's 1944 book *The Road to Serfdom* constitutes the most widely known evidence of this change of direction. But work on that book had begun by the late 1930s, and his progress can be traced in the papers gathered in part 3. As will be shown in the final part of the introduction, Hayek's path was much influenced by his desire to refute the claims of his opponents—in this instance virtually all of the British intelligentsia and in particular those who believed that the rational scientific planning of society provides the only means for ensuring the preservation of freedom.

### 1. German Language Debates on Socialism

Until the turn of the century, Continental Marxism was closely identified with German Social Democracy. Its statement of principles was the Gotha Program of 1875, in which various of Marx's doctrines were combined with the more moderate ideas of one of his chief rivals, Ferdinand Lassalle (much to the consternation of Marx himself). In 1891 the Erfurt Program, with Karl Kautsky the principal architect, superseded the Gotha Program. It marked a return to the more revolutionary, and hence more purely Marxian, socialist vision. The consensus was not to last long. At the end of the decade, Eduard Bernstein published *Die Voraussetzungen des Sozialismus*.<sup>3</sup> Influenced by his experience with the English Fabian socialists, Bernstein questioned Marx's theoretical edifice, as well as a number of his predictions, and touted an evolutionary rather than revolutionary path to the socialist future. Bernstein's vision directly contradicted that of Kautsky; the first revisionist controversy had begun. The second

<sup>2</sup>J. M. Keynes, *How to Pay for the War*, reprinted in *Essays in Persuasion*, vol. 9 (1972) of *The Collected Writings of John Maynard Keynes*, Austin Robinson and Donald Moggridge, eds, 30 vols (London: Macmillan, for the Royal Economic Society, 1971–89), pp. 367–439.

<sup>3</sup>Eduard Bernstein, *Die Voraussetzungen des Sozialismus und die Aufgaben der Sozialdemokratie* (Stuttgart: Dietz, 1899), translated as *Evolutionary Socialism: A Criticism and an Affirmation* (New York: Huebsch, 1909; reprinted, New York: Schocken, 1961).

would come two decades later when Lenin split from Kautsky. This resulted in the great schism between Soviet-style Communism (with its ultimate dedication to revolution and extensive central planning) and German-style Social Democracy (which was more gradualist, and whose proponents tended to endorse variants of market socialism). The many divisions within Marxism meant that anyone who chose to criticize 'socialism' confronted a Hydra rather than a monolith. To be effective, the argument against socialism had to be a general one.

Another type of Marxist thought emerged at the turn of the century, this one from within the Austro-Hungarian Empire. Austro-Marxists retained a theoretical adherence to Marx's writings and, influenced by the physicist Ernst Mach,<sup>4</sup> were taken with the idea that Marxism constituted a truly 'scientific' approach to the study of social phenomena.<sup>5</sup>

The third volume of Marx's *Das Kapital* appeared in 1894, eleven years after its author's death. Advocates hoped that the final book would resolve certain key problems with the labour theory of value that were evident in the earlier volumes. In 1896, the Austrian economist Eugen von Böhm-Bawerk offered a comprehensive assessment of Marx's system and concentrated on the Marxian theory of value.<sup>6</sup> The title of the English translation, *Karl Marx and the Close of His System*, arguably carries a double meaning. The original German reads, "The Completion of the Marxian System", indicating that Böhm-Bawerk's essay was simply meant as a response to Marx's now finally completed trilogy. But Böhm-Bawerk's closing sentence, in which Marx is compared to Hegel, makes evident his intent to bring on the collapse of the Marxian edifice: "The specific theoretical work of each was a most ingeniously conceived structure, built up by a fabulous power of combination, of innumerable storeys of thought,

<sup>4</sup>For Hayek's view of Mach's influence, see his essay "Ernst Mach (1838–1916) and the Social Sciences in Vienna", reprinted as chapter 7 of *The Fortunes of Liberalism*, ed. Peter Klein, which constitutes vol. 4 (1992) of *The Collected Works of F. A. Hayek* (Chicago: University of Chicago Press, and London: Routledge), pp. 172–175. Compare his remarks in *Hayek on Hayek*, Stephen Kresge and Leif Wenar, eds (Chicago: University of Chicago Press, and London: Routledge, 1994), p. 47.

<sup>5</sup>The attempt by Viennese groups like the Austro-Marxists (as well as the psychoanalysts) to claim the mantle of science for their systems provoked Karl Popper to try to provide a criterion to demarcate science from pseudo-science; see his "Intellectual Autobiography", in vol. 1 of *The Philosophy of Karl Popper*, ed. Paul Schilpp (LaSalle, Ill.: Open Court, 1974), pp. 23–33.

<sup>6</sup>Eugen von Böhm-Bawerk, "Zum Abschluss des Marxschen Systems", in *Staatswissenschaftliche Arbeiten: Festgaben für Karl Knies*, ed. Otto von Boenigk (Berlin: Haering, 1896), translated as *Karl Marx and the Close of His System* (London: Fisher Unwin, 1898) and reprinted in *Karl Marx and the Close of His System and Böhm-Bawerk's Criticism of Marx*, ed. Paul Sweezy (New York: Kelley, 1949; reprinted, 1975).

held together by a marvelous mental grasp, but—a house of cards”.<sup>7</sup> The most important reply to Böhm-Bawerk’s critique came in 1904 from Rudolf Hilferding, a leader of the Austro-Marxists, in the first issue of the Marxist periodical *Marx-Studien*, which he co-edited with Max Adler.<sup>8</sup>

At about the same time that Hilferding’s article appeared, Böhm-Bawerk returned to teach at the University of Vienna, after many years of government service (including three periods as Finance Minister). For the next decade he conducted a seminar in economics, a gathering that remains noteworthy in the history of economics. Participants included Böhm-Bawerk’s young critic Rudolf Hilferding, who published *Das Finanzkapital* in 1910, perhaps the most important work in Marxian economic theory in the twentieth century;<sup>9</sup> Otto Bauer, political theorist of the Austro-Marxists who, at the conclusion of the First World War, became the leader of the Austrian Social Democrats; Emil Lederer, who became the first Dean of the Graduate Faculty of Political and Social Science at the New School for Social Research; the brilliant young economist Joseph Schumpeter;<sup>10</sup> the sociologist Otto Neurath, who became one of the leading members of the Vienna Circle of Logical Positivists in the 1920s; and finally Ludwig von Mises, who, though trained in the style of the historical school economists, embraced the doctrines of his teacher and in 1912

<sup>7</sup>Böhm-Bawerk, *Karl Marx and the Close of His System*, op. cit., p. 118.

<sup>8</sup>Rudolf Hilferding, “Böhm-Bawerk’s Marx-Kritik”, *Marx-Studien*, vol. 1, 1904, pp. 1–61, translated as *Böhm-Bawerk’s Criticism of Marx*, reprinted in *Karl Marx and the Close of His System and Böhm-Bawerk’s Criticism of Marx*, op. cit., pp. 121–196.

<sup>9</sup>Rudolf Hilferding, *Das Finanzkapital* (Vienna: I. Brand, 1910); translated as *Finance Capital* (London: Routledge and Kegan Paul, 1980). M. C. Howard and J. E. King, in their *A History of Marxian Economics, Volume I 1883–1929* (Princeton: Princeton University Press, 1989), p. 100, judge *Finance Capital* “the most influential text in the entire history of Marxian political economy, only excepting *Capital* itself”.

<sup>10</sup>Schumpeter’s early works included *Das Wesen und der Hauptinhalt der Theoretischen Nationalökonomie* (Leipzig: Duncker & Humblot, 1908); *Theorie der wirtschaftlichen Entwicklung* (Leipzig: Duncker & Humblot, 1912), translated by Redvers Opie as *The Theory of Economic Development* (Cambridge, Mass.: Harvard University Press, 1934; reprinted, New York: Oxford University Press, 1961); and *Epochen der Dogmen- und Methodengeschichte, Grundriss der Sozialökonomik*, vol. 1, part 1, first ed. (Tübingen: J. C. B. Mohr, 1914), translated by R. Aris as *Economic Doctrine and Method, An Historical Sketch* (New York: Oxford University Press, 1954). The first contained a variety of methodological insights as well as praise for the Walrasian variant of marginal analysis; Schumpeter would in his *History of Economic Analysis* (New York: Oxford University Press, 1954), p. 827, call Walras “the greatest of all economists”, a remark sufficient in itself to remove him from the pantheon of Austrian School economists. His second book contained a theory of capitalist development, and the last book foreshadowed his lifelong interest in the history of ideas. For Hayek’s assessment of Schumpeter, see chapter 5 of *The Fortunes of Liberalism*, op. cit., pp. 160–165.

published his classic contribution to monetary theory, *Theorie des Geldes und der Umlaufsmittel*.<sup>11</sup>

Mises reminisced in his memoirs about the first semester’s meetings of Böhm-Bawerk’s seminar. His respect for other members of the seminar, even those with whom he sharply disagreed, is evident.

As the subject matter of the first seminar Böhm-Bawerk chose the fundamentals of the theory of value. From his Marxian position, Otto Bauer sought to dissect the subjectivism of the Austrian value theory. With the other members of the seminar in the background, the discussion between Bauer and Böhm-Bawerk filled the whole winter semester. Bauer’s intellect was very impressive; he was a worthy opponent of the great master whose critique had mortally wounded Marxian economics.<sup>12</sup>

But while he praised Böhm-Bawerk and his rivals, Mises excoriated one member of the group.

Böhm-Bawerk was a brilliant seminar leader. He did not think of himself as a teacher, but as a chairman who occasionally participated in the discussion. Unfortunately, the extraordinary freedom to speak which he granted to every member was occasionally abused by thoughtless talkers. Especially disturbing was the nonsense which Otto Neurath presented with fanatical fervor.<sup>13</sup>

Otto Neurath, who was born in Vienna in 1882, received his doctorate in Berlin, then returned to Vienna to teach at the Neue Wiener Handelsakademie. In 1909 he began publishing articles on the subject of ‘war economy’, that is, how to run an economy under conditions of modern

<sup>11</sup>Ludwig von Mises, *Theorie des Geldes und der Umlaufsmittel* (Munich and Leipzig: Duncker & Humblot, 1912), 2nd edition translated by H. E. Batson as *The Theory of Money and Credit* (London: Cape, 1934; reprinted, Indianapolis, Ind.: LibertyClassics, 1981). Hayek said of the seminar, “There is no doubt that the foundations of Mises’s characteristic ideas on socialism were laid then. . . .”; see his Foreword to Ludwig von Mises, *Socialism: An Economic and Sociological Analysis*, reprinted in chapter 4 of *The Fortunes of Liberalism*, op. cit., pp. 136–143.

<sup>12</sup>Ludwig von Mises, *Notes and Recollections* (South Holland, Ill.: Libertarian Press, 1978), pp. 39–40.

<sup>13</sup>*Ibid.*, p. 40.

warfare. He argued that the continued use of a peacetime market economy would hinder the pursuit of military objectives, that only with centralized control could a successful war effort be mounted. Otto Neurath thus was one of the first to link socialism explicitly with war.

His efforts continued at the end of the First World War.<sup>14</sup> By then his theses were, first, that the experience of the war had demonstrated that the efficient central planning of a complex economy was feasible, and, second, that a concern for justice dictated that such planning should be continued now that the fighting had stopped. Neurath envisioned the full socialization of the economy. A 'central office for measurement in kind' would be set up that would run the economy as if it were one giant enterprise. Planning and administration authorities would make extensive use of statistics to guide them in their decision-making.

Perhaps most controversially, Neurath believed that money would be unnecessary in the new planned order. Calculation regarding the appropriate inputs and outputs of goods would be handled in physical terms. For the determination of societal needs, various statistics measuring demographic and social variables would be employed. In Neurath's opinion, the real needs of society could not be measured in money terms. The monetary system was uncontrolled and disorderly. Any attempt to employ monetary calculations within a planned society would render impossible scientific economic management, which had to be conducted in terms of 'real' physical quantities.

In 1919 Neurath served as the President of the Central Planning Office of the short-lived Bavarian Soviet Republic. Returning to Austria, he became in 1924 the Director of the Social and Economic Museum, one of the showplaces of the 'Red Vienna'<sup>15</sup> of the 1920s. Visitors to the museum observed Neurath's ISOTYPE system (the International System of Typographical Picture Education), a collection of images meant to represent economic and social conditions. He also participated in the Vienna Circle, where he advocated physicalism, the doctrine that all scientific statements must make a reference to phenomena that are observable and,

<sup>14</sup>See Otto Neurath, *Durch die Kriegswirtschaft zur Naturalwirtschaft* (Munich: Georg D. W. Callway, 1919), which collects a number of his articles. The table of contents and selected articles are translated and appear as chapter 5 of Otto Neurath, *Empiricism and Sociology*, Marie Neurath and Robert S. Cohen, eds (Dordrecht, Holland: D. Reidel, 1973). The title is translated there as "Through War Economy to Economy in Kind". *Naturalwirtschaft* can also be translated as 'barter economy' or 'natural economy'.

<sup>15</sup>Though they took part in two coalition governments directly after the war ended, the Austrian Social Democratic Party fell from power nationally in June 1920. After that, their stronghold was in large urban centers, and Vienna became the centerpiece for various socialist experiments, hence the epithet.

when feasible, quantifiable.<sup>16</sup> Neurath fled Vienna in 1934, ultimately settling in Oxford, where he died in December 1945.

Neurath's apparently disparate projects were actually all of a piece. His insistence that non-monetary statistics be used to manage a planned economy led naturally to the development of ISOTYPE. The ISOTYPE system, in which signs represent social reality, was itself a practical analog to the Logical Positivist assertion that scientific theories are nothing more than formal systems of signs, rules for their manipulation, and 'correspondence rules' which link up the signs to elements of phenomenal reality. Neurath's physicalism was wholly compatible with the view that statistical information on physical quantities of goods and on 'life dispositions' are all that is needed to scientifically manage a complex economy. It was also a good antidote to the 'metaphysical' view that a monetary order expresses through prices such subjective 'entities' as 'utility' and 'value'.

According to Hayek, it was Neurath's book that "provoked" Ludwig von Mises to initiate the socialist calculation debate.<sup>17</sup> Mises wrote about socialism in a book published in 1919, and though Neurath is not mentioned by name, there is no mistaking his ideas, nor Mises's reaction to them: "Right at the beginning of the war a catchword turned up whose unfortunate consequences cannot be completely overlooked even today: the verbal fetish 'war economy'."<sup>18</sup> Mises argued that 'war socialism', widely credited for helping the war effort, in fact hindered it; that while "statism sought to avoid the inevitable collapse, it only hastened it."<sup>19</sup>

Mises's main contribution to the calculation debate came in a journal article published the next year. He took as a starting premise that under socialism all 'production-goods' (factors of production) are owned by the state, and that as such there is no market for them. But this has substantial consequences:

- ... because no production-good will ever become the object of exchange, it will be impossible to determine its monetary value. Money could never fill in a socialist state the role it fills in a competitive society

<sup>16</sup>For more on the doctrines of the Vienna Circle, see Bruce Caldwell, *Beyond Positivism: Economic Methodology in the Twentieth Century* (London: Allen and Unwin, 1982; reprinted, London: Routledge, 1994), chapter 1.

<sup>17</sup>F. A. Hayek, Foreword to Mises, *Socialism*, in *The Fortunes of Liberalism*, op. cit., p. 139.

<sup>18</sup>Ludwig von Mises, *Nation, Staat und Wirtschaft: Beiträge zur Politik und Geschichte der Zeit* (Vienna: Manz'sche Verlags und Universitäts-Buchhandlung, 1919), translated by Leland Yeager as *Nation, State and Economy: Contributions to the Politics and History of Our Time* (New York and London: New York University Press, 1983), p. 140.

<sup>19</sup>*Ibid.*, p. 147.

in determining the value of production-goods. Calculation in terms of money will here be impossible.<sup>20</sup>

Mises's reasoning was straightforward. In a market economy, entrepreneurs choose from among innumerable possible combinations of factors of production in an attempt to find the combination that minimizes their expected costs. They do this in an attempt to maximize their profits, which is the difference between revenues and costs. This self-interested search for the best combination helps to guide resources to their highest-valued uses, an outcome beneficial to society as a whole. Because of the multiplicity of production-goods and the fact that production takes place through time (during which all manner of changes on both the demand and the supply side of the market might occur), the task is not an easy one. Entrepreneurs are aided in their deliberations by the money prices attached to the factors which reflect their relative scarcity. But in the socialist state no such prices would exist. Socialist managers would not have recourse to price signals to tell them which factors are relatively scarce and which relatively plentiful; they would be left "groping in the dark". The results were plain to see: "Where there is no free market, there is no pricing mechanism; without a pricing mechanism, there is no economic calculation."<sup>21</sup>

The contrast between two views could hardly be greater. Neurath argued that the use of money undermined the rational management of a planned economy. Mises, the monetary theorist, argued that in the absence of market-generated money prices to direct the allocation of resources, the rational planning of production (by which he meant, planning that attempts to avoid wasting resources) in a complex economy is impossible. Mises's article also makes clear that the two apparently unrelated subjects under discussion (monetary theory and socialism) are in fact intimately linked. He spends a number of pages examining the limitations of money as a tool for measuring value, noting that its own value need not be stable, and that many aspects of life are not subject to monetary calculation. Only when the value of money is itself stable will prices accurately reflect relative scarcities and thereby help to guide production. For Mises, sound money and freely adjusting relative prices go hand in hand in making a private enterprise system work. Neurath wanted to do

<sup>20</sup>Ludwig von Mises, "Die Wirtschaftsrechnung im sozialistischen Gemeinwesen", *Archiv für Sozialwissenschaft*, vol. 47, 1920, pp. 86–121, translated by S. Adler as "Economic Calculation in the Socialist Commonwealth", in *Collectivist Economic Planning*, ed. Friedrich A. Hayek (London: Routledge and Sons, 1935; reprinted, Clifton, N. J.: Kelley, 1975), p. 92.

<sup>21</sup>*Ibid.*, p. 11.

away with all of it and justified his views by invoking principles of scientific management.

Mises's article bears close reading. His statement that "No single man can master all the possibilities of production, innumerable as they are, so as to be in a position to make straightway evident judgements of value without the aid of some system of computation"<sup>22</sup> is suggestive of Hayek's later arguments about the dispersion of knowledge. In a like manner, his brief paragraph stating that calculation would be unnecessary in the 'static state' foreshadows Hayek's argument that his opponents are blinded by an unhealthy preoccupation with the conditions of static equilibrium.<sup>23</sup> Finally, in the section entitled "Responsibility and Initiative in Communal Concerns", Mises discusses a number of incentive problems that exist under socialism, most of them due to the absence of private property.<sup>24</sup>

It is not surprising that in the debate with Neurath, Ludwig von Mises very quickly won the day; most socialists of the time agreed with him that Neurath's scheme of a moneyless planned economy was fundamentally flawed.<sup>25</sup> This was doubtless in part due to the clear and horrifying evidence provided by Soviet policies during the period of 'War Communism' from May, 1918, through the end of 1920.<sup>26</sup> But Neurath was not the only person calling for planning based on the wartime model. Had that

<sup>22</sup>*Ibid.*, p. 102.

<sup>23</sup>*Ibid.*, pp. 109–110. This is not to say that the positions of Mises and Hayek are identical. Indeed, a debate has arisen recently among Austrian scholars as to whether one of the positions (either Mises's "calculation based on property rights" critique or Hayek's "knowledge-based" one) should be viewed as more fundamental. See Joseph T. Salerno, "Ludwig von Mises as Social Rationalist", *The Review of Austrian Economics*, vol. 4, 1990, pp. 26–54, and Leland Yeager, "Mises and Hayek on Calculation and Knowledge", *The Review of Austrian Economics*, vol. 7, 1994, pp. 91–107.

<sup>24</sup>*Ibid.*, pp. 116–122.

<sup>25</sup>Thus, for example, Helene Bauer, Otto Bauer's wife, attacked Neurath by citing Marxist literature; Otto Leichter proposed that calculations in a centralized economy be made in terms of labour-hours. See Günther Chaloupek, "The Austrian Debate on Economic Calculation in a Socialist Society", *History of Political Economy*, vol. 22, no. 4, Winter 1990, especially pp. 662–670.

<sup>26</sup>Policies enacted during the period of 'State Capitalism' (which directly preceded the 'War Communism' episode) were explicitly drawn from German *Kriegswirtschaft* models. Peter Boettke, in *The Political Economy of Soviet Socialism: The Formative Years, 1918–1928* (Boston: Kluwer, 1990), p. 106, notes that, for Lenin, "the Soviet dictatorship of the proletariat provides the political basis for social transformation, while the German war-planning machine provides the economic basis". Under War Communism the first steps towards the abolition of money were instituted. For more on this, see Eugène Zaleski, *Planning for Economic Growth in the Soviet Union, 1918–1932* (Chapel Hill, N. C.: University of North Carolina Press, 1971), pp. 13–24.

been the case, Mises would probably not have felt the necessity of writing a whole book devoted to the refutation of socialism.<sup>27</sup>

Socialization schemes were in fact being proposed everywhere, and not just by socialists. One of the most widely respected voices was that of the German industrialist Walther Rathenau. During the war he was instrumental in setting up a new division at the Ministry of War, the KRA (*Kriegsrohstoffabteilung*), or Raw Materials Section, which made raw materials procurement secure for much of the duration. The KRA became for many social democrats the model of what could be accomplished through efficient central planning. Rathenau, a successful industrialist and a man of action, was also an urbane intellect. He wrote an influential pamphlet published in 1918 in which the variety of goods available under capitalism was portrayed as indicative of the system's great wastefulness.<sup>28</sup> Rathenau argued that far greater amounts of standardized goods could be produced (thereby ensuring plenty for all) if centrally controlled mass production techniques developed during the war were utilized. Given his role in the war, Walther Rathenau was a hero to the German-speaking people in a period when precious few heroes were to be found.<sup>29</sup> That he was bourgeois rather than socialist, and one who spoke from experience, added further to his credibility. This progressive Jewish internationalist was assassinated by right-wing thugs soon after becoming Foreign Minister. Instead of playing a leading role in the Weimar Republic, he ended up a harbinger of the world that was to come.

## 2. Hayek and the Socialist Calculation Debate

F. A. Hayek, born in Vienna in 1899, was too young to have attended Böhm-Bawerk's seminar and knew him only as an occasional guest at the home of his grandparents. After war service, Hayek entered the University of Vienna, receiving degrees in 1921 and 1923. While working on his second doctoral degree he came to know Ludwig von Mises, with whom he worked in a temporary government office. At the time, Mises was known principally as a monetary theorist and a champion of sound money. Within the year, Mises's massive tome on socialism had appeared. As Hayek says in a preface to a later edition, the book "gradually but

<sup>27</sup>Ludwig von Mises, *Die Gemeinwirtschaft: Untersuchungen über den Sozialismus* (Jena: Gustav Fischer, 1922), 2nd edition translated by J. Kahane as *Socialism: An Economic and Sociological Analysis* (London: Cape, 1936; reprinted, Indianapolis, Ind.: LibertyClassics, 1981). Mises criticizes socialism from a number of different perspectives in the book.

<sup>28</sup>Walter Rathenau, *Die neue Wirtschaft* (Berlin: S. Fischer, 1918).

<sup>29</sup>Hayek mentions the pamphlets of Rathenau and of Karl Renner as providing his first exposure to economic and social analysis; see F. A. Hayek, *Hayek on Hayek*, op. cit., p. 47.

fundamentally altered the outlook of many of the young idealists returning to their university studies after World War I".<sup>30</sup>

Hayek wrote nothing about socialism during the 1920s. He worked mainly on monetary theory, developing his own version of the Austrian theory of the trade cycle, one that drew upon the earlier writings of the Swedish economist Knut Wicksell as well as those of Mises. On the basis of this work, Hayek was invited by Lionel Robbins to deliver a series of lectures at the London School of Economics (LSE) in the spring of 1931. By the next year he had been appointed to the Tooke Chair of Economic Science and Statistics at the LSE, a position he would hold (except for a semester at the University of Arkansas) until he moved to the University of Chicago in 1950.<sup>31</sup> Hayek's immediate task was to challenge the rival cycle theory of John Maynard Keynes, which the latter had presented in *A Treatise on Money*, published late in 1930.<sup>32</sup>

Although England provided a physical sanctuary for socialist revolutionaries like Marx and Engels, Marxist doctrine found few supporters there, even among members of socialist societies such as the Fabian Society. The Fabian Society began in 1884 as a small discussion group and counted among its founders Sidney Webb, George Bernard Shaw, and Graham Wallas. The Fabians debated the merits of Marxian analysis at some of the earliest meetings. But most were dissatisfied, and soon thereafter the economists Philip Wicksteed and F. Y. Edgeworth were invited to explain to the group the new marginalist analysis of Stanley Jevons. The Fabians ultimately accepted the marginalist theory of value and attempted to work out a socialist program based on marginalist principles. In addition to this difference over theoretical issues, an adherence to parliamentary democracy, to 'socialism of the ballot box', also separated British socialists from Marxists. Fabians finally believed in 'the inevitability of gradualness', in an evolutionary rather than revolutionary transformation of society: their name, after all, was taken from the Roman general Fabius Maximus, "Cunctator", famed for his holding tactics.

The political equivalent in Britain of the various Continental Social Democratic parties was the Labour party. Officially formed in 1906, it was little more than a lobbying group in the prewar years; indeed, the

<sup>30</sup>F. A. Hayek, Foreword to Mises, *Socialism*, in *The Fortunes of Liberalism*, op. cit., p. 136.

<sup>31</sup>For more on Hayek in the 1920s and 1930s, see F. A. Hayek, *Hayek on Hayek*, op. cit., pp. 64-98; "The Economics of the 1920s as Seen from Vienna", in *The Fortunes of Liberalism*, op. cit., pp. 19-38; "The Economics of the 1930s as Seen from London", in *Contra Keynes and Cambridge: Essays and Correspondence*, ed. Bruce Caldwell, vol. 9 (1995) of *The Collected Works of F. A. Hayek*, op. cit., pp. 49-63 and the Introduction.

<sup>32</sup>J. M. Keynes, *A Treatise on Money* [1930], reprinted as vols 5 and 6 (1971) of *The Collected Writings of John Maynard Keynes*, op. cit.

other two major parties (the Conservatives and the Liberals) themselves passed a substantial amount of social legislation in the first decade as they vied against each other for the workers' votes. After the First World War there were some electoral successes, as minority Labour governments formed under the leadership of Ramsay MacDonald in 1923 and again in 1929.

A major question facing the party during the interwar period was how to bring together a coherent program that would reflect the views of its various constituencies. Intellectual groups like the Fabians wanted to replace markets with an efficient administrative bureaucracy composed of experts, while the trade unions had the improvement of the lot of workers as their principal goal. Guild Socialists, whose intellectual leaders included G. D. H. Cole and R. H. Tawney, wanted to found a new society in which there existed worker control of industry and collective ownership of the means of production. Finally, many who were drawn to socialism had no clearly articulated vision of the future, but were driven more by a deeply held resentment of the British class structure and the economic inequities that accompanied it.

The postwar economy in Britain was moribund, a situation not unfavourable to the growth of radical thought. Throughout the 1920s the unemployment rate hovered in the 10 per cent range. Labour unrest grew, culminating in a general strike in 1926. It was during this period that the Liberal economist John Maynard Keynes began to formulate his own set of remedies for rescuing the British economy, remedies that would in the next decade come to be considered necessary palliatives for the saving of capitalism itself. Keynes's was a minority view; neither the Labour nor the Conservative parties would deviate from the 'sound finance' doctrines of the 'Treasury view'. Only the Liberal party accepted the interventionist heresies of Keynes and Lloyd George, and for this they were repudiated in the 1929 general elections.

The Great Depression caused the unemployment rate to rise even higher and allowed socialists to add to their arguments against capitalism. Socialists had always considered the market system unjust. Now it appeared to be inefficient and unstable as well. The English socialist Barbara Wootton observed in 1934 a "shift of contemporary interest from the wickedness to the stupidity of our economic organization", and noted with some incredulity that even G. D. H. Cole was now writing "not so much of wrongs as of muddles".<sup>33</sup> The time seemed right for a search for alternatives.

In the late 1920s and early 1930s articles began to appear in English-language economics journals arguing that rational calculation under so-

<sup>33</sup>Barbara Wootton, *Plan or No Plan* (London: V. Gollancz, 1934), pp. 104-105.

cialism was at least theoretically possible. Particularly important was a 1933 article by H. D. Dickinson.<sup>34</sup> Dickinson cited a paper originally published in 1908 by the Italian economist Enrico Barone in support of the notion that any economy, whether socialist or capitalist, can be represented mathematically by a system of equations, an approach made famous by the founders of the Lausanne School, Léon Walras and Vilfredo Pareto. Within a capitalist system the equations are "solved" by the market. Within a socialist system they are solved by the planning authorities. On a theoretical level, Dickinson concluded, there is no difference between the two systems. This was the first step in any successful defense of socialism on economic grounds.<sup>35</sup> The next would be to show that the socialist state is able to avoid the distributional inequities and cyclical disturbances that apparently plague a free market system.

Hayek's first contribution to the English-language debate was his inaugural address at the LSE, "The Trend of Economic Thinking", delivered in March 1933 and published two months later in *Economica*.<sup>36</sup> Hayek did not bring up the topic of calculation; as is usually the case with such talks, his themes were broader. The question he set out to answer was: Why did contemporary public opinion on economic issues differ so dramatically from that held by professional economists like himself? Hayek answered that the cleavage had originated some seventy years earlier, when historical criticisms of the (admittedly crude) theories of the classical economists were broadened into a general attack on the use of theory in the social sciences. This questioning of the validity of theory had had a number of adverse effects. The most consequential of these was a decline in understanding of how the market mechanism works: Too few realized any longer that "we are a part of a 'higher' organized system which, without our knowledge, and long before we tried to understand it, solved problems the existence of which we did not even recognize, but which we should have had to solve in much the same way if we had tried to run it deliberately".<sup>37</sup> By failing to understand how the market solves these

<sup>34</sup>H. D. Dickinson, "Price Formation in a Socialist Economy", *Economic Journal*, vol. 43, June 1933, pp. 237-250. He also argued that, were the prices not correct, a trial and error process of adjustment could be used to obtain the right ones.

<sup>35</sup>Not all on the left were pleased with Dickinson's claims. For example, the Marxist academic Maurice Dobb in his article "Economic Theory and the Problem of a Socialist Economy", *Economic Journal*, vol. 43, December 1933, pp. 588-598, denied that socialist and capitalist economies were governed by the same principles.

<sup>36</sup>F. A. Hayek, "The Trend of Economic Thinking", which is chapter 1 of *The Trend of Economic Thinking*, W. W. Bartley and Stephen Kresge, eds, vol. 3 (1991) of *The Collected Works of F. A. Hayek*, op. cit., pp. 17-34. Many themes in this address re-emerge in Hayek's later work; for more on this, see Bruce Caldwell, "Hayek's 'The Trend of Economic Thinking'", *Review of Austrian Economics*, vol. 2, 1987, pp. 175-178.

<sup>37</sup>F. A. Hayek, "The Trend of Economic Thinking", op. cit., pp. 27-28.

problems, many had been led to conclude that only by deliberate planning would an economy be capable of functioning efficiently and justly. Near the end of his talk Hayek noted the linkage between planning and socialism:

I have discussed planning here rather than its older brother socialism, not because I think that there is any difference between them (except for the greater consistency of the latter), but because most of the planners do not yet realize that they are socialists and that, therefore, what the economist has to say with regard to socialism applies also to them. In this sense, there are, of course, very few people left today who are not socialists. . . . [W]hatever we may think about particular problems, there can be no doubt that recent additions to knowledge in this respect have made the probability of a solution of our difficulties by planning appear less, rather than more, likely.<sup>38</sup>

Not long afterward, Hayek shared with his English-language audience the content of some of those recent additions to knowledge in the 1935 publication *Collectivist Economic Planning: Critical Studies on the Possibilities of Socialism*, which he edited.<sup>39</sup> The book contained translations of three articles, including an early (1907) article by the Dutch economist N. G. Pierson on "The Problem of Value in the Socialist Community", Mises's "Economic Calculation in the Socialist Commonwealth", and "Further Considerations on the Possibility of Adequate Calculation in a Socialist Community", a review by the German economist Georg Halm of the Continental literature since Mises. Hayek provided introductory and concluding essays to the book; these constitute the first and second chapters of this volume.

In the introductory essay, Hayek reiterates certain themes from the "Trends" essay, pointing out the origins and current ubiquity of the unfortunate notion that planning is necessary for a rational allocation of resources. He also notes how difficult it is to define 'socialism', and ultimately settles on "public ownership of the means of production" as its essential characteristic. The primary purpose of the chapter is to review the Continental debates, placing the writings of the proponents of various socialization schemes (among those mentioned are Kautsky, Neurath, Bauer, Lederer, and Rathenau) and those of their opponents in context. One of the opponents is Boris Brutzkus, a Russian economist who, writ-

<sup>38</sup>*Ibid.*, p. 32; p. 33.

<sup>39</sup>*Collectivist Economic Planning*, ed. F. A. Hayek, op. cit.

ing in the aftermath of the Revolution, independently came to substantially the same conclusions as Mises regarding calculation.<sup>40</sup>

Hayek's concluding essay, reprinted as chapter 2 of this volume, is titled, "The Present State of the Debate". Hayek first evaluates the 'Russian experiment', which he deems a failure, citing Brutzkus in support. He next moves to the 'mathematical solution' of Dickinson and others, in which the central planning board would, in essence, solve a giant system of equations for the relevant prices and quantities. About this Hayek states:

Now it must be admitted that this is not an impossibility in the sense that it is logically contradictory. But to argue that a determination of prices by such a procedure being logically conceivable in any way invalidates the contention that it is not a possible solution only proves that the real nature of the problem has not been perceived.<sup>41</sup>

Hayek then enumerates a variety of obstacles that would hinder the implementation of the mathematical solution: the staggering amount of information that would need to be gathered; the immense difficulty of formulating the correct system of equations; the hundreds of thousands of equations that would then need to be solved, not just once but repeatedly; the inability of such a system to adapt to change. He notes that although the "theoretical abstractions used in the explanation of equilibrium include the assumption that a certain range of technical knowledge is 'given'", it is "absurd" to think that the necessary knowledge is anywhere already "in existence" in this readymade form.<sup>42</sup> In making his case, Hayek also pointedly includes a translation of Barone's 1908 article as an appendix to *Collectivist Economic Planning*. Since socialists had begun to cite the article in support of their own arguments, Hayek thought it useful to provide Barone's own words on the matter:

For the solution of the problem it is not enough that the Ministry of Production has arrived at tracing out for itself the system of equations

<sup>40</sup>Boris Brutzkus, *Economic Planning in Soviet Russia* (London: Routledge and Sons, 1935; reprinted, Westport, Conn.: Hyperion Press, 1981). As Hayek notes, Brutzkus's book appeared in 1935 as a kind of companion volume to *Collectivist Economic Planning*. Hayek's Foreword to Brutzkus appears as an addendum to chapter 1, this volume.

<sup>41</sup>F. A. Hayek, "The Present State of the Debate", this volume, p. 93.

<sup>42</sup>*Ibid.*, p. 95.



best adapted for obtaining the collective maximum. . . . It is necessary to solve the equations afterwards. And that is the problem.

Many of the writers who have criticized collectivism have hesitated to use as evidence the practical difficulties in establishing on paper the various equivalents; but it seems they have not perceived what really are the difficulties—or more frankly, the impossibility—of solving such equations a priori.<sup>43</sup>

Towards the end of his discussion of the mathematical solution, Hayek gives his opponents the benefit of the doubt, acknowledging that, appearances notwithstanding, what they must have had in mind was some sort of trial-and-error method rather than one that required the solving of a gigantic system of equations. But even this apparently simpler method would not do, since it still required that a regime of price-fixing

. . . be applied not to a few but to all commodities, finished or unfinished, and that it would have to bring about as frequent and as varied price changes as those which occur in a capitalistic society every day and every hour. . . . Almost every change of any single price would make changes of hundreds of other prices necessary and most of these other changes would by no means be proportional but would be affected by the different degrees of elasticity of demand, by the possibilities of substitution, and other changes in the method of production.<sup>44</sup>

In the latter half of his essay, Hayek provides a preliminary analysis of “pseudo-competition”, or market socialism, the discussion of which in England was still “in a very embryonic stage”.<sup>45</sup> Because no concrete proposals were yet on the table, Hayek had to imagine the forms of market organization that his opponents might envision. Before turning to that task, he notes that a key question in any such scheme is whether managers not disciplined by the prospects of profits and losses could be relied upon to serve “the common ends loyally and to the best of their capacity”.<sup>46</sup> As they did for Mises, issues of incentives played an essential role in Hayek’s initial critique of socialism.

<sup>43</sup>Enrico Barone, “The Ministry of Production in the Collectivist State”, in *Collectivist Economic Planning*, op. cit., pp. 286–287.

<sup>44</sup>F. A. Hayek, “The Present State of the Debate”, this volume, p. 97.

<sup>45</sup>*Ibid.*, p. 99.

<sup>46</sup>*Ibid.*, p. 101.

Hayek discusses two potential forms of market organization. The first, analyzed in Sections 6 through 9, is a world in which every industry is a monopoly. He raises a number of problems with this scheme, some of which draw on already existing theory. Some of the criticisms, though, are uniquely his own. One of the most innovative of these is found in his section on “The Criterion of Marginal Cost”. Hayek asks:

Does the instruction that they [the managers of a socialized industry] should aim at prices which will just cover their (marginal)-cost really provide a clear criterion of action?

It is in this connection that it almost seems as if perhaps excessive preoccupation with the conditions of a hypothetical state of stationary equilibrium has led modern economists in general, and especially those who propose this particular solution, to attribute to the notion of costs in general a much greater precision and definiteness than can be attached to any cost phenomenon in real life.<sup>47</sup>

Hayek goes on to say that in a world of constant change, “the value of most of the more durable instruments of production has little or no connection with the costs that have been incurred in their production but depends only on the services which they are expected to render in the future. . . .”<sup>48</sup> These services depend, of course, on the demand for the various sorts of products that the resources can be used to help to produce. The process of market competition itself reveals what the competing (and ever-changing) possible uses of the resources might be, and thereby what the true costs are (in terms of alternative uses) for their employment in a particular production process. One cannot duplicate the results of competition without competition itself being present: “To make a monopolist charge the price that would rule under competition, or a price that is equal to the necessary cost, is impossible, because the competitive or necessary cost is not known unless there is competition.”<sup>49</sup>

Hayek next examines a market structure in which competition among firms within socialized industries would be permitted to exist. Though it might seem that there is little need for central direction in such a system, the appearance is misleading. The crucial question here is how to determine how much capital and other resources each firm should receive. In a free-market system the problem is solved when entrepreneurs bid for

<sup>47</sup>*Ibid.*, p. 105.

<sup>48</sup>*Ibid.*, 105–106.

<sup>49</sup>*Ibid.*, p. 107.

capital based on their individually formed expectations about profit opportunities within their specific markets. They are guided in making their decisions by the carrot of potential profits and the stick of potential losses. Under a socialist regime, a central planner would be in charge of disbursing resources to the managers of the different enterprises. He would have to estimate where capital could be put to its most efficient use, where future demands might be expected to materialize and where they might diminish, which managers' past behaviours were to be rewarded and which punished, and so on. In his summary, Hayek emphasizes two problems with such a set-up. First, lines of responsibility for decision-making are blurred, creating all those difficulties that "arise in connection with freedom of initiative and the assessment of responsibility which are usually associated with bureaucracy".<sup>50</sup> (This is the question of 'incentives' again.) And second, "All this involves planning on the part of the central authority on much the same scale as if it were actually running the enterprise".<sup>51</sup> The most competitive form of market socialism would result in central planners having to take over the role of entrepreneurs.

Writing in 1935, unsure about which of his many opponents might respond (remember, they ran the gamut from the Marxist Dobb to the Barone-enthusiast Dickinson to those engaging in the still 'embryonic' discussion of 'pseudo-competition'), Hayek nonetheless tried to identify the essential economic arguments against socialism. Four that he identified stand out:

1) Hayek enumerates the many difficulties associated with "the mathematical solution", or any regime that relied on formulating and solving a system of thousands of equations. Should socialist authorities decide to employ a trial-and-error method instead, other problems would arise. The most important of these is the inability of any price-changing mechanism to replicate the automatic adjustments that occur in a free-market system in response to underlying changes in supply and demand.

2) Within the spectrum of possible market socialist ("pseudo-competitive") regimes, one possible arrangement is for industries to be monopolies, but with managers directed to price at marginal cost. Hayek points out that under such a set-up it would be difficult to know exactly what marginal costs were. In a competitive system market competition itself reveals this information; it would be absent in a world of monopolized industries.

3) In a market socialist regime in which firms within an industry compete, decisions concerning how much capital each firm should receive

<sup>50</sup>*Ibid.*, p. 112.

<sup>51</sup>*Ibid.*

would still have to be made by some central authority. But in order for this decision to be properly made, the planning authority would require complete information about each firm's and each industry's prospects. The planning authority would in essence need to take over the role played by the entrepreneur in a market system. Hayek simply states this as an (obviously undesirable) implication, but does not specify the nature of the problem that the result entails.

4) Finally, the absence of private ownership in the means of production creates all sorts of 'agency' or incentive problems for managers, who will shy away from making difficult decisions and who will tend towards risk-aversion in making their 'investment' decisions.

### 3. Oskar Lange's Economic Theory of Socialism

Market socialism was finally given a more complete articulation for the English-language audience in a flurry of articles appearing in British academic journals in 1936 and 1937. It is appropriate here to note the awkward position that a market-socialist system perforce occupies within the spectrum of possible economic regimes. Market socialists are obviously critics of capitalism. But their acknowledgement that perfectly competitive markets have certain desirable efficiency characteristics (albeit only under rather strict assumptions) must leave a Marxist like Maurice Dobb in a rather bad humour and economists like Hayek wondering why the market should be replaced by an elaborate scheme whose sole intent is simply to duplicate its workings. If markets work so well, why not just leave them alone?

A key claim of the market socialists is the denial that market structures under late capitalism resemble, in any meaningful way, perfect competition. According to this view, few competitive industries exist anymore, having been replaced by industrial giants, cartels, and monopolists. As such, contemporary capitalism *lacks* the beneficial efficiency characteristics of competition, while retaining all of its defects. With careful planning, market socialism can replicate the benefits of truly competitive markets, correct for remaining problems regarding efficiency, and all the while avoid capitalism's pernicious effects on distributive justice. This was at least the vision of hope that was offered by the market socialists to a world stuck in Depression and careening towards war.

The most famous blueprint for a market socialist system was laid out in a two-part article by a Polish economist and recent émigré to America, Oskar Lange.<sup>52</sup> The first footnote reference in Lange's article was to Hay-

<sup>52</sup>Oskar Lange, "On the Economic Theory of Socialism", *Review of Economic Studies*, vol. 4, October 1936, pp. 53-71, and February 1937, pp. 123-142. Reprinted with additions

ek's *Collectivist Economic Planning*; and his essay might fairly be viewed as an extended critical comment on Hayek's book. Since Lange's articles were believed by many to have refuted the Austrian<sup>53</sup> case, it is worthwhile to examine his arguments in detail.

Lange begins with the playful suggestion that a statue of Mises be erected in the great hall of the Central Planning Board, since his criticisms had forced socialists to tackle the question of how resources were to be allocated in the socialist state. Mises's arguments were, however, wrong. His mistake was to think that prices, which (as Lange agreed) are necessary for rational calculation, must be formed in markets. Since there is no market for capital goods in the socialist commonwealth, there are no prices for such goods. This is why Mises was able to conclude that rational calculation by producers is "impossible". But if one recognizes that prices are merely "terms on which alternatives are offered", and that their determination in markets is not essential, but rather a peculiarity of a particular institutional arrangement (capitalism), then Mises's argument collapses. Accounting prices could be supplied by the Central Planning Board, and these could be taken by socialist managers as parameters in their decision-making. It turns out that rational calculation under socialism is not impossible, after all.

Turning next to the contributions of Hayek and Lionel Robbins, Lange asserts that since they "do not deny the *theoretical* possibility of a rational allocation of resources in a socialist economy; they only doubt the possibility of a *practical* solution of the problem", they have "given up the essential point of Professor Mises's position and retreated to a second line of defense".<sup>54</sup> Hayek and Robbins cannot conceive of how a socialist commonwealth can be made to yield the same results as a competitive market system. By providing a demonstration, Lange will show that even the weaker Austrian claim regarding the practical feasibility of socialism is wrong.

Under market socialism there would exist both a free market for consumer goods (thus, at least for those resources to be used for the production of consumer goods, consumer sovereignty would apply) and a free market for labour (so that freedom of occupational choice would also exist). Because of public ownership of the means of production, there

and some changes in *On the Economic Theory of Socialism*, ed. Benjamin E. Lippincott (Minneapolis: University of Minnesota Press, 1938; reprinted, New York: McGraw Hill, 1956), pp. 57-143. Citations in the text will be to the Lippincott volume.

<sup>53</sup>The term "Austrian" as used in this context refers to Mises and Hayek, but also to Lionel Robbins and others who argued against socialism on economic grounds in the 1930s.

<sup>54</sup>Lange, in Lippincott, ed., op. cit., pp. 62, 63, emphasis in the original.

would be no market for non-labour productive resources like capital. Note that this arrangement, taken alone, would not eliminate income inequality. Because labour incomes would still be determined in markets, they would continue to differ across professions. Even so, since capital ownership is a principal source of income disparities, its elimination under market socialism would serve to reduce inequality. Furthermore, individual incomes would be supplemented by receipt of some share of the 'social dividend': each worker would receive a share of the amount that previously went to owners of capital. Later discussions included progressive taxation and the public provision of 'necessities' as additional means to bring about a more just distribution.

The sticking point for market socialism is the absence of profit maximizing firms and of a market (and hence of prices that reflect relative scarcities) for non-labour productive resources. Standard economic analysis can demonstrate that under certain conditions, within a regime of perfect competition, profit maximization ensures that each firm uses the optimal (least cost) combination of inputs, and that it uses them to produce the optimal amount (the amount at which product prices just cover the marginal costs of production) of output. Furthermore, freedom of entry and exit (itself presumed to exist under perfect competition) guarantees that industries are of optimal size. But if there are no market prices for non-productive resources, how can the managers of socialist firms decide what the least-cost combination of inputs is? And if they are not trying to maximize profits, by what mechanism can we guarantee that the managers will choose to produce the optimal amount of output?

Lange proposed that the Central Planning Board provide "prices" for all goods and factors of production. Managers of socialist firms would then be instructed to choose, on the basis of these "given" prices, the combination of inputs that minimizes their costs. Operationally, the rule they would follow is: Combine inputs so as to equalize the marginal productivity of each input that can be purchased for a given sum of money. To ensure that managers produced the right amount of output, they would be instructed to follow a second rule. Again assuming that the Planning Board has provided managers with the relevant set of prices, the rule states: Choose that level of output so that the price of the product just covers its marginal cost of production. Finally, planners in charge of industries would apply the same rule at the industry level, expanding or contracting them as necessary, and thereby replicating the beneficial effects of free entry and exit under competition.

Lange's proposal obviously begs a key question: What if the Central Planning Board fails to choose the correct prices? That is, what if their

chosen "terms on which alternatives are offered" do not accurately reflect underlying relative scarcities, a problem that one might expect to occur, given that the prices are not formed in markets? Lange's solution was simplicity itself (and indeed, one that Dickinson had already mentioned): By following a straightforward trial-and-error procedure, one similar to that used in actual markets, planners would adjust prices up or down in those factor and product markets in which gluts or shortages existed. Crucially, planners would *not* have to solve thousands of equations, or perform the complex manipulations that Hayek and Robbins argued were the chief obstacles to a feasible market socialism. If a factor was underutilized, its price would be lowered. If there was a shortage of some good, its price would be raised. Could anything be more simple?

We may recall Hayek's observation that, in a market socialist regime in which industries were not monopolized, planners would still be required to perform the role of entrepreneurs. This did not pose a problem for Lange, who argued that

... the trial and error procedure would, or at least could, work much better in a socialist economy than it does in a competitive market. For the Central Planning Board has a much wider knowledge of what is going on in the whole economic system than any private entrepreneur can ever have, and, consequently, may be able to reach the right equilibrium prices by a *much shorter* series of successive trials than a competitive market actually does.<sup>55</sup>

What about Hayek's claims about the skewing of incentives under socialism? Lange acknowledges that "the argument which might be raised against socialism with regard to the efficiency of public officials as compared with private entrepreneurs as managers of production" is an important one.<sup>56</sup> He then offers two arguments in response. The first is to deny that such agency questions are a proper topic for economists to study: "The discussion of this argument belongs to the field of sociology rather than of economic theory and must therefore be dispensed with here."<sup>57</sup> Sensing perhaps that this might not satisfy, he adds that the real problem is one of *bureaucracy*. Bureaucratization, however, is a generic problem, one that afflicts both capitalism and socialism. The dominant market structures under late capitalism have little resemblance to perfect

<sup>55</sup>*Ibid.*, p. 89, emphasis in the original.

<sup>56</sup>*Ibid.*, p. 109.

<sup>57</sup>*Ibid.*

competition. Because of the absence of competition, the managers within a bureaucratic modern organization are likely to be just as inefficient as their counterparts under socialism. A corporate structural change, the separation of ownership from control, exacerbates this: The modern corporation is increasingly run by a professional managerial class whose members care more about their own welfare than about running an efficient firm. For Lange, bureaucracy is an admitted problem. But it is a problem of modern life, not one that is unique to socialism.<sup>58</sup>

Lange's article was soon reprinted, along with another by the American economist Fred M. Taylor, in a book edited by political scientist Benjamin Lippincott. In 1940 Hayek published an extensive critical review of the Lange-Taylor volume together with a review of a book by the original proponent of the "mathematical solution", H. D. Dickinson. If Lange's essay can be viewed as a comment on Hayek's *Collectivist Economic Planning*, Hayek's review, reprinted as chapter 3, this volume, may be viewed as his reply.<sup>59</sup>

Hayek complains with considerable justice that his arguments had not been accurately represented. If we read only Lange, we might well come away with the impression that Hayek's objections focused exclusively on the "mathematical solution"; that the only problems that he identified had to do with trying to formulate and solve a giant system of equations. To be sure, Hayek had pointed out the difficulties that would exist under such a regime. But he also had addressed the trial and error elements in Dickinson's proposal and had offered arguments against their feasibility. All of this was conveniently ignored by Lange.

Hayek still believed, of course, that any proposed trial and error solution could not work as well as a real market system. From Hayek's point of view, Lange's proposal revealed that he misunderstood how a market system actually functions. He adds a conjecture about the origins of Lange's errors:

<sup>58</sup>*Ibid.*, pp. 109–110, 120. As one might expect, to support his case Lange cites (on p. 120) Adolf Berle and Gardiner Means, *The Modern Corporation and Private Property* (New York: Macmillan, 1933; revised edition, New York: Harcourt, Brace and World, 1968), the classic study of the separation of ownership from control in the modern corporation and a forerunner of the modern principal-agent literature in economics. Lange's argument makes clear the crucial importance for market socialists of the claim that old-style atomistic competition is rare under late capitalism.

<sup>59</sup>F. A. Hayek, "Socialist Calculation: The Competitive 'Solution'", *Economica*, N. S., vol. 7, May 1940, pp. 125–149; Lippincott, ed., op. cit.; H. D. Dickinson, *Economics of Socialism* (London: Oxford University Press, 1939). Dickinson's bibliography reveals that about a dozen books in support of planning or of socialism were published in England between 1935 and 1938. Hayek probably thought that these two were among the best of the lot.

...[I]t is difficult to suppress the suspicion that this particular proposal has been born out of an excessive preoccupation with problems of the pure theory of stationary equilibrium.<sup>60</sup>

When Hayek raises objections to "the pure theory of stationary equilibrium", he is emphasizing how a preoccupation with static equilibrium theory misleads planners about the true nature of the world. Hayek identifies a number of ways in which this occurs.

First, equilibrium theory concentrates on end-points, on a system that has achieved a state of rest. In solving for the equilibrium values of the system, certain data are assumed to be given, or constant. But the notion of a system moving towards some final end-point as determined by given data is radically at odds with the situation in the real world, "where constant change is the rule".<sup>61</sup> Parameters assumed to be given are in fact constantly changing; final equilibrium values are not final at all, but ever shifting. Concretely, in the real world, innumerable prices are changing every day, and every time a price changes, part of the 'given' data on which all other prices are set is also altered. This sets up innumerable further changes, which cause other parameters to alter, and so on, and so on. It is difficult to imagine any trial and error mechanism being able to duplicate such a process. Hayek wonders aloud "whether anyone should really be prepared to suggest that, within the domain of practical possibility, such a system will ever even distantly approach the efficiency of a system where the required changes are brought about by the spontaneous action of the persons immediately concerned".<sup>62</sup> He notes that neither author even clearly specifies how often prices are to be changed, a matter of no small consequence given the criticism outlined above. From Hayek's perspective, his opponents simply have failed to think through what they are saying.

Hayek points out other problems associated with an overemphasis on the static theory of competitive equilibrium. The theory of pure competition assumes homogeneous standardized products. But many goods, particularly capital goods, are built to order. Furthermore, static theory ignores that production takes place over time. Many decisions made by managers are of necessity forward-looking, and, as a result, existing prices are much less important to them than are anticipated future

<sup>60</sup>F. A. Hayek, p. 123.

<sup>61</sup>*Ibid.*

<sup>62</sup>*Ibid.*

prices.<sup>63</sup> Perhaps most important, market socialists fail to realize that the results of the market process cannot be separated from the actual process of competition.<sup>64</sup>

Hayek's criticisms, then, focus on the inadequacies of the existing theory. His adversaries might well respond: Theories are always abstractions from reality; why should any of this matter?

Hayek provides an example of the consequences of taking static theories too seriously in his discussion of Lange's cost minimization rule. The problem is a straightforward one: How, in the absence of price competition, will we know what the minimum costs are? Hayek's analysis includes a wonderful example of the role of the entrepreneur in the competitive process:

In the discussion of this sort of problem, as in the discussion of so much of economic theory at the present time, the question is frequently treated as if the cost curves were objectively given facts. What is forgotten here is that the method which under given conditions is the cheapest is a thing which has to be discovered, and to be discovered anew sometimes almost from day to day, by the entrepreneur, and that, in spite of the strong inducement, it is by no means regularly the established entrepreneur, the man in charge of the existing plant, who will discover what is the best method. The force which in a competitive society brings about the reduction of price to the lowest cost at which the quantity saleable at that cost can be produced is the opportunity for anybody who knows a cheaper method to come in at his own risk and to attract customers by underbidding the other producers.<sup>65</sup>

Standard equilibrium theory assumes that an end-state is already reached, so that cost-minimizing input combinations are already known. This obscures the process by which they come to be known and may lead

<sup>63</sup>*Ibid.*, pp. 123-124.

<sup>64</sup>As Hayek would later put it, "competition is by its nature a dynamic process whose essential characteristics are assumed away by the assumptions of standard analysis" (F. A. Hayek, "The Meaning of Competition", in Hayek, ed., *Individualism and Economic Order* (Chicago: University of Chicago Press, 1948; Midway reprint, 1980), p. 94). This point was so crucial for the Austrians that they would ultimately argue that standard equilibrium theory should be replaced by a theory of the market process, one which underlines the importance of rivalrous market competition for obtaining the results that the static equilibrium model at best is only able to summarize.

<sup>65</sup>F. A. Hayek, "Socialist Calculation: The Competitive 'Solution'", op. cit., this volume, p. 130.

to the ultimate error: the belief that one can dispense with the very process (rivalrous market competition) that generates knowledge.<sup>66</sup>

There is another error concerning knowledge into which market socialists using standard equilibrium theory might easily fall. Recall that Hayek in 1935 had said that under competitive market socialism, planners in deciding how to allocate capital among firms would have to take on the role played in markets by entrepreneurs. Lange responded that that state of affairs might well improve on the workings of the free market. Entrepreneurs only have knowledge about a limited set of markets and prices. Since the Central Planning Board has access to more knowledge than do individual entrepreneurs, they could make better decisions, or so Lange argued.

In 1937 Hayek published "Economics and Knowledge",<sup>67</sup> an article that has more than a passing relevance for this discussion. He noted there that standard equilibrium theory assumes that all participants have access to the same, objectively correct, information. But in reality there is a division of knowledge. Knowledge as it actually exists in the world is dispersed; different people have access to different bits of it. The real question for the social sciences is how such dispersed knowledge might be put to use, how society might coordinate the knowledge that exists in many different minds and places. Equilibrium theory with its emphasis on end-states assumes that the process of coordination has *already* taken place. By doing so, it assumes away the most important question.

Citing his earlier article, Hayek argues that Lange has again been misled.

As I have tried to show on another occasion, it is the main merit of real competition that through it use is made of knowledge divided among many persons which, if it were to be used in a centrally directed economy, would all have to enter the single plan. To assume that all this knowledge would be automatically in the possession of the planning authority seems to me to miss the main point.<sup>68</sup>

<sup>66</sup>As Hayek would later put it, competition may itself rightly be viewed as a "discovery procedure". F. A. Hayek, "Competition as a Discovery Procedure", in *New Studies in Philosophy, Politics, Economics, and the History of Ideas* (Chicago: University of Chicago Press, 1978), pp. 179-190.

<sup>67</sup>F. A. Hayek, "Economics and Knowledge", *Economica*, N. S., vol. 4, February 1937, pp. 33-54; reprinted in F. A. Hayek, *Individualism and Economic Order*, op. cit., pp. 33-56. For the significance of this article in the further development of his thought, see Bruce Caldwell, "Hayek's Transformation", *History of Political Economy*, vol. 20, Winter 1988, pp. 513-541.

<sup>68</sup>Hayek, this volume, p. 134.

Tracing out the implications of the "dispersion of knowledge" became a major theme in Hayek's work. One can see additional development of it in a short piece (reprinted as chapter 4, this volume) that appeared in 1941.<sup>69</sup> There Hayek talks about what sorts of resources might be available at specific times and places and asserts that, "For what purposes and in what way particular resources are used with the greatest advantage can be intelligently decided only by the 'man on the spot'."<sup>70</sup> Hayek would later further develop the idea that much knowledge is localized, calling it "knowledge of the particular circumstances of time and place".<sup>71</sup> A further addition is that certain knowledge is tacit; it is "knowledge how" rather than "knowledge that". Such knowledge, Hayek would claim, cannot be easily passed on to others, even if one wanted to.

In his essays in *Collectivist Economic Planning* Hayek provided four opening arguments against a variety of socialist schemes. The first one, that no centrally imposed trial and error method could duplicate the workings of the market, was basically ignored by Lange, who shifted attention to Hayek's discussion of the mathematical solution. In his 1941 review Hayek reiterated and fleshed out the arguments against trial and error schemes. But it was his next two claims (that the competitive market process constitutes a discovery procedure, and that it assists the coordination of agents' plans in a world of dispersed knowledge) that ultimately emerged as Hayek's lasting and most original contributions. These arguments about markets and knowledge now constitute a central tenet of Austrian thought. Their refinement was a direct result of Hayek's battles with the market socialists.<sup>72</sup>

For many years it was the general consensus among economists that the debate over market socialism had ended in a draw. Lange's definition of prices as "terms on which alternatives are offered" seemed to many an adequate answer to Mises's insistence that prices be market-determined. It was further believed that Lange's trial and error procedure had

<sup>69</sup>F. A. Hayek, "The Economics of Planning", *The Liberal Review*, vol. 1, 1941, pp. 5-11, reprinted as chapter 4, this volume. This article has seen little circulation because *The Liberal Review*, although grandly described on its cover as the "Official Organ of the Oxford University Liberal Club", was little more than a mimeograph pamphlet. Note that the article contains the first outline of Hayek's well-known "tin example".

<sup>70</sup>*Ibid.*, p. 143.

<sup>71</sup>F. A. Hayek, "The Use of Knowledge in Society", in Hayek, *Individualism and Economic Order*, op. cit., p. 80.

<sup>72</sup>Hayek did not pursue his fourth argument against socialism, the claim (one that had also been made by Mises) that a socialist regime would be plagued by incentive problems. Interestingly, it is this claim that recent critics of market socialism, working within the 'economics of information' framework, tend to emphasize. For example, see Joseph Stiglitz, *Whither Socialism?* (Cambridge, Mass., and London: MIT Press, 1994).

demonstrated that calculation was feasible, since it did not require the formation and solution of a massive system of equations, which was assumed to have been the chief objection of Hayek and Robbins. On theoretical grounds, it appeared that socialism could not be distinguished from capitalism. The chief question then became: Which one is preferable?

Lange had taken up the desirability question in the latter half of his essay.<sup>73</sup> He argued there that market socialism was preferable to capitalism on four grounds:

1) Since the unequal income distribution under capitalism is itself inherently unjust, the mix of goods it creates does not maximize social welfare.

2) Free markets fail to account for the social costs and benefits of production (the externalities problem).

3) Since planners will be able to keep mistakes "localized", there will be less trouble with the business cycle under market socialism.

4) Under market socialism, the wastes of monopoly can be avoided.

In the postwar era, the debate over market socialism continued, but the socialist's opponents were neoclassical economists, not the Austrians. In one sense, Lange had won, since the neoclassicals more or less accepted the criticisms of capitalism enumerated above. The key question was what to do about them. By the 1950s and 1960s, the market socialists had lost this larger debate, at least within the economics profession, where the so-called 'neoclassical synthesis' emerged as the consensus view. In this theory, free markets are retained but supplemented by various forms of government intervention. There would be progressive income taxation and an assortment of transfer schemes to redress distributional injustices, increased attention to the provision of the public goods that free markets supposedly failed to produce, Pigovian subsidy and taxation responses to externalities, anti-trust policies to deal with problems associated with monopoly, and Keynesian fiscal and monetary policies to combat the business cycle. In this great debate, the minority view was not presented by Hayek, but by critics like Milton Friedman and George Stigler at the University of Chicago, or members of the Public Choice school. These maverick economists raised two objections to the standard view. First, they asserted that many so-called 'market' failures were actually caused by ill-conceived government policies. Next, they questioned on a variety of grounds the ability and desirability of government intervention to correct market failures that might exist, raising the spectre of

<sup>73</sup>Lange, in Lippincott, ed., op. cit., pp. 98ff.

cures that were worse than the original disease. Significantly, even though he was for a time on the faculty of the University of Chicago, Hayek was not really a participant in these discussions.<sup>74</sup>

How did all of this come about? The outcome is even stranger given that Hayek's opponents never really answered his knowledge-based critique of socialism. It turns out that few economists ever really seemed to have understood what Hayek was saying. To see why Hayek's argument was not answered, we must try to figure out why he was so poorly understood.

The first reason is something that Hayek himself identified when he derided economists' unhealthy preoccupation with static equilibrium theory. Lange's great accomplishment was to take mainstream economic theory and show how it could be applied to the case of a socialist economy. Paretian theory provides the logical foundation for Marshallian partial equilibrium analysis, and together they comprise the core of every modern undergraduate course in microeconomic theory as it has been taught since the 1930s. It is no small irony that Robbins, Hayek, and others at the London School of Economics were among those most responsible for the introduction of the Paretian approach to economists in Britain.<sup>75</sup> Both neoclassical economists and market socialists, then, were trained to model the economic system in the same way. For market socialists, Paretian theory provides them with the "marginal conditions" that the rules they impose on managers must approximate. For neoclassicals, it shows what an ideal perfectly competitive market system can accomplish and how deviation from this ideal might be corrected by the appropriate dose of government intervention. But whether one is a neoclassical or a market socialist, one's principal goal as an economist is the same: to make one's chosen system more efficient, using the marginal conditions provided by the Paretian system as the benchmark.

For Austrian economists, neoclassicals no less than market socialists

<sup>74</sup>Hayek's post was on the Committee on Social Thought at the University of Chicago, rather than the Economics Department. It should be noted, however, that portions of his book *The Constitution of Liberty* (Chicago: University of Chicago Press, and London: Routledge and Kegan Paul, 1960), written while he was at Chicago, show the influence of the "Chicago view" in economics.

<sup>75</sup>Thus Abba Lerner could quite correctly write in the preface of his book-length blueprint for market socialism, *The Economics of Control* (New York: Macmillan, 1944), p. viii: "It is almost impossible for me to say now exactly in what respects this work shows true originality. Most of it doubtless was absorbed from my teachers at the London School of Economics. To Professor Lionel C. Robbins, Professor Friedrich A. Hayek, Professor J. R. Hicks, and Professor D. H. Robertson I am indebted for my original training in handling the tools of economic analysis."

have been led astray by Paretian theory.<sup>76</sup> Hayek's ultimate endorsement of markets is not based on their alleged Pareto-efficiency characteristics. Rather, a system of free markets is one among a number of institutions that are vital for the creation and discovery of knowledge and for the coordination of agents' plans in a world in which knowledge is dispersed and error is possible. By assuming away these essential characteristics of the market process, the Paretian paradigm completely obscures the Austrian message. The rapid ascendance and subsequent dominance of the Paretian approach to welfare economics rendered the Austrian message (nearly literally) incomprehensible to economists, socialist and neoclassical alike.

The second reason why Hayek was not listened to is perhaps the most obvious one: His ideas were not in step with the prevailing opinion of his day, at least among the intelligentsia. The 1930s was a time when intellectuals could seriously posit socialism as representing a middle way between totalitarianism of the communist and fascist varieties on the one hand and laissez-faire capitalism on the other. Indeed, as the decade came to an end, Hayek began to believe that countering the statist views of progressive intellectuals, many of whom had claimed the authority of 'science' for their arguments, was the most important contribution that he could make. We will look at this development in Hayek's thought later in the introduction.

#### 4. *Hayek on the Economics of War*

Many of the problems that wartime mobilization causes are identified in the following passage, written by one who had firsthand experience:

When war broke out, however, the nations found that economic efficiency was a matter of life and death. The first shock forced governments and business interests to concoct immediately novel expedients to save credits from disruption. Presently all the large questions of war financing had to be faced—how much to borrow and how much to tax, how to adjust the burden of taxation, and how to manage the currency. Then it became clear that victory required drastic economic mobilization of all available resources to maintain military efficiency and civilian

<sup>76</sup>This is perhaps the appropriate place to point out that Hayek was by no means an unqualified opponent of general equilibrium theory. He spent much of the later 1930s trying to develop a dynamic intertemporal general equilibrium model of a capital-using monetary economy. It was *static* general equilibrium theory that Hayek felt was potentially misleading when used in the analysis of socialism.

morale. It was not merely a problem of getting money with which to buy goods, but a problem of organizing agriculture and industry, shipping and railways, of training labour and making inventions to procure the necessary amount of food, clothing, and munitions.

Economists in every belligerent country had a share in framing the many measures for mobilizing resources. They were called in as technical advisers for the most part, but some among them became responsible officials. Both executives and advisers were plunged into a situation where they had to think constructively about economic institutions. They did a vast amount of strenuous planning, and tried to change the institutions of their several nations even more radically than they succeeded in doing. . . .

One of the outstanding lessons of the war to all economists who had a share in planning was the indispensable necessity of carrying their analyses beyond the stage represented in orthodox treatises. It seldom sufficed to say that a given action would have consequences of a certain kind, that would have been easy—and trifling. The important thing was to find out at least in what order of magnitude these consequences should be reckoned. Continually grave decisions turned on the questions: How many? How much? How soon? Say that the limiting factor upon our military effectiveness in France was ships—ships to carry troops and munitions. Then we should put all the available tonnage under army control. And it was wasteful to recruit and train more soldiers or to make more materials within a given time than these available ships could carry. But how large a force would each thousand tons maintain in France and how many thousand tons were available for army use? The available tonnage depended partly on how soon the new shipyards could get their vessels finished, partly on how much tonnage we could acquire from neutrals, and partly on how much tonnage was needed to provision the Allies and to bring us necessary imports. What imports, then, were necessary? That again was a quantitative problem of almost infinite detail. We might cut down the output of tires for pleasure automobiles, for example, but we needed a great deal of rubber for military and for essential civilian uses. Just how much did we need, just how much was already in stock, just how much more crude rubber should be imported each month, and where could we get it with the shortest voyages? Such questions came up—literally by thousands—and they had to be answered in figures: figures drawn from official records if there were such, figures carefully estimated if there were no records, figures intelligently guessed at if there was no real basis for an estimate.

In the economic problems of peace this quantitative element is not less fundamental than it was in the problems of the war. Here, indeed, is one of the differentiating characteristics that set off the problems that crop up in real life from those that appear in books. The theorist discouraging at large may content himself with pointing out the kinds of



causes and consequences to be considered; the practitioner dealing with specific cases must calculate the magnitudes involved. In proportion as economists face real problems they will strive to cast even their general theory into the quantitative mold.<sup>77</sup>

Mitchell identifies the problems of war financing, of rapid resource re-allocation, and of the necessity for extensive quantitative planning in his reminiscence. The three problems are all interrelated. As mobilization begins, a massive amount of resources must be shifted from the production of consumption goods and of peacetime capital equipment to the production of war materials and capital. The government begins bidding resources away from the production of consumer goods and may even restrict by law the production of certain goods. This cutback in the production of consumption goods takes place at a time when workers' incomes are rising. If no countervailing measures are taken, the prices of many goods are bid up.

The ensuing inflation has a number of costs associated with it. It hurts those whose incomes do not keep pace, falling particularly hard on pensioners and others whose incomes are fixed in nominal terms. It triggers increased wage demands by workers whose real incomes are falling, thus setting up a vicious wage-price spiral: increased wage costs leading to higher prices, leading to increased wage demands, and so on. During wartime these distributional effects are particularly damaging, since they can distract attention from the war effort and weaken the nation's resolve. In addition, inflation reduces the value of outstanding debts, creating uncertainty among investors. This hinders the government's effort to finance some of its increased expenditure via borrowing.

For these reasons governments are often tempted to pursue another policy during wartime, the fixing of prices, which is usually justified on distributional grounds. But this policy has adverse consequences of its own. Since most prices get fixed at levels that are below equilibrium, shortages, queues, and rationing are the ultimate result. Even worse, the fixing of prices hinders the market from performing its allocative function. This makes central planning of the war effort all the more attractive.

<sup>77</sup>Wesley Clair Mitchell, "The Prospects of Economics", *The Backward Art of Spending Money*, New York and London: McGraw Hill, 1937, pp. 365-366, 376-377. The essay was first published in *The Trend of Economics*, edited by R. G. Tugwell (New York: F. S. Crofts, 1924). Hayek sat in on Mitchell's lectures on the history of economic thought when he visited the United States in the 1920s; see Hayek, *Hayek on Hayek*, op. cit., p. 66. Though Hayek might have agreed with Mitchell's diagnosis, they differed regarding remedies: It was in no small part the Tugwell volume to which Hayek was responding in his lecture, "The Trend of Economic Thinking". See note 36 above.

There was a final problem, one that Hayek recognized from the start. If the war brought about extensive central control of the economy, one could be quite sure that socialists would call for the continuation of that policy once peace had been restored. So in the case of British mobilization efforts at the beginning of the Second World War, the stakes were particularly high.

It was with these considerations in mind that Hayek made his first major contribution to the economics of war. It consisted of two articles published in *The Banker* just at the outset of the war, in September and October of 1939. They are reprinted as chapters 5 and 6 of this volume.<sup>78</sup> There were originally to have been more articles. In a letter to Tjalling Koopmans, Hayek later explained why only two appeared.

There were intended to be quite a series but no more has been published than the two articles you have seen. The story is rather curious: When war actually broke out, *The Banker* decided that in view of the decisions already taken, they were no longer relevant! And though I probably still have somewhere fairly detailed notes at least for the third article, it was in fact never written out.<sup>79</sup>

The message of Hayek's first article is clear, simple, and uncompromising: In times of war no less than in peace, changing relative prices reveal changing conditions of scarcity and thereby provide important information. Whatever schemes might be adopted to assist the mobilization effort, the fixing of prices (and the rationing that typically accompanies such a policy) should be minimized. The authorities should, whenever possible, allow relative prices to do their work.

Hayek's second article applies the same principles to another "price", this one an intertemporal one, the interest rate. As Hayek notes in a pointed reference, John Maynard Keynes had been a prominent advocate of keeping interest rates low in the Depression, in the hopes that this would help stimulate the economy. Hayek had opposed this policy, arguing that the long-run effects would be further to disrupt the structure of production and thereby ultimately to exacerbate the business cycle.<sup>80</sup>

<sup>78</sup>F. A. Hayek, "Pricing versus Rationing", *The Banker*, September 1939, pp. 242-249, and "The Economy of Capital", *The Banker*, October 1939, pp. 38-42.

<sup>79</sup>Letter from F. A. Hayek to Tjalling Koopmans, August 6, 1956. In the Hayek collection, The Hoover Institution Archives, Stanford, Calif.

<sup>80</sup>The differences in their respective theories are highlighted in the editor's Introduction to *Contra Keynes and Cambridge: Essays and Correspondence*, ed. Bruce Caldwell, vol. 9 (1995) of *The Collected Works of F. A. Hayek*, op. cit. It is perhaps unsurprising that Keynes's first biographer, Roy Harrod, should identify the low interest rate policy followed by the British

These two articles contain Hayek's warnings about paths to avoid. They do not contain any positive proposals, and in particular there is no plan for avoiding the seemingly inevitable run-up in the prices of consumer goods. His positive contribution would not come until about a month later. Interestingly enough, it would consist of an addendum to a proposal made by his old nemesis, John Maynard Keynes.

Keynes's remarkable book *How to Pay for the War* began as a lecture delivered on October 20, 1939, before the Marshall Society, the undergraduate economics club at Cambridge. After he had discussed his ideas with a number of government officials, Keynes published a revised version of the proposal as two articles in *The Times*, on November 14 and 15.<sup>81</sup> To Hayek's delight, Keynes concurred that both inflation and rationing schemes (Keynes called the latter a "pseudo-remedy"<sup>82</sup>) should if at all possible be avoided during mobilization. Another possible strategy was to raise taxes. Keynes pointed out that if this alternative were chosen, the tax would have to extend to the working classes, for two reasons: First, the amounts needed were so large that a tax on the rich would not generate sufficient funds to finance the war; second, a tax on the rich would not sufficiently reduce current expenditure, so it would not help with the problem of excess demand for consumption goods.

In order to avoid the inflationary outcome, then, the present consumption levels of the working classes would have to be reduced. In an attempt to soften this unpopular but inevitable truth, Keynes came up with the novel idea of a 'deferred pay' or 'compulsory savings' provision.<sup>83</sup> A (progressively increasing) percentage of all incomes above some minimum level would be paid to the government, some of it in the form of taxes, the rest in the form of compulsory savings. The latter amount would be credited to each individual's account at his Post Office Savings Bank. This sum would earn interest of 2-1/2 per cent, but the individual would be blocked from use of the fund until after the war was over. Keynes envisioned that the funds would be unblocked in a series of installments and timed to counteract (in good Keynesian style) the first postwar slump.

and American governments during the war as one of Keynes's most important influences, and one that derived from his writings earlier in the 1930s. See Roy Harrod, *The Life of John Maynard Keynes* (New York: Harcourt Brace, 1951; reprinted, New York: Norton, 1982), pp. 492-493.

<sup>81</sup>J. M. Keynes, "Paying for the War", reprinted in *Activities 1939-1945: Internal War Finance*, ed. Donald Moggridge, vol. 22 (1978) of *The Collected Writings of John Maynard Keynes*, op. cit., pp. 41-51.

<sup>82</sup>*Ibid.*, p. 43.

<sup>83</sup>It is perhaps understandable that Keynes would not choose the phrase 'forced savings' to refer to this provision within his new proposal.

Hayek responded swiftly to Keynes's proposal. In an article published about two weeks later in *The Spectator* magazine, Hayek praised Keynes's ideas as "ingenious".<sup>84</sup> His only disagreement was to question the wisdom of using the release of the deposits as a tool of counter-cyclical fiscal policy. In its stead Hayek proposed his own novel idea: a capital levy on old wealth that would be used to create a giant holding company. Those who had deferred their consumption during the war would receive, instead of a cash claim against the government, equity in the industrial capital of the country. Hayek's scheme was a perfect complement to Keynes's. The latter had figured out how to reduce consumption during the war, and the former how ultimately to pay for it. Hayek's plan would, in short, turn workers into stockholders.<sup>85</sup>

Keynes's plan was not well received by the Labour party, the left press, or the unions; he would characterize the initial reaction of the Labour leaders as "frivolous and unthinking".<sup>86</sup> In an attempt to placate them, Keynes modified his proposal. In the book version, now called *How to Pay for the War* and published in February 1940, Keynes added a family allowance of £13 per year per child, an 'iron ration', or minimum ration of consumption goods made available at a low fixed price, and Hayek's capital levy provision.<sup>87</sup> Hayek's proposal was designed to prevent Keynes from using the distribution of the deferred pay as a tool of fiscal policy. With typical ingenuity, Keynes altered Hayek's proposal to meet his own ends, keeping the levy as a means of paying for the war, but using the receipts to finance his own preferred cash payments scheme. Hayek points this out in his review of *How to Pay for the War* in the *Economic Journal*, also reprinted in chapter 7, this volume.<sup>88</sup>

Unfortunately, Labour intransigence continued. Then everything was turned upside down, as 'the phony war' came to an abrupt conclusion. On May 10, 1940, Hitler's armies invaded Holland and Belgium. By the

<sup>84</sup>F. A. Hayek, "Mr. Keynes and War Costs", *The Spectator*, November 24, 1939, pp. 740-741, reprinted in chapter 7, this volume.

<sup>85</sup>A similar method has been used to distribute government-owned capital in the former East Bloc countries, most notably in the Czech Republic. Jack Birner has commented to the editor that Keynes's and Hayek's proposals reflect their respective theories of the cycle. 'Compulsory savings' causes consumption to be deferred. In order to meet future consumption demand, output would need to be increased in the future, which is only possible if there are investments. Hayek's proposal anticipates this problem, whereas Keynes's cash-claim scheme typically neglects these long-run capital-theoretic concerns.

<sup>86</sup>Reported on by D. E. Moggridge in *Activities 1939-1945: Internal War Finance*, op. cit., p. 82.

<sup>87</sup>J. M. Keynes, *How to Pay for the War*, op. cit., pp. 367-439.

<sup>88</sup>F. A. Hayek, "Book Review: John Maynard Keynes, *How to Pay for the War*, *Economic Journal*, vol. 50, June-September 1940, pp. 321-326.

end of the month both countries had surrendered; meanwhile British soldiers were desperately trying to escape from the beaches of Dunkirk. In June France sued for peace, and only Britain remained.

The moment for trying out such comprehensive and innovative proposals was over. Some of Keynes's recommendations eventually were enacted, including a modest deferred pay scheme that was added to the 1941 budget under the name of "postwar credits". But also enacted was a 100 per cent excess profits tax, a policy that Keynes had vehemently opposed in his proposals. His biographer Roy Harrod summed up Keynes's influence on the economics of war in Britain this way:

... [I]t is difficult to hold that the main idea in *How to Pay for the War* was put into effect. He pointed out that there were only three logical solutions to the war problem, namely, his scheme, sufficient taxation, or inflation. Sufficient taxation was impractical, and he feared inflation. But he recognized there was also a pseudo-remedy, namely widespread rationing and price controls. . . . He thought that, with the prevailing outlook, this, rather than open inflation, was the most likely outcome of the lack of an orderly plan. And he dreaded it. He was appalled by the waste and the inefficiency of shortages and queues. His scheme was designed to avoid them. But, in the event, we had them!<sup>89</sup>

Hayek made other contributions during this period. In the press he was a consistent advocate for a variety of forms of international cooperation, from the lowering of trade barriers among the allies to the formation of a federation of the Western democracies. He also called for increases in the flow of knowledge about Germany. In a letter dated September 9, 1939, Hayek wrote to the Director General of the Ministry of Information, noting that his "exceptional experience and somewhat special position might enable me to be of considerable help in connection with the organization of propaganda in Germany".<sup>90</sup> Despite providing as references such luminaries as Lord Josiah Stamp, A. M. Carr-Saunders (the Director of the London School of Economics), Sir William Beveridge, Ralph Hawtrey of the Treasury, and F. W. Ogilvie of the BBC, his offer apparently went unanswered.

<sup>89</sup>Roy Harrod, *The Life of John Maynard Keynes*, op. cit., p. 494.

<sup>90</sup>Letter, Hayek to the Director General of the Ministry of Information, September 9, 1939. In the Hayek collection, The Hoover Institution Archives, Stanford, Calif. There is no record of a reply in the Archives.

At the outbreak of the war the London School was evacuated to Cambridge, and with Keynes's help Hayek was able to find rooms at Kings College. This lasted until 1941, when Hayek and his family (the latter during the previous year had been put up in the Robbinses' country cottage) finally found a house in which to live in Cambridge, where they stayed until 1945. Hayek spent the duration of the war teaching, but also working on his 'war effort', *The Road to Serfdom*.

### 5. *Planning and Freedom: Mapping The Road to Serfdom*

In the penultimate section of his 1941 review, "Socialist Calculation: The Competitive 'Solution'", Hayek asks whether personal and political freedom can be preserved under a regime of extensive economic planning. This was a line of questioning that he had begun pursuing a few years earlier, and one he would follow with increasing urgency during the war years, finally producing *The Road to Serfdom* in 1944. In its preface, Hayek wrote that "The central argument of this book was first sketched in an article entitled 'Freedom and the Economic System', which appeared in the *Contemporary Review* for April, 1938, and was later reprinted in an enlarged form as one of the Public Policy Pamphlets edited by Professor H. D. Gideonse for the University of Chicago Press (1939)."<sup>91</sup> The two articles are reprinted as chapters 8 and 9 of this volume.<sup>92</sup>

Hayek explained the reason for his turn to these political concerns in an interview in 1978:

A very special situation arose in England. . . . that people were seriously believing that National Socialism was a capitalist reaction against socialism. It's difficult to believe it now, but the main exponent whom I came across was Lord Beveridge. . . . I wrote a memorandum for Beveridge on this subject, then turned it into a journal article, and then used [my time during] the war to write out what was really a sort of advance popular version of what I had imagined would be the great book on the abuse and decline of reason. . . . It was adjusted to the moment and wholly aimed at the British socialist intelligentsia, who all seemed to have this

<sup>91</sup>F. A. Hayek, *The Road to Serfdom*, op. cit., p. xviii.

<sup>92</sup>F. A. Hayek, "Freedom and the Economic System", *Contemporary Review*, April 1938, pp. 434-442, reprinted as chapter 8, this volume, was reprinted in a slightly revised version under the title "What Price a Planned Economy", *American Affairs*, July 1945, pp. 178-181; *Freedom and the Economic System* (Chicago: University of Chicago Press, 1939), Public Policy Pamphlet no. 19 in the series edited by Harry D. Gideonse, reprinted as chapter 9, this volume.

idea that National Socialism was not socialism, just something contemptible.<sup>93</sup>

The argument against which Hayek fought existed on varying levels of sophistication. The vulgar version went something like this: Since communists and socialists are among the chief opponents of fascism (especially in countries where no viable liberal tradition has ever taken root), and since communists and socialists also oppose capitalism, then fascism must be a form of capitalism. The syllogism is invalid: Though both spinach and snakes may revolt me, this does not make my greens reptilian. But even were it not, the Communist Party betrayal of the Republican forces in Spain (documented by George Orwell in his 1938 book, *Homage to Catalonia*<sup>94</sup>) and the signing of the Molotov-Ribbentrop pact in 1939 provided incontrovertible evidence that the first premise was false.

A more robust version infers from the inability of the nascent liberal democracies on the Continent to contain fascism that liberal democracy is everywhere doomed to fall before the jackboot. This argument never made much headway in Britain, where experience spoke as eloquently in favour of the prospects of liberal democracy as it had against them on the Continent.

The most sophisticated account was doubtless that of the Hungarian émigré Karl Mannheim, who, having fled Frankfurt in 1933, soon gained an appointment as a Lecturer in Sociology at the London School of Economics. Mannheim's vision was a dark and depressing one. Reflecting on the recent experience of Germany, he concluded that the mass democracies of the Continent were lost, that all were headed towards totalitarianism. He held out some hope for England, but only if it would give up on liberal democracy and embrace a comprehensive system of planning. In Mannheim's apocalyptic analysis, the choice was no longer between laissez faire and planning, but between the good planning of the sort that he advocated and the horrific planning that would accompany totalitarianism.

In a lecture given at the London School of Economics and published in 1937, Mannheim also explained how capitalism had allowed fascism to take root. The sequence had the usual Mannheimian air of dismal inevitability. Monopoly capitalism leads naturally to sustained periods of mass unemployment. This creates a permanent state of collective insecurity among the population. Mass democratic society can be easily manipu-

<sup>93</sup>F. A. Hayek, *Hayek on Hayek*, op. cit., p. 102.

<sup>94</sup>George Orwell, *Homage to Catalonia* (London: Secker and Warburg, 1938).

lated by demagogues who play on the insecurity, providing scapegoats for the current problems and offering escape into symbols of past glories. There is a gradual breakdown of society, and totalitarian forms of government step in to fill the vacuum. The breakdown is further aided by capitalists, whose allegiances are few and fleeting, and who see new profit opportunities in every change of regime.<sup>95</sup>

Hayek does not mention Mannheim in his writings until the 1940s, perhaps because much of Mannheim's work on mass democracy and social structures was not translated until 1940 and so would be unfamiliar to his English audience. But by 1944 he is accorded a place of some prominence. Seeking to contrast his own views with those of the planners, Hayek cites Mannheim in the first chapter of *The Road to Serfdom*, stating, "The difference cannot be better illustrated than by the extreme position taken in a widely acclaimed book on whose program of so-called planning for freedom we shall have to comment yet more than once."<sup>96</sup> If *The Road to Serfdom* had its beginnings in an intellectual spat with Beveridge, its final form may owe more to the darkly brilliant sociological ruminations of Karl Mannheim.

At the outset of his 1938 paper, Hayek addressed Beveridge's opinions with a flurry of rhetorical questions:

Are we certain that we know exactly where the danger to liberty lies? Was the rise of the fascist regimes really simply an intellectual reaction fomented by those whose privileges were abolished by social progress?<sup>97</sup>

He then states his principal thesis, the same one that he would develop in *The Road to Serfdom*.

The main point is very simple. It is that the central economic planning, which is regarded as necessary to organize economic activity on more rational and efficient lines, presupposes a much more complete agreement on the relative importance of the different ends than actually exists, and that in consequence, in order to be able to plan, the planning

<sup>95</sup>Mannheim's lecture originally appeared as a chapter in *Peaceful Change: An International Problem*, ed. C. A. W. Manning (London: Macmillan, 1937). It later formed the basis for chapter 3 of Karl Mannheim, *Man and Society in an Age of Reconstruction: Studies in Modern Social Structure* (London: Kegan Paul and New York: Harcourt Brace, 1940).

<sup>96</sup>F. A. Hayek, *The Road to Serfdom*, op. cit., p. 21.

<sup>97</sup>Hayek, this volume, p. 182.

authority must impose upon the people that detailed code of values which is lacking.

... [A]greement that planning is necessary, together with the inability to agree on a particular plan, must tend to strengthen the demand that government, or some single person, should be given the power to act on their own responsibility. It becomes more and more the accepted belief that if one wants to get things done the responsible director of affairs must be freed from the fetters of democratic procedure.<sup>98</sup>

Under a system of free markets, each consumer makes his own choices. Under planning, at least some choices must be subject to the 'general will'. In making these choices, the planners will inevitably impose a code of values on the rest of the populace. Whatever choices are finally made, some members of the society will be made better off and some worse off. Since planners are political appointees who wish to retain power, they will seek ways to justify the choices that they have made. Those who support their choices will be rewarded, and those who oppose them will be sanctioned: "Planning becomes necessarily a planning in favour of some and against others."<sup>99</sup> In this way authoritarian government tends inevitably to expand beyond the economic and into the political domain. Liberty ends up being sacrificed, even under those forms of socialism that may have started out as democratic. Only if democracy is allied with the freedom of choice that inheres in a free market system will it have some hope of survival.

Democratic government worked successfully so long as, by a widely accepted creed, the functions of the State were limited to fields where real agreement among a majority could be achieved. The price we have to pay for a democratic system is the restriction of State action to those fields where agreement can be obtained; and it is the great merit of a liberal society that it reduces the necessity of agreement to a minimum compatible with the diversity of individual opinions which in a free society will exist.<sup>100</sup>

There is some value in seeing the 1938 and the 1939 versions of "Freedom and the Economic System" side by side. Though there is, of course, some duplication (parts of sections one, four, five, and six of the later

<sup>98</sup>*Ibid.*, pp. 182, 184.

<sup>99</sup>*Ibid.*, p. 185.

<sup>100</sup>*Ibid.*, p. 184.

version repeat some of the earlier text), new material is also evident. As befits a policy pamphlet, there are references to contemporary events and citations of the current popular literature. But there are also some substantial new ideas, three of which will be mentioned here.

First, there is an emphasis in Section 2 on the crucial importance of the rule of law in a liberal democratic society. Hayek introduces the idea by differentiating between the sort of planning that one experiences under socialism and the 'planning' that occurs under liberalism, namely, "the construction of a rational framework of general and permanent rules":

We can 'plan' a system of general rules, equally applicable to all people and intended to be permanent (even if subject to revision with the growth of knowledge), which provides an institutional framework within which the decisions as to what to do and how to earn a living are left to the individuals. In other words, we can plan a system in which individual initiative is given the widest possible scope and the best opportunity to bring about effective coordination of individual effort.<sup>101</sup>

Later in his essay, Hayek notes that though the early liberals had understood the importance of these general rules, they had not carried their analyses far enough.

[T]his task of creating a framework of law has by no means been carried through consistently by the early liberals. After vindicating on utilitarian grounds the general principles of private property and freedom of contract, they have stopped short of applying the same criterion of social expediency to the specific historic forms of the law of property and of contract. Yet it should have been obvious that the question of the exact content and the specific limitations of property rights, and how and when the state will enforce the fulfillment of contracts, require as much consideration on utilitarian grounds as the general principle.<sup>102</sup>

The rule of law would become a recurrent theme in Hayek's work. Hayek scholars should note, however, that (in 1939, anyway) he apparently had not developed an antipathy towards utilitarianism. Indeed, in his willingness to subject existing laws to a "criterion of social expediency", the

<sup>101</sup>F. A. Hayek, *Freedom and the Economic System*, op. cit. This volume, p. 194.

<sup>102</sup>*Ibid.*, p. 195.

author of "Freedom and the Economic System" sounds suspiciously like what the later Hayek might call a social constructivist (or, at the very least, a constitutional political economist)!<sup>103</sup>

In a review of Hayek's pamphlet, the British socialist H. D. Dickinson agreed with Hayek's criticisms of his predecessors:

[T]he liberal opponents of collectivism have not so far entered the field with a positive programme. Can they suggest any workable set of institutions in the realm of property, inheritance, contract, money, and business organization which will be compatible with private property and the free market and which will at the same time guarantee the ordinary man a reasonable security of livelihood and prevent the accumulation of wealth (and, what is still more important, the concentration of power over wealth) in the hands of a minority of the community? In the pamphlet under review, Professor Hayek hints at the possibility of such a programme.<sup>104</sup>

In due course Hayek responded to Dickinson's challenge, though the framework of *The Constitution of Liberty* would be quite different from the one hoped for by Dickinson. Though Hayek did not want it to be considered a blueprint, the book contained a fairly detailed account of the institutional setting that would permit a liberal democratic state to flourish.<sup>105</sup>

In "Freedom and the Economic System" Hayek signalled a second significant shift in his thinking. Up till then when he had argued against socialism, he had restricted himself to making economic arguments. By 1939 Hayek probably felt that he had successfully refuted socialism on economic grounds. But one can also see him coming to the realization that, having concentrated on winning the economic battle, he had placed himself in danger of losing the larger war.

Many planners would be willing to put up with a considerable decrease of efficiency if at that price greater distributive justice could be achieved.

<sup>103</sup>Stuart Warner pointed out to the editor that "in the 1940s, Hayek's lists of phenomena which were the results of human action but not design include language, the market, money, and morals; law is not on the lists." Hayek's understanding of the law changed through time.

<sup>104</sup>H. D. Dickinson, "Review, *Freedom and the Economic System*", *Economica*, N. S., vol. 7, November 1940, pp. 435-437.

<sup>105</sup>F. A. Hayek, *The Constitution of Liberty*, op. cit.

And this, indeed, brings us to the crucial question. The ultimate decision for and against socialism cannot rest on purely economic grounds, and cannot be based merely on the determination of whether a greater or smaller output of society is likely to be obtained under the alternative systems in question. The aims of socialism as well as the costs of its achievement are mainly in the moral sphere.<sup>106</sup>

Henceforth, Hayek in his writings against socialism would add political, ethical, and historical arguments to the economic ones.

A third theme that Hayek mentions in passing in the essay concerns the origins of the belief that central planning is necessary for productive efficiency:

It would be interesting, but it is not possible within the space available, to show how this belief is largely due to the intrusion into the discussion of social problems of the preconceptions of the pure scientist and the engineer, which have dominated the outlook of the educated man during the past hundred years.<sup>107</sup>

Normally, of course, one thinks of Hayek as debating with other economists. But it is evident that what increasingly worried Hayek in the late 1930s was the enthusiasm for all sorts of planning among the non-economist intelligentsia of Britain, and especially among the natural scientists whose enthusiasm attracted much public attention and who, in this heyday of positivism, were accorded great respect. The group against which Hayek struggled has since come to be called the 'Social Relations of Science' movement.

Members of the movement generally adhered to three fundamental theses. First, science serves a social function, and it reflects the class interests of the society in which it is embedded. Second, though science in the past assisted the development of capitalism, its further advance has been hindered under monopoly capitalism. Finally, under socialism science would be planned and thereby could once again be made to serve the needs of society.

One of the leaders of the movement was the Cambridge-trained physicist J. D. Bernal. He had been introduced to socialist ideas during his student days by his friend H. D. Dickinson and was a Communist Party

<sup>106</sup>F. A. Hayek, this volume, p. 198.

<sup>107</sup>*Ibid.*, p. 197.

member in the 1920s and early 1930s. In his popular book *The Social Function of Science*, Bernal first offered a bleak description of the way that science was carried on, then provided a utopian vision of what a properly planned science could look like.<sup>108</sup> As one of his biographers put it, "The central purpose behind all of Bernal's writings is to show that only in socialist society can science take its rightful place as the chief servant of human liberation."<sup>109</sup> Bernal did not limit himself to writing. He was "a model Popular Front intellectual, involving himself at one count in more than sixty committees devoted to peace, anti-fascism, civil liberties, Spanish aid, friendship with the USSR, etc., ad infinitum."<sup>110</sup>

There were many others, and all were highly visible. J. B. S. Haldane was a biochemist and geneticist, for a time the Chairman of the Editorial Board of *The Daily Worker*, and one of the first to write popular science. His fluid style, frequent speaking engagements (by the mid-1930s he was averaging about 100 speeches a year), and willingness to break social conventions soon gained him a huge public; early in his career he was the model for characters in two different fictional works. The mathematician Hyman Levy was a great popularizer of science. The titles of his book series, the Library of Science and Culture, and of his BBC broadcasts ("Scientific Research and Social Needs", "Science in a Changing World", "The Web of Thought and Action") reveal his conviction that science is properly viewed as an agent of societal change. Lancelot Hogben held a chair in social biology at the London School of Economics from 1930 to 1936. In such books as *Mathematics for the Million* and *Science for the Citizen*,<sup>111</sup> Hogben made sure that his descriptions of the facts of science were accompanied by his own particular analyses of its social history. J. G. Crowther was the science correspondent for the *Manchester Guardian*. Though he hoped for a communistic scientific community, he also suspected that many scientists would not share his goals, writing in *The Social Relations of Science* that "the material conditions of scientists contain elements that dispose them to fascism. . . . The immediate economic and class interests of scientists tend to make them fall in with authority."<sup>112</sup> P. M. S. Blackett would win the Nobel Prize in physics in 1948. In 1935,

<sup>108</sup>J. D. Bernal, *The Social Function of Science* (New York: Macmillan, 1939; 2nd corrected edition, London: Routledge, 1940).

<sup>109</sup>Gary Werskey, *The Visible College: The Collective Biography of British Scientific Socialists of the 1930s* (New York: Holt, Rinehart and Winston, 1978), p. 185.

<sup>110</sup>*Ibid.*, p. 167.

<sup>111</sup>Lancelot Hogben, *Mathematics for the Million* (New York: Norton, 1938); *Science for the Citizen: A Self-Educator Based on the Social Background of Scientific Discovery* (London: Allen and Unwin, 1938).

<sup>112</sup>J. G. Crowther, *The Social Relations of Science* (London and New York: Macmillan, 1941; rev. ed., London: Cresset, 1967), p. 648.

he contributed the title essay to *The Frustration of Science*, a book whose main theme was that scientific advance would be frustrated so long as the capitalist system was maintained.<sup>113</sup> As a radical historian of the movement wrote:

This theme—that it was the advancement of science, not the actions of the working class, which would bring about the downfall of capitalism (and vice versa)—became a significant one in any country where the Communist Party was allowed to operate in the 1930s. Nevertheless, no left-wing movement ever became quite so obsessional about the scientific road to socialism as the one in Britain.<sup>114</sup>

These were some of the people that Hayek had in mind when he wrote against the 'men of science'. One of his most explicit statements can be found in his 1941 piece, "Planning, Science, and Freedom".<sup>115</sup> The article appeared in the influential weekly *Nature*, which guaranteed that his challenge would reach the scientific elite of Britain. The war was under way, and Hayek was more explicit than he had been before about the similarities between the dark future he could foresee and conditions then evident in Germany. In the second sentence of the article he mentions France in conjunction with Germany as one of the places where the modern passion for planning originated. This theme was carefully developed in Hayek's just-published series of essays, "The Counter-Revolution of Science", where he traced the "source of the scientific hubris" to the engineers of L'Ecole Polytechnique, Henri de Saint-Simon, Auguste Comte, and their apostles.<sup>116</sup>

Hayek notes in the *Nature* article:

The attempts to advance the social sciences by a more or less close imitation of the methods of the natural sciences, far from being new, have been a constant feature for more than a century. The same objections

<sup>113</sup>Sir Daniel Hall and others, *The Frustration of Science* (London: Allen and Unwin, 1935; reprinted, New York: Arno Press, 1975).

<sup>114</sup>Gary Werskey, *The Visible College*, op. cit., p. 178.

<sup>115</sup>F. A. Hayek, "Planning, Science, and Freedom", *Nature*, vol. 143, November 15, 1941, pp. 580–584, reprinted as chapter 10, this volume.

<sup>116</sup>F. A. Hayek, "The Counter-Revolution of Science", *Economica*, N. S., vol. 8, February 1941, pp. 9–36; May 1941, pp. 119–150; August 1941, pp. 281–320; reprinted in *The Counter-Revolution of Science: Studies on the Abuse of Reason* (Glencoe, Ill.: Free Press, 1952; second edition, Indianapolis, Ind.: Liberty Press, 1979), pp. 185–363.

against 'deductive' economics, the same proposals to make it at last 'scientific', and it must be added, the same characteristic errors and primitive mistakes to which the natural scientists approaching this field seem to be prone, have been repeated and discussed over and over again by successive generations of economists and sociologists and have led precisely nowhere. All the progress in the understanding of the phenomena which has been achieved has come from the economists patiently developing the technique which has grown out of their peculiar problems.<sup>117</sup>

Hayek's battle was a lonely one. As he put it, "for a hundred men of science who attack competition and 'capitalism' scarcely one can be found who criticizes the restrictionist and protectionist policies which masquerade as 'planning' and which are the true causes of the 'frustration of science'."<sup>118</sup> But he did have some companions besides Mises and Robbins, and he participated in a number of initiatives to stem the tide. One of his allies was the American journalist and critic Walter Lippmann. In *An Inquiry into the Principles of the Good Society*, Lippmann offered arguments similar to those of Hayek about planning, collectivism, and totalitarianism, and praised both Hayek and Mises in his book for their insights.<sup>119</sup> A French translation of *The Good Society* appeared the next year, and in August 1938 a five-day colloquium organized by Louis Rougier was held in Paris to honour Lippmann and to inquire into the prospects for democratic liberalism. Hayek, Mises, and Robbins were among those in attendance, as well as a number of Continental liberals, including Wilhelm Roepke, Raymond Aron, and Jacques Rueff. The meeting led to the creation of the short-lived Centre International des Etudes pour la Rénovation du Libéralisme, which lasted only until 1940, another victim of the war. Another compatriot was the physical chemist and philosopher Michael Polanyi, who attacked the science planning movement in his book *The Contempt of Freedom*, which Hayek reviewed.<sup>120</sup> In the early 1940s Hayek attempted to raise funds to finance the publication of an outlet for

<sup>117</sup>F. A. Hayek, "Planning, Science, and Freedom", pp. 216–217, this volume.

<sup>118</sup>*Ibid.*, p. 216. Hayek identifies some of his opponents in the chapter titled "The Totalitarians in Our Midst" in *The Road to Serfdom*, op. cit.

<sup>119</sup>Walter Lippmann, *An Inquiry into the Principles of the Good Society* (Boston: Little, Brown, 1937). I thank Julian Ellison for providing me with information concerning the existence and significance of the Lippmann colloquium.

<sup>120</sup>Michael Polanyi, *The Contempt of Freedom: The Russian Experiment and After* (London: Watts, 1940; reprinted, New York: Arno Press, 1975). Hayek's review appears in the Appendix of this volume. In a letter dated July 1, 1941, Hayek wrote Polanyi: "I attach very great importance to these pseudo-scientific arguments on social organization being effectively met and I am getting more and more alarmed by the effect of the propaganda of the Haldanes, Hogbens, Needhams, etc., etc." The Polanyi Archives, University of Chicago Library. The editor thanks Philip Mirowski for bringing the Polanyi-Hayek letters to his attention.

liberal thought, one that he thought should be named *Common Affairs*,<sup>121</sup> but the project was not realized. Hayek's organizational efforts did not bear fruit until April 1947, when the Mont Pèlerin Society was founded.

The final paper in this volume is "The Intellectuals and Socialism".<sup>122</sup> It was first published in 1949, five years after *The Road to Serfdom*. Hayek's initial attack was directed against a specifically British movement. By 1949 it was evident that socialist ideology was on the upswing among the intellectual elite worldwide, which may account for the resignation, and even self-pity, that one occasionally glimpses in the article. But at its conclusion one can also begin to see the outline of a program: "What we lack is a liberal Utopia, a program which seems neither a mere defense of things as they are nor a diluted kind of socialism, but truly liberal radicalism. . . ." <sup>123</sup> A decade later he provided his first comprehensive statement of the principles underlying a liberal Utopia in *The Constitution of Liberty*.<sup>124</sup>

The volume concludes with an Appendix in which are gathered a number of Hayek's book reviews from this period, wherein one may see some of the books that Hayek was reading at the time and how his reactions to them helped shape both his critical and positive writings.

## 6. Conclusion

This introduction is being written in 1995, only six years after the collapse of Communist regimes in the Soviet Union and Eastern Europe. As might be expected, most advocates of socialism, particularly those who had favoured extensive central planning, have been chastened by recent events. Such regimes continue, of course, to persist: Totalitarians rarely go gently into the night. But few intellectuals now seem prepared to defend anything resembling Soviet-style central planning.

Yet at the same time there has been a renewal of interest in market socialism. Ironically, the failures of the central-planning model have given advocates of market socialism the opportunity for a renewed claim on the

<sup>121</sup>On the choice of the title, Hayek remarked to Polanyi: "What appeals to me most in that title is that it would to some extent take the wind out of the sails of the socialists, who so far seem to have had all the advantage of the names which appeal to the man of goodwill." Hayek to Polanyi, letter of February 4, 1940, the Polanyi Archives, University of Chicago Library.

<sup>122</sup>F. A. Hayek, "The Intellectuals and Socialism", *University of Chicago Law Review*, volume 16, Spring 1949, pp. 417–433; reprinted in Hayek, *Studies in Philosophy, Politics and Economics* (Chicago: University of Chicago Press, 1967), pp. 178–194, which appears as chapter 11, this volume. Presumably Hayek would not share in the tiresome periodic outpouring of despair over 'the disappearance of the intellectual' from American public culture.

<sup>123</sup>*Ibid.*, p. 237, this volume.

<sup>124</sup>F. A. Hayek, *The Constitution of Liberty*, op. cit.



attention of the intelligentsia. As the socialist John Roemer succinctly states, "Clearly the Soviet model of socialist society is dead, but that does not mean that the other, untried forms of socialism should be buried along with it. This essay is a defense of an alternative socialism, market socialism."<sup>125</sup> Two recent collections of articles contain a variety of proposed market socialist alternatives.<sup>126</sup>

This development may seem incredible to those who know the history of the socialist calculation debates or, more fundamentally, to those who have followed the fortunes of various socialist 'experiments' in the twentieth century. It is essential for advocates of the market system to understand why socialist hopes for a New Jerusalem are so difficult to extinguish. There are three reasons for the persistence of such visions, and all of them were well understood by Hayek.

1) Dreams for a socialist utopia tap two deep and basic human impulses. The first is the quest for "social justice", for a society that is better, perhaps more egalitarian but certainly less unfair, than the one in which one lives. The second is the hope, and in more optimistic (or arrogant) times the expectation, that with reason, planning, and adequate forethought, such a society can actually be constructed. To possess these impulses, the desire for a better society and the willingness to try to construct one, is part of what it means to be human. Hayek knew this, which is why despite his strong disagreements with them, he never questioned the motivation of his socialist opponents.<sup>127</sup>

But Hayek also knew of the dangers of such hopes. He understood, in the first instance, that many human actions have beneficial though unintended consequences, and that through them a complex web of social institutions had emerged which served mankind remarkably well. He also understood that attempts to reconstruct society anew were virtually destined to fail. Since human comprehension of the functions of existing institutional structures is in the nature of things severely limited, changes in the structures could easily produce unintended adverse consequences. In particular, changes that failed to understand, as economists do, the functions performed by market institutions were bound to have disas-

trous consequences, yet these were the very institutions that socialists seemed most intent on altering.

Because it drew on many disciplines, Hayek's message was not an easy one to grasp. And since it emphasized the limits of our capacity to change the world, neither was it an easy one for intellectuals or reformers to accept, particularly in the age in which he was writing, which was the heyday of positivism. We live today in a post-positivist world, one which has witnessed firsthand the unintended consequences of the engineering mentality, so perhaps there is reason to hope that Hayek's arguments may finally be allowed a fair hearing. In his last book, Hayek offered this final observation:

It is a betrayal of concerns for others, then, to theorize about 'the just society' without carefully considering the economic consequences of implementing such views. Yet, after seventy years of experience with socialism, it is safe to say that most intellectuals outside the areas—Eastern Europe and the Third World—where socialism has been tried remain content to brush aside what lessons might lie in economics, unwilling to wonder whether there might not be a *reason* why socialism, as often as it is attempted, never seems to work out as its intellectual leaders *intended*.<sup>128</sup>

2) A second problem is that there are as many variants of socialism as there are blueprints for socialist utopias. This was a problem that both Mises and Hayek faced. Each time they attempted to show the flaws in one plan, another was proposed in its place. In the end the Austrians proposed general arguments against socialism, a strategy which under the circumstances made good sense, but which has its own shortcomings. Even general arguments may not apply to all conceivable socialist systems. But even more important, because general arguments do not address the specifics of particular plans, they can be ignored by socialist opponents who will insist that their own specific blueprints have not been adequately addressed.<sup>129</sup> The plethora of plans also explains how social-

<sup>125</sup>John Roemer, *A Future for Socialism* (Cambridge: Harvard University Press, 1994), p. 1.

<sup>126</sup>Pranab Bardhan and John Roemer, eds, *Market Socialism* (New York and Oxford: Oxford University Press, 1993), and Frank Roosevelt and David Belkin, eds, *Why Market Socialism? Voices from Dissent* (Armonk, N. Y., and London: M. E. Sharpe, 1994). Unfortunately there is not space here for a discussion of the new literature on market socialism and the economics of information, and their relationship to the earlier writings of Hayek and others.

<sup>127</sup>Hayek accordingly dismisses Schumpeter's cynical charge that it is 'politeness' that accounts for his failure to attack his opponents' motivations. See p. 227, this volume.

<sup>128</sup>F. A. Hayek, *The Fatal Conceit: The Errors of Socialism*, ed. W. W. Bartley III, which is vol. I (1988) of *The Collected Works of F. A. Hayek*, op. cit., p. 85, emphasis in the original.

<sup>129</sup>Thus Evan Durbin, in his "Professor Hayek on Economic Planning and Political Liberty", *Economic Journal*, volume 55, December 1945, questioned Hayek's claim that socialism requires that planners impose a single set of values on the rest of society. Durbin argued that Hayek's criticism did not count as an argument against market socialism, under which production plans for private goods are supposed to reflect consumers' diverse preferences. In a footnote in *The Road to Serfdom*, op. cit., p. 40, Hayek had noted that his criticism of 'competitive socialism' could be found elsewhere, a point that Durbin conveniently ignored.

ists can continue to keep their hopes for a socialist utopia alive, even in the face of overwhelming countervailing evidence. Every failure convinces the committed socialist not of a flaw in socialism, but that the wrong blueprint has been used.

3) There is a final reason, a profound one, why dreams for a socialist utopia may never die. Hayek's case against socialism makes sense; it is reasonable, as is his case for viewing the market system as a mechanism for the discovery, creation, and coordination of knowledge. But these cases are not susceptible to any ultimate empirical test; there are no crucial experiments; ultimately his claims are not provable. Hayek recognizes this in his essay "Competition as a Discovery Procedure".

The necessary consequence of the reason why we use competition is that, *in those cases in which it is interesting*, the validity of the theory can never be proved empirically. We can test it on conceptual models, and we might conceivably test it in artificially created real situations, where the facts which competition is intended to discover are already known to the observer. . . . If we do not know the facts we hope to discover by means of competition, we can never ascertain how effective it has been in discovering those facts that might be discovered. . . . The peculiarity of competition—which it has in common with the scientific method—is that its performance cannot be tested in particular instances where it is significant, but is shown only by the fact that the market will prevail in comparison with any alternative arrangements.<sup>130</sup>

Because of obstacles of this sort, Hayek's arguments presumably will make little headway with the committed socialist. But perhaps they can serve as a counterweight to the perennial socialist vision of a just society, a vision the implementation of which has been the source of much human suffering. Hayek's arguments should also help to convince those who have yet to make up their minds, and so may keep good-hearted people from repeating, always in the name of human decency, some of the twentieth century's most terrible mistakes.

Bruce Caldwell

This nicely illustrates the difficulty of formulating an effective critique of the many-headed Hydra.

<sup>130</sup>F. A. Hayek, "Competition as a Discovery Procedure", op. cit., p. 180, emphasis in the original.

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## MARKET SOCIALISM AND THE SOCIALIST CALCULATION DEBATE

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