



National Library
of Canada

Bibliothèque nationale
du Canada

Canadian Theses Service

Service des thèses canadiennes

Ottawa, Canada
K1A 0N4

NOTICE

The quality of this microform is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Reproduction in full or in part of this microform is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30, and subsequent amendments.

AVIS

La qualité de cette microforme dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

La reproduction, même partielle, de cette microforme est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30, et ses amendements subséquents.

"THE ECONOMIST AS PHILOSOPHER"

**FRANK H. KNIGHT AND AMERICAN SOCIAL SCIENCE
DURING THE TWENTIES AND EARLY THIRTIES**

BY

ROSS B. EMMETT

**A DISSERTATION
PRESENTED TO THE UNIVERSITY OF MANITOBA
IN COMPLETE FULFILMENT OF THE
DISSERTATION REQUIREMENT FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN
ECONOMICS**

ST. JOHN'S COLLEGE

WINNIPEG, MANITOBA

NOVEMBER 15, 1990



National Library
of Canada

Bibliothèque nationale
du Canada

Canadian Theses Service Service des thèses canadiennes

Ottawa, Canada
K1A 0N4

The author has granted an irrevocable non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of his/her thesis by any means and in any form or format, making this thesis available to interested persons.

L'auteur a accordé une licence irrévocable et non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de sa thèse de quelque manière et sous quelque forme que ce soit pour mettre des exemplaires de cette thèse à la disposition des personnes intéressées.

The author retains ownership of the copyright in his/her thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without his/her permission.

L'auteur conserve la propriété du droit d'auteur qui protège sa thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

ISBN 0-315-71948-6

Canada

THE UNIVERSITY OF MANITOBA

FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a Ph.D. thesis entitled:

"THE ECONOMIST AS PHILOSOPHER" FRANK H. KNIGHT AND AMERICAN SOCIAL SCIENCE DURING THE TWENTIES AND EARLY THIRTIES

Submitted by: **ROSS B. EMMETT**

in partial fulfilment of the requirements for the Ph.D. Degree

A. M. J. Wauers
.....
Warren J. Samuels
.....
John R. ...
.....
.....

Warren J. Samuels
.....
Dr. Warren J. Samuels
Professor of Economics
Michigan State University
East Lansing, Michigan

Date of Oral Examination:....November 15, 1990.....

The Student has satisfactorily completed and passed the Ph.D. Oral Examination.

A. M. J. Wauers
.....
Advisor
Warren J. Samuels
.....
John R. ...
.....
.....

John R. ...
.....
Chair of Ph.D. Oral

(*The signature of the Chair does not necessarily signify that the Chair has read the complete thesis.)

" THE ECONOMIST AS PHILOSOPHER:"
FRANK H. KNIGHT AND AMERICAN SOCIAL SCIENCE DURING THE TWENTIES
AND EARLY THIRTIES

BY

ROSS B. EMMETT

A thesis submitted to the Faculty of Graduate Studies of
the University of Manitoba in partial fulfillment of the requirements
of the degree of

DOCTOR OF PHILOSOPHY

© 1990

Permission has been granted to the LIBRARY OF THE UNIVER-
SITY OF MANITOBA to lend or sell copies of this thesis. to
the NATIONAL LIBRARY OF CANADA to microfilm this
thesis and to lend or sell copies of the film, and UNIVERSITY
MICROFILMS to publish an abstract of this thesis.

The author reserves other publication rights, and neither the
thesis nor extensive extracts from it may be printed or other-
wise reproduced without the author's written permission.

I hereby declare that I am the sole author of this thesis.

I authorize the University of Manitoba to lend this thesis to other institutions or individuals for the purpose of scholarly research.

A handwritten signature in black ink, consisting of the initials 'R.B.' followed by a stylized, elongated surname 'Emmett'.

Ross B. Emmett

I further authorize the University of Manitoba to reproduce this thesis for photocopying or by other means, in total or in part, at the request of other institutions or individuals for the purpose of scholarly research.

A handwritten signature in black ink, identical to the one above, consisting of the initials 'R.B.' followed by a stylized, elongated surname 'Emmett'.

Ross B. Emmett

TABLE OF CONTENTS

PREFACE	v
LIST OF ABBREVIATIONS	xvii
INTRODUCTION: ON FRANK H. KNIGHT, "DISCOURSE STUDIES," AND THE HISTORIOGRAPHY OF ECONOMIC THOUGHT	1
"Absolutism" and Historical Reconstruction	8
"Absolutism" and Rational Reconstruction	15
Chapter	
1. "THE ECONOMIST AS PHILOSOPHER": FRANK KNIGHT'S THERAPEUTIC PHILOSOPHY AND HIS PARADOXICAL RELATION WITH AMERICAN SOCIAL SCIENCE	24
Frank Knight and Chicago: A Sign of the Underlying Paradox	27
Knight's Therapeutic Philosophy	32
The Evolution of Frank Knight's Paradoxical Relation with Naturalistic Social Science	42
2. THERAPEUTIC PHILOSOPHY AND HISTORIOGRAPHY: A SURVEY OF THE LITERATURE ON FRANK KNIGHT'S ECONOMIC PHILOSOPHY	46
The "Mythology of Doctrines" Trap	47
The "Mythology of Coherence" Trap	62
3. THE RE-ORIENTATION OF AMERICAN SOCIAL DISCOURSE IN THE TWENTIES AND EARLY THIRTIES: RELIGION, SOCIAL SCIENCE AND THE CRISIS OF DEMOCRATIC THEORY	77
The Chicago Fight	77

3. THE RE-ORIENTATION OF AMERICAN SOCIAL DISCOURSE (Continued)	
From Individualism to Social Control: The Changing Language of Social Discourse in America	88
Interdependence and Social Control: Social Scientific Discourse in the Twenties	100
The Language of Social Control and the Crisis of Democratic Authority	108
4. RELIGION, SCIENCE, AND SOCIAL PROGRESS THE EMERGENCE OF FRANK KNIGHT'S THERAPEUTIC ORIENTATION	114
Religion, Science, and Philosophy in Knight's Early Education	119
From Religion and Science to Interdependence and Social Science: Knight's Early Participation in the Language of Social Scientific Discourse	132
A Brief Interlude: Philosophy at Cornell	142
5. KNOWLEDGE, UNCERTAINTY, AND ORGANIZATION: THE THERAPEUTIC QUALITY OF <i>RISK</i> , <i>UNCERTAINTY, AND PROFIT</i>	154
The Therapeutic Purpose of <i>Risk</i>	157
"A Theory of Business Profit" and <i>Risk</i>	161
Economic Theory and Its Limitations	170
Uncertainty and the Therapeutic Purpose of <i>Risk</i>	182
The Social Aspects of Uncertainty	193
6. SCIENCE AND VALUE: FRANK KNIGHT AND AMERICAN SOCIAL SCIENCE IN THE TWENTIES	197
Economic Theory and Its Limitations (The Second Time Around)	209
The Economic Problem as a Value Problem	220
The Ethics of Competition	233

7. FRANK KNIGHT, SOCIAL SCIENCE AND THE CRISIS OF DEMOCRATIC AUTHORITY IN THE EARLY THIRTIES . . .	247
Knight and the Crisis of Democratic Authority	254
Therapeutic Philosophy and the Crisis of Democratic Authority	273
 BIBLIOGRAPHIC ESSAY	 276
Introduction	276
The Work of Frank H. Knight	278
Knight's Economics Textbook and <i>The Economic Organization</i>	280
Unpublished Material from the 1920's	281
Knight's Public Lectures from the Early 1930's	285
Pre-1915 Material	288
Works About Frank H. Knight	290
Historiography	292
Social Science and Social Discourse in Early Twentieth-Century America	296
 SOURCES CONSULTED	 302
 TABLE OF CONTENTS	 302
A. PRIMARY SOURCES	303
B. SECONDARY SOURCES	316

PREFACE

A recent book on new movements in literary criticism starts with a quotation from a Renaissance scholar: "I began with the desire to speak with the dead."¹ In my case, I began with the desire to tell a particular dead person (namely, Frank Knight) why he was wrong about a number of fundamental issues regarding the relation between Christianity and democratic capitalism. In the process, however, I learned that conversations with the dead, like those with the living, require one first to listen and seek to understand. My primary task, therefore, has been to learn how to train my ear to listen to the dead.

The historiographic implications of that task are sketched in the introduction and first couple of chapters. Hence, I will not rehearse them here. Instead, I want to explain how training my ear to listen to Knight shifted the focus of my dissertation from Knight's views on religion and economic life to the general concerns of his early work. Although the shift was gradual, it is possible to identify three distinct stages. .

¹Stephen Greenblatt, *Shakespearean Negotiations: The Circulation of Social Energy in Renaissance England* (Berkeley and Los Angeles: University of California Press, 1988), 1; quoted in H. Aram Veenser, "Introduction," in *The New Historicism*, ed. H. Aram Veenser (New York: Routledge, 1989), ix.

When I first began to work on Knight's views on economics and religion, I quickly realized that the problems in most existing treatments of his opposition to religiously-based social reform reflected a lack of attention, on the part of the interpreter, to the categories of Knight's own thought (see chapter 2 for an examination of the problems inherent in this literature). In order to avoid making the same mistake, I began to attempt a reconstruction of the general outline of Knight's thought, on the assumption that an understanding of the general position expressed in his work would later enable me to understand the particulars of his opposition to religion. By the end of the first stage, then, the primary purpose of the dissertation had become the articulation of the structure of Knight's economic philosophy. Knight's writings on economics and religion had begun to take a secondary role.

At the time, I was sure that a patient reading, and re-reading, of all of Knight's work would provide the key that no one else had found to unlock the mystery of Frank Knight. Yet the more I read, and the more I followed lines of thought suggested by others who had tried to do what I was doing, the more paradoxical Knight appeared. Every time I thought I had identified a basic principle of his thought, I found something else in his work that seemed to contradict, or at least constrain, that principle. Convinced that there had to be an underlying coherence to all his work, I inevitably tried to find some deeper, or meta-level, principle that would unify the two (or more) disparate themes. However, as my construction of Knight's economic philosophy became increasingly

complex, it also became further removed from his actual work; I was working in a world of abstract ideas only remotely connected to the issues and debates that Knight himself was concerned with. This was a problem I recognized, but felt unable to solve.

At this point, two things happened. First, Anthony Waterman suggested that I read some more work on historiography and literary theory in order to get a better idea of what I was doing. Secondly, Warren Samuels suggested, although not in these words, that the power of Knight's work arose from the tension he maintained between contradictory themes. Reading the historiographic work of Quentin Skinner, I realized that I had fallen into the trap of presuming a coherence in Knight's work that could not possibly be there: how could Knight, writing over a period of more than 50 years, have written as if he had rigorously followed a pre-established outline?² Listening to Samuels, I decided that perhaps I should not try to reconcile the contradictory themes in Knight, but rather try to understand how he used them.

The second stage, therefore, ended with the attempt to identify the lines of tension between competing themes that characterized Knight's work. Because I had learned from Skinner that one could not always treat the entirety of a past

²Skinner refers to this as the "mythology of coherence" trap. See Quentin Skinner, "Meaning and Understanding in the History of Ideas," in *Meaning and Context: Quentin Skinner and His Critics*, ed. James Tully (Princeton, NJ: Princeton University Press, 1988), 39-41. Chapter 2 discusses the relevance of the mythology of coherence trap to interpretations of Knight's work in greater detail.

thinker's work as a single unit, I also decided to limit the scope of Knight's work that I would consider to what he had written in the early part of his career, during the 1920's and early 1930's (the reasons for concentrating on this period are detailed in chapter 1). Although the latter decision meant that I would focus on the essays by Knight that I considered to be the most stimulating, it also had the ironic result of eliminating most of Knight's published writings on economics and religion from consideration in the dissertation. The latter writings, I decided, could wait for another time.

The transition from what had been to what was to come was not complete however. As I read Knight's early work, and tried to identify the central paradoxes within it, I became increasingly cognizant of the fact that Knight had employed the various contradictory themes for particular purposes which often had little to do with the topic at hand. When I considered this problem further, I recognized that, regardless of the topic he was actually writing about, he wove in and among his comments on that topic remarks that provided the essay with another level of meaning--usually directed at issues that transcended the boundaries of economics, worked against the systemization of knowledge, and encompassed the central concerns of social scientists in his day. Although I knew that several of his essays were directed across disciplinary lines, especially in his writings on economic method, I began to suspect that all of his writing reflected this anti-systematic orientation. While I was trying to understand this anti-systematic side of Knight's work, Dennis Rogers, a friend in the graduate program

in political science, reminded me of Richard Rorty's use of the term "therapeutic" in his description of the work of John Dewey and several others, and suggested that the term might be relevant to Knight as well. After re-reading the relevant sections of Rorty's work,³ I was certain that the term provided a description of the ruminating quality of Knight's work that highlighted the positive features I wished to emphasize as characteristic of his early work, rather than the cynicism that was so often associated with his later work.

My suspicion was confirmed as I set to work to write a few pages about *Risk, Uncertainty, and Profit*, the published version of Knight's doctoral dissertation that was originally written in 1915-16, and revised for publication from 1917-1921. *Risk* pre-dated the material I considered to be the core of Knight's early writing, and so I had planned to say very little about it. Furthermore, I had considered it to be primarily a work on economic theory, which I was interested in only insofar as it revealed something about Knight's economic and social philosophy. Reading *Risk*, however, I found the intertwining of his systematic exposition of economic theory and therapeutic ruminations on the limitations of economic theory (and the market) so complex and stimulating that I simply had to extend my treatment of the book--it exhibited exactly the kind of constructive application of Knight's paradoxical mindset that I wanted to show to be characteristic of his writing during the Twenties.

³Especially Richard Rorty, *Philosophy and the Mirror of Nature* (Princeton, NJ: Princeton University Press, 1979), 357-94.

The third stage began, therefore, with my effort to understand the central debates of American social-scientific discourse during the early twentieth century, in order to show how Knight employed his ideas as a part of his participation in those debates. Alongside my collection of Knight manuscripts, I now piled books on the debates within sociology, political science, and philosophy during the early twentieth century.

Three things in this literature attracted my attention. First, I was surprised to find that Knight shared a lot more with other social scientists of his era than I had previously thought. Groomed by the standard interpretations of his methodological writings to think that Knight was an opponent of all things "scientific" in social inquiry, I was surprised to realize the extent to which, at least in his early career, he shared the goals and aspirations, and spoke the language, of the scientific naturalists he was said to have opposed. I was pleased, however, when I recognized that Knight's participation in scientific naturalism reinforced my use of the term "therapeutic" as a description of his thinking, because my use of the term implies, in part, that he worked from within the dominant discourse of his time. I began to think of him, therefore, as an internal critic of naturalism in the social sciences, whose ruminations were aimed at unsettling or stretching the naturalistic tradition to prevent it from becoming *too* "scientific" (in several senses of the word), rather than as an advocate of a different method of social inquiry.

The second thing that attracted my attention in the literature on the social sciences in the 1920's was the dichotomy between the contemporary social

scientists' belief that they were starting something new and the historians' assumption that they were simply continuing something that had begun in the 1890's and would reach fruition in the 1930's. Often, in fact, the historians' seemed to view 1920 as the end of one important era in American intellectual history (1920 is the terminal date of many studies), and the 1930's as the beginning of a new important era (I suppose I should say "new deal"). The 1920's appeared as a moment apart, a self-contained unit of time in which America caught its breath. The historians seemed to agree, therefore, with Paul Samuelson, who once said that "for an economic theorist, the last half of the nineteenth century was a bad time to be born," for all the great theoretical work was done either before 1910 or after 1935 (notice how these dates almost exactly bracket the period of Knight's work that I was interested in!).⁴ However, my reading of social science in the 1920's suggested that the common assumption about the 1920's needed revision.

One of the ways it needed revision emerged from my third observation regarding the literature on social science in the early twentieth century; namely, that the vocabulary of American social scientific discourse was shaped, even beyond the end of the nineteenth century, by the intellectual and rhetorical heritage of American Protestantism in ways that have generally been

⁴Paul A. Samuelson, "Economics in a Golden Age: A Personal Memoir," in *The Twentieth-Century Sciences: Studies in the Biography of Ideas*, ed. Gerald Holton (New York: W.W. Norton, 1972), 160.

unacknowledged. Historians of economics commonly assume that religion and economics parted company during the discipline's professionalization in the last two decades of the nineteenth century: as J.M. Keynes once remarked, these years marked the end of an epoch in "which Christian dogma fell away from the serious philosophical world of England, or at any rate of Cambridge."⁵ Whatever may have happened at Cambridge, it became increasingly clear to me that, in America, at least, social discourse, including that of the social sciences, continued to be constrained by the vestiges of certain Protestant traditions until well into the 1920's. In fact, I came to think of the Twenties as the period when the language of social discourse in the United States was fundamentally re-oriented: it was between the end of World War I and the Great Depression that "Christian dogma" finally fell away and the language of scientific control rose to take its place.

The recognition of the critical nature of the 1920's in the re-orientation of the languages of social discourse also enabled me to understand more fully the nature of Knight's work during that decade. Like the other American social scientists with whom he conversed, Knight was still pre-occupied with "the dilemmas and contradictions in the relationship between God, the state, and civil

⁵J.M. Keynes, *The Collected Writings of John Maynard Keynes*, vol. 10, *Essays in Biography*, eds. D. Moggridge and E. Johnson (London: Macmillan, 1972), 168; quoted in A.M.C. Waterman, "Economists on the Relation Between Political Economy and Christian Theology: A Preliminary Survey," *Int. J. Soc. Econ.* 14 (1987): 50.

society."⁶ This pre-occupation affected the questions and problems toward which he directed his attention during the period I was considering.

Ironically, then, the final stage of my effort to train my ear to listen to Frank Knight returned to the theme with which I had begun--religion and economics. However, the focus of my concern was now not Knight's writings on religion and economic reform, but rather his participation in a world of discourse in which the language of religion was slipping away and the language of science was coming to hold sway. What was being lost? What was gained? Could the liberal democratic values which Americans had always held dear be translated effectively from one language to the other? And what new challenges would the language of scientific control present? These are the questions to which Knight returned again and again during the Twenties and early Thirties.

* * * * *

Because the gestation period of this dissertation is numbered in years rather than months, many people have either read or heard parts of it during its various stages. Among those who read part of my work, I would particularly like to thank James Buchanan, A.W. Coats, Dan Hammond, Sheryl Kasper, and Pat Raines for their helpful comments. Their observations and disagreements enabled

⁶Arthur J. Vidich and Stanford M. Lyman, *American Sociology: Worldly Rejections of Religion and Their Directions* (New Haven: Yale University Press, 1985), 281.

me to sharpen my arguments and avoid some obvious, and some not so obvious, blunders.

Early drafts of portions of the dissertation, or material related to it, were presented at a number of different meetings. An early draft of chapter 5 (combining with it material from the introduction and several other chapters) was presented at the 1989 annual meeting of the History of Economics Society. Some of the material now contained in chapters 6 and 7 was originally a part of a paper entitled "Frank H. Knight and the Conflict of Values in Economic Life," which was presented at the 1988 annual meetings of the Association for Social Economics and will be published in a forthcoming issue of Warren Samuels' research annual *Research in the History of Economic Thought and Methodology*.

Drafts of my early attempts at interpreting Knight were tried out on a number of audiences at the University of Manitoba. An early prospectus of the dissertation, entitled "Frank H. Knight on the Nature, Method and Scope of Economics," was presented to a University of Manitoba Department of Economics seminar in November 1987. I presented "Is Positivism the Enemy of Liberal Democracy?: Frank Knight on Social Science and Democratic Action" at a "Philosophical Friday" in the University of Manitoba Philosophy department in January 1988. And the Theological Discussion Group at St. John's College spent one evening in the spring of 1988 discussing Knight's views on religion and democratic society.

The comments of all those who read portions of the dissertation or attended my presentations were helpful. Nevertheless, none of the them would entirely agree with the final product, and the usual caveat regarding authorial responsibility is no less appropriate in my case than in any other.

Several others contributed to the dissertation by providing me with biographical and bibliographical material. Sheryl Kasper was able to obtain a copy of Knight's master's thesis from the University of Tennessee for me. Professor Gerald Nordquist of the University of Iowa provided me with some timely information about Knight's tenure at that University and copies of the articles Knight wrote for the University's *Journal of Business*. Dan Hammond provided some new material that emerged out of his research on Milton Friedman. Richard Popp, Andrew Bergerson, and a number of unknown assistants at the University of Chicago Library patiently kept up with my stream of requests for material contained in the Frank H. Knight Papers. And Nancy Bresslar kindly provided me with copies of the Knight-Viner correspondence from the Jacob Viner Papers, held in the Statecraft Collection at Princeton University.

Even with all this help, my dissertation could not have been completed without the constant encouragement and assistance of several others. Anthony Waterman, and his wife Margaret, deserve mention here again. They have opened their lives, and at times even their home, to my family. Anthony, Derek Hum, Jim Dean and Henry Rempel went out of their way to ensure the provision of sufficient financial resources for our growing family needs. A number of other

scholars interested in Knight helped me to continue struggling to finish by encouraging me that the effort to understand Knight would be worthwhile: I think particularly of Warren Samuels, Bob Coats, Mark Casson, Don Patinkin, and Dan Hammond. Through the granting of Research and Visiting Fellowships for five years, St. John's College provided me with an office, congenial colleagues, the opportunity for a daily routine of spiritual and intellectual exercise, and access to the college's Macintosh and Laserwriter. When I made the transition to Camrose Lutheran University College, both Tim Parker and the University College graciously loaned me computers for extended periods of time, enabling me to complete the dissertation. Finally, the spiritual and intellectual companionship I needed to survive the last several years has come from Dave Steenburg, Ranall Ingalls, Tim Anderson, Larry Hurtado, Dennis Rogers, Richard Vaudry, Roger Epp, and, most especially, my wife Meg, to whom I owe far more than can ever be adequately expressed in words here.

The dedication expresses an appreciation of a different sort. My parents always encouraged me to pursue a Ph.D. and supported us in numerous ways during my graduate studies. Now their long wait is over.

LIST OF ABBREVIATIONS

The abbreviations used to describe unpublished materials are listed below. When unpublished material from the Frank H. Knight Papers is cited, the abbreviated description is followed by the designation FHK, a box (B) and folder (F) number, and either the relevant page numbers or an indication of the total number of pages in the manuscript (e.g., either Frank H. Knight, "Love and Force," TMs, n.d., FHK B21 F16-18, 5; or Frank H. Knight, "Love and Force," TMs, n.d., FHK B21 F16-18: 33 p.).

ALS	Autograph Letter Signed	A signed letter, written in the hand of the author
AMs	Autograph Manuscript	A nonlegal paper written in the hand of the author
AN	Autograph note	A fragment (usually not more than one page) which is written in the hand of the author
TL	Typewritten Letter	A mechanically produced letter, with no signature
TLS	Typewritten Letter Signed	A mechanically produced letter, signed by the author
TMs	Typewritten Manuscript	A typed manuscript (see AMs)
TN	Typewritten note	A typed fragment

For Mom and Dad

Knight is the economist as philosopher, not the economist as scientist.

James M. Buchanan, "Frank H. Knight"

I think there is something wrong with a fellow who doesn't believe it's worthwhile trying to understand the true and the good and the beautiful, but there is even more wrong with him if he thinks he knows what they are.

*Frank H. Knight, quoted in Warner Wick,
"Frank Knight, Philosopher at Large"*

INTRODUCTION

ON FRANK H. KNIGHT, "DISCOURSE STUDIES," AND THE HISTORIOGRAPHY OF ECONOMIC THOUGHT

You cannot find out what a man means by simply studying his spoken or written statements, even though he has spoken or written with perfect command of language and perfectly truthful intention. In order to find out his meaning you must also know what the question was . . . to which the thing he has said or written was meant as an answer.

*R.G. Collingwood, *An Autobiography**

The chapters which follow provide a *historical* reconstruction of Frank Hyneman Knight's work on economics and philosophy up until the mid-1930's. The addition of the adjective "historical," and my emphasis upon it, indicates that my primary purpose is to reconstruct Knight's early work in such a way as to recover its *historical identity*, rather than to assess his contribution to modern economics or to reconstruct his work in such a way as to provide it with a contemporary identity.¹ Another way to express my central concern is to say that

¹The term 'historical identity' comes from John Dunn, "The Identity of the History of Ideas," in *Philosophy, Politics and Society*, 4th series, ed. Peter Laslett, W.G. Runciman, and Quentin Skinner (Oxford: Basil Blackwell, 1972), 158-73. Reconstructions which provide a contemporary identity for the meaning of a text are known as "rational reconstructions." See Richard Rorty, "The Historiography of Philosophy: Four Genres," in *Philosophy in History: Essays in the Historiography of Philosophy*, ed. Richard Rorty, J.B. Schneewind, and Quentin Skinner, Ideas in Context (Cambridge: Cambridge University Press, 1984), 49-75.

I seek to understand both *what* Knight said about the relation between economic and philosophical issues during the early part of his career and *why* he said it. Such a task necessitates not only a careful reading of his texts, but also a consideration of the relation between Knight's intentions and the audience which he was addressing. My interpretation is guided, therefore, by Quentin Skinner's maxim for historical reconstruction: "no agent can eventually be said to have meant or done something which he could never be brought to accept as a correct description of what he had meant or done."²

In adopting this concern for understanding the historical identity of Frank Knight's work, I am following the lead of the "Cambridge School" of historiography, often identified with the work of Skinner, J.G.A. Pocock, and John Dunn, all of whom are historians of political thought.³ At the heart of the Cambridge School's approach to intellectual history is a cross-fertilization of ideas from the historiography of R.G. Collingwood and the philosophy of language of Ludwig Wittgenstein. From Collingwood, the Cambridge School learned that writing history is a process of *understanding*, which comes only when one learns to

²Quentin Skinner, "Meaning and Understanding in the History of Ideas," in *Meaning & Context: Quentin Skinner and his Critics*, ed. James Tully (Princeton, NJ: Princeton University Press, 1988), 48.

³A brief bibliographic introduction to the Cambridge School's work can be found in the bibliographic essay.

ask the same questions as the past thinker asked.⁴ From Wittgenstein, the Cambridge School learned that meaning was language-bound;⁵ hence, it could only be understood by uncovering the "language-game," or what I will call the "discursive context" (see chapter 1), within which that meaning was played out. Putting the two together, the Cambridge School recognized that understanding the meaning of a text required that we learn how the discursive context of the author shaped both the questions asked and the answers given.

I am also, in part, following the lead of Frank Knight himself. In his work on the philosophy of the social sciences, Knight often argued, *pace* behaviourists and other scientific naturalists, that human conduct could only be understood in terms of the meanings which individuals give to events and objects. In order to understand a person's action, Knight argued, one must understand the meaning the person gives to the action, which will only be possible if the person is approached as an individual, with a unique set of meanings shaped by the circumstances of his personal history.

Human beings are undoubtedly natural objects, . . . and as such they seem to be subject to all the laws and principles which science finds to hold for other objects under the same conditions. . . . But in addition some other principles seem to apply which do not hold good elsewhere. Men are *more* than mechanical objects which release energy in uniform ways in response to external movements

⁴See R.G. Collingwood, *The Idea of History* (Oxford: Clarendon Press, 1946); and idem, *An Autobiography* (Oxford: Oxford University Press, 1939).

⁵See Ludwig Wittgenstein, *Philosophical Investigations*, trans. G.E.M. Anscombe (Oxford: Basil Blackwell, 1968).

of matter. They *initiate* changes, out of all discoverable uniformity of relation to external changes of any kind; and when they do respond to external changes, the nature of the response has relatively little uniform relation to the physical nature of the stimulus but is chiefly a matter of what we call the *meaning* of the stimulus-event which puts the whole occurrence, as the philosophers say, in a different world of discourse. *These meanings and the responses to them depend on the history, which is a thing made up of meanings, of social groups and the particular life-history of the individual in the group* [italics added]; and they are very largely free from "dependence" on anything which research has yet disclosed. As far as can be judged in the present state of knowledge (in the speaker's opinion) the problem of understanding and explaining these phenomena must be approached in a quite different way from that of understanding and explaining physical nature.⁶

However, I am only partially following Knight's lead because, in his own reconstructions of past economic thought, he chose a different historiographic vantage point--one that I will identify below as "absolutist" because it assumes the historiographic priority of the present state of economic knowledge. Examples of this approach can be found in many of his articles and book reviews, as well as his lecture notes for the history of economics courses that he taught almost every year of his academic career. Perhaps the most representative statement comes from his longest treatment of classical economic theory:

On the assumption that the primary interest in the "ancients" in such a field as economics is to learn from their mistakes, the principal

⁶Frank H. Knight, "Fact and Interpretation in Economics," *Special Lectures on Economics* (U.S. Department of Agriculture, Graduate School) (February-March 1930), 7 (italics in original except where noted). Page references are to the draft of the essay held in FHK B14 F3.

theme of this discussion will be the contrast between the "classical" system and "correct" views.⁷

In the article, Knight then went on to detail the seven deadly "aberrations" in classical economic thought. And in a review of a book on the work of the classical economist Nassau Senior, he remarked,

With all due reverence for the great dead, it is surely time for criticism in a scientific spirit to begin a serious effort to separate the trash from the grain in economics and to give both descriptive labels.⁸

As these examples make clear, Knight never sought to understand the classical economists (in Collingwood's sense of the word "understand") in his own work on the history of economic thought, except in so far as he needed to in order to show why modern theory was better.

* * * * *

The questions about Frank Knight which emerge from the historiographic perspective I have adopted are identified in Chapter 1, where a guide to the

⁷Frank H. Knight, "The Ricardian Theory of Production and Distribution," Parts I-II, *Cdn. J. Econ. & Polit. Sci.* 1 (February 1935); reprinted in *History & Method*, 37 (page reference is to reprinted version). For summaries of the approach he adopted in his lectures, see Richard Howey, "Frank Hyneman Knight and the History of Economic Thought," in *Research in the History of Economic Thought and Methodology*, vol. 1, *The Craft of the Historian of Economic Thought*, ed. Warren J. Samuels (Greenwich, CT: JAI Press, 1983), 172-74; and Don Patinkin, "Frank Knight as Teacher," in *Essays On and In the Chicago Tradition* (Durham, NC: Duke University Press, 1981), 34-35.

⁸Frank H. Knight, review of *Nassau Senior And Classical Economics*, by Marian Bowley, *J. Polit. Econ.* 47 (February 1939): 134.

dissertation's organization is also provided. Before turning to those tasks, however, I want to explain more fully the purpose I have set for myself by addressing a response which economists commonly make to those who seek to understand the work of a past thinker in the thinker's own terms. For lack of a better expression, that response can be identified as the charge of being "unscientific"--i.e., the charge that my reconstruction is of little relevance to the economics discipline as a *science*, because I do not seek assess the scientific contribution that Knight made to economics.

The charge of being unscientific is usually issued by historians of economics associated with the "absolutist" tradition of economic historiography.⁹ Primarily concerned with the progress of economic science, absolutists advocate a historiography oriented toward "studying the past from the standpoint of the present state of economic science."¹⁰ Because "criticism implies standards of judgment, and [the absolutist's] standards are those of modern economic theory,"¹¹ the absolutist's task is to reconstruct the work of past economists in such a way as to lay bare the internal logic of their theoretical systems and the

⁹The term "absolutist" is introduced to describe this tradition in Mark Blaug, *Economic Theory in Retrospect*, 4th ed. (Cambridge: Cambridge University Press, 1985), 2-8. See also Alfred F. Chalk, "Relativist and Absolutist Approaches to the History of Economic Theory," *Southwestern Soc. Sci. Quart.* 48 (June 1967): 5-12.

¹⁰Paul A. Samuelson, "Out of the Closet: A Program for the Whig History of Economic Science," *History of Economics Society Bulletin* 9 (Fall 1987): 52.

¹¹Mark Blaug, *Economic Theory in Retrospect*, 1.

conclusions which they drew, in order to apply the contemporary standards of logical coherence and empirical adequacy (or falsifiability) to that system. Only this type of "scientific exegesis," the absolutist argues, will allow past economists to be assessed on the same footing as contemporary practitioners, thereby enabling us to pinpoint their errors and applaud their contributions.¹² And for that "scientific" task, knowledge of the lives of past economists is as unnecessary as knowledge of the lives of current economists is for assessing their work: "When we are told that we must study a man's life to understand what he really meant," George Stigler tells us, "we are being invited to abandon science."¹³

My initial response to the "absolutist" charge is quite simple: so be it. I am more interested in understanding Knight in the context of the questions he asked and the debates in which he participated, than I am in assessing the value of his theories for the growth of economic science. Hence, I am not particularly bothered by their charge. The absolutist writes "economic theory in retrospect"; I am writing intellectual history. Or, to say the same thing in another way: the absolutist writes as a contemporary theorist, in order to teach modern theory; I write as a historian, in order to explain what questions one individual asked

¹²George J. Stigler, "Textual Exegesis as a Scientific Problem," in *The Economist as Preacher and Other Essays* (Chicago: University of Chicago Press, 1982), 68-71.

¹³George J. Stigler, "The Scientific Uses of Scientific Biography, with Special Reference to J.S. Mill," in *James and John Stuart Mill: Papers of the Centenary Conference*, ed. John M. Robson and Michael Laine (Toronto: University of Toronto Press, 1976), 60.

during a particular period of time and why he asked them. Because we have different purposes, we naturally have different methods. The theorist's work may be of assistance to the historian (as a tool in the reconstruction of the logic of an argument, for example), and the historian's work may be of interest to the theorist (for heuristic reasons, if none other), but ultimately they are two different types of inquiry. "Economic theory in retrospect" is not the same thing as the history of economic thought.

"Absolutism" and Historical Reconstruction

My initial response, however, covers over a number of things that ought to be said about both the differences and similarities between our respective questions and procedures. The absolutist method described as "scientific exegesis" by George Stigler actually blurs the distinction between two types of historiographic questions that absolutists ask. The first question is, what did a particular thinker of the past contribute to economic theory; the second question is, can we reconstruct the work of the past thinker in terms of our modern understanding of economics (can we put the past thinker in "modern dress," so to speak)? As I will show below, the blurring of the distinction between these two questions has heightened the absolutists' sense of the difference between their method and that involved in historical reconstruction, and has prevented absolutists from perceiving the similarity between some of their questions and the questions asked within the context of historical reconstruction. In order to

explore the differences and similarities between the absolutist and the historian more critically, I will compare the various questions that are asked in the context of the interpretation of Knight's distinction between risk and uncertainty, introduced in his classic treatise *Risk, Uncertainty, and Profit*.¹⁴

Consider, then, the relations among the following three questions about Knight's treatment of risk and uncertainty:

1. What did Knight mean by risk and uncertainty, and why did he use the terms?
2. What did Knight's distinction between risk and uncertainty contribute to modern economics?
3. Can Knight's distinction between risk and uncertainty be reconstructed in a way which avoids the criticisms brought against it by modern decision theory?

The first question is my own (for my answer see chapter 5); the latter two are examples of questions often posed within the absolutist tradition. In order to answer the first question, one needs to know two things. The first is the range of meanings for the terms "risk" and "uncertainty" that Knight's discursive context would have enabled him to draw upon. Keeping in mind the maxim from Skinner quoted earlier, characterizations of Knight's distinction that draw upon meanings that Knight in principle could not have had at his disposal (e.g., those drawing

¹⁴Frank H. Knight, *Risk, Uncertainty, and Profit*, Hart, Schaffner, and Marx Prize Essays, no. 31 (Boston and New York: Houghton Mifflin Co., 1921; reprint (with a new "Preface to the Re-Issue"), Reprints of Scarce Tracts in Economic and Political Science, no. 16, London School of Economics and Political Science, 1933; reprint (with a foreword by George J. Stigler), Chicago: University of Chicago Press, 1971; Midway Reprint, 1985).

upon Bayesian theory or modern decision theory) must be ruled out. One must try to approach Knight's treatment of probability theory as if one were in fact living and thinking in the second decade of the twentieth century, not the last decade. The second thing one needs to know is the role that Knight intended his distinction to play. Here I am speaking not only of the important position he gave it in his treatment of the theory of profit, but also of the part he intended it to play in his response to the central issues of his discursive context. In fact, recognizing the second role will help us to understand the first, because Knight's treatment of economic theory was, as I will show throughout the dissertation, shaped by his participation in the central debates of American social scientific discourse during the Twenties and early Thirties. My examination of the first question, therefore, will involve a study of the discourse of American social science and Knight's participation in it.¹⁵

¹⁵The only other study of Knight's distinction which comes close to the type of reconstruction offered here is found in a recent paper by Richard N. Langlois and Metin M. Cosgel, "Knight on Risk, Uncertainty, and the Firm: A New Interpretation," presented at the annual meeting of the History of Economics Society, Lexington, VA, June 1990. Although Langlois and Cosgel approach Knight as modern theorists, they successfully balance their own concerns with close attention to what they call the "categories" of Knight's own thought. The only criticism I can make of their reconstruction is to point out that they focus exclusively on what Knight said, and not also on why he said it. By failing to examine how Knight employed the distinction in response to the central issues of social scientific discourse at the time he wrote *Risk*, Langlois and Cosgel miss several important aspects of his use of the distinction in economic theory. However, for the most part, their reconstruction is an excellent one, and can be read as a complement to my own.

* * * * *

At first glance, one might think that the second question asked above requires a prior answer to the first question. Before one can assess Knight's contribution to modern economic theory, does one not first need to know what Knight meant by his distinction between risk and uncertainty, and how he used it to construct a theory of profit? In fact, however, the second question does not require a prior understanding of the historical identity of Knight's distinction between risk and uncertainty, and one will be distracted from answering the second question if one tries to provide such an understanding. What the question does require is knowledge of the evolution of normal discourse among economists since Knight--i.e., the discursive context of Knight's interpreters rather than that of Knight himself.

Unfortunately, the usual response to questions regarding the contribution of some thinker to economics, typified by textbook treatments, ignores the distinction between the first and second questions. The usual textbook response to this type of question is a brief explication of the portions of the author's work traditionally identified as being of some relevance to the question, along with a survey of the various criticisms and improvements other economists have made. In Knight's case, for example, textbooks generally cite his improvements to the

neoclassical theory of the costs of production, including the theory of profit based on the distinction between risk and uncertainty which he articulated in *Risk*.¹⁶

The textbook-style response is misleading, however, because it fails to answer the question it is asking. In order to explain why this is the case, let me ask the following question: what difference would it make for our answer to the question about Knight's contribution to economic theory if a historian showed that what Knight had actually meant to say in *Risk* was significantly different from that which had generally been attributed to him? The answer, of course, is no difference. Knight's contribution to modern theory is not determined by what he was trying to say by saying what he did, but rather, by how he has been *read*. Once his work circulated among economists, its words were no longer his own, but rather belonged to the scholarly community which sought to interpret them. The interpretative community may have applied meanings to his words significantly different than those he intended. Thus, an answer which directly addresses the question about the contribution of Knight's uncertainty-based theory of profit to economic theory will reflect the evolving pattern of discourse among economists more than it reflects what Knight said. *And this is how it should be*. Difficulties will abound if one tries to answer the second question through a reconstruction of the distinction's historical identity. George Stigler was correct when he said,

¹⁶For example, see Blaug's discussion of neoclassical production and distribution theory in *Economic Theory in Retrospect*, 370-497. Blaug provides no independent assessment of Knight's work, but weaves it into his account of Alfred Marshall's work.

The recipients of a scientific message are the people who determine what that message is . . .

. . . [Absolutists] do right if they seek to understand the *scientific* role these men played in the evolution of economic theory: that role was played with the words they wrote, not with the ideas they intended to express.¹⁷

In order to answer the second question, therefore, one has to examine the various meanings that economists have attached to Knight's words, and the roles that his work has been asked to play. For example, if one wants to know what Knight has contributed to the theoretical framework of contemporary economists, one could begin by asking them. If their answer is nothing, then one is faced with the question as to why an author who was considered important by many in the past is no longer relevant. What changes in the discursive context enable us to understand why Knight's distinction between risk and uncertainty is generally considered irrelevant to the problems of modern decision theory?¹⁸ If, on the other hand, they point to a particular aspect of Knight's work then one is faced with the question as to how and why that particular aspect has significance for

¹⁷Stigler, "Scientific Biography," 60-61.

¹⁸Among the various answers that might be given to this follow-up question, one possibility is an explanation of the way in which Knight's work has been corrected, improved upon, and assimilated into the normal discourse of contemporary economics in such a way as to make the content of his contribution completely transparent to the practicing economist. One way to explain the transparency of the contribution of a past economist is by reference to the efficiency of the transference mechanism within the interpretative community. For a discussion of the efficiency argument, see Gary M. Anderson, David M. Levy, and Robert D. Tollison, "The Half-life of Dead Economists," *Cdn. J. Econ.* 22 (February 1988): 174-83.

contemporary discourse. For example, why is it that, despite the general disregard of Knight's distinction, his discussion of the response of rational agents, including firms, to the presence of uncertainty continues to attract attention by economists working on the theory of the firm?¹⁹ The fact that the textbooks have not yet realized that they are asking the wrong questions is reflected in a simple observation: while Knight's name is gradually disappearing from the textbooks on the history of economic thought, citations to his work, and in particular to the latter half of *Risk*, are on the increase.²⁰

There is a striking parallel between the examination required to answer question two and the historical reconstruction carried out in determining the answer to the first question. The only difference between them is the discursive

¹⁹The interest in Knight is represented in the variety of recent commentary on his distinction. See Yoram Barzel, "Knight's 'Moral Hazard' Theory of Organization," *Econ. Inquiry* 25 (January 1987): 117-20; Harold Demsetz, "Managed Coordination: The Theory of the Firm Revisited, With Special Reference to Frank H. Knight's *Risk, Uncertainty, and Profit*," paper presented at the "Frank H. Knight: A Reappraisal of His Intellectual Contributions" Symposium at the University of Chicago, Chicago, 7-9 November 1985; Langlois and Cosgel, "Knight on Risk, Uncertainty, and the Firm"; Tony Lawson, "Probability and Uncertainty in Economic Analysis," *J. Post-Keynesian Econ.* 11 (Fall 1988): 45-46, and 50-51; and Stephen F. LeRoy and Larry D. Singell, Jr., "Knight on Risk and Uncertainty," *J. Polit. Econ.* 95 (April 1987): 394-406.

²⁰A recent textbook which focuses on Knight's generation of scholars mentions his name only once, and that in passing. Roger Backhouse, *A History of Modern Economic Analysis* (Oxford: Basil Blackwell, 1985). However, Knight ranked fourteenth among the economists most frequently cited in economics journals in 1983. Anderson, Levy, and Tollison, "The Half-life of Dead Economists." From 1983 to 1987, 54% of the total citations of Knight's work in social science journals were citations of *Risk* (compiled from a search of the *Social Science Citation Index* for those years).

context with which one is concerned: in order to understand what Knight said, one examines how his discursive context shaped his work; in order to understand how economists have read Knight, one examines how their discursive contexts have shaped their interpretations of his work. Both of these examinations, therefore, are similar types of studies in discourse. Hence, it is appropriate to refer to both examinations as historical reconstructions. However, because they are concerned with uncovering the meaning of Knight's work for different discursive contexts, they can be conducted independently of each other.²¹

"Absolutism" and Rational Reconstruction

The third question asked earlier was whether it was possible to reconstruct Knight's distinction between risk and uncertainty in a way which avoided the criticisms brought against it by modern decision theory. Another way in which the the same question can be posed is: what might Knight have said about risk and

²¹In chapter 2 I will identify accounts which confuse the historiographic issues at stake here with a phrase borrowed from Quentin Skinner--"mythologies of doctrines." (See Skinner, "Meaning and Understanding," 32-36.) Richard Rorty has provided us with another, perhaps more picturesque, term with which to describe the majority of textbooks in the history of economics. He describes most history of philosophy textbooks as "doxography"--hymns of praise to past thinkers which are really not interested in either what the thinker said or the thinker's role in contemporary philosophical discourse. The authors who are mentioned, and the sections of their work that are described, are included merely because convention tells us that they should be included. Rorty, "The Historiography of Philosophy," 61-67. Rorty advises us simply to give up trying to write books entitled *The History of Philosophy/Economics*. I am inclined to agree.

uncertainty if he knew then what we know now about the relation between probability theory and rational choice?

In order to contrast the third question with the first and second questions, where we sought to provide a *historical reconstruction* of either what Knight said and why he said it or how those who have read Knight's work interpreted it (and why!), I will identify it as an example of a *rational reconstruction*.²² Where historical reconstruction seeks to uncover the historical identity of an author (or interpretative community), rational reconstruction seeks to devise a contemporary identity for the author. Or, to put it differently, where a historian writing a historical reconstruction attempts to enter the world of the author in order to understand what the author meant to say by saying what was said, the writer of a rational reconstruction (often a contemporary practitioner of the discipline) attempts to re-educate the past thinker in such a way as to enable the past thinker to enter into our world and talk with us.²³ Because rational reconstruction

²²See *ibid.* for the distinction between historical and rational reconstruction. In practice, rational reconstruction is similar to the "scientific exegesis" of which Stigler wrote in "Textual Exegesis." My use of the term "rational reconstruction" should not be confused with that of Imre Lakatos, who uses it for the identification and assessment of a "scientific research programme" undertaken by a community of scholars. See Imre Lakatos, "History of Science and Its Rational Reconstructions," in *The Methodology of Scientific Research Programmes: Philosophical Papers, vol. 1*, ed. John Worrall and Gregory Currie (Cambridge: Cambridge University Press, 1978), 102-38.

²³It is the notion of re-educating a past thinker that has made rational reconstruction a controversial form of historiography among economists. Those who argue against rational reconstruction do so on the grounds that such reconstructions are too closely related to the perspective of contemporary

places primary emphasis upon our discursive context, rather than that of the author, it is, as I claimed earlier in the introduction, a fundamentally different task from historical reconstruction.

Despite the fact that rational reconstruction and the reconstruction of the historical identity of an author's work are decidedly different tasks, they are similar in one regard; namely, they both share a concern for the author's original text that is not shared by the reconstructive effort required to provide an answer to the second question. The primary "text" for an answer to the second question is the standard account of Knight's distinction between risk and uncertainty provided by a particular interpretative community; a "text" which may have little to do with *Risk*. Historical and rational reconstructions, on the other hand, seek to identify a meaning for the author's original text. Historical reconstructions seek the text's historical identity; rational reconstructions seek to provide its contemporary identity. Thus, although the second and third questions are often assumed to be related, they are, in fact, quite different.

One way to recognize the difference between the historiographic concerns of the second and third questions is to realize that rational reconstruction

economists to capture adequately the meaning of the original author (for an example of this argument, see the objection to Paul Samuelson's canonical classical model raised by Cigdem Kurdas in her "The 'Whig Historian' Adam Smith: Paul Samuelson's Canonical Classical Model," *History of Economics Society Bulletin* 10 (Spring 1988): 13-21). Unfortunately, that argument misses the legitimacy of the distinction drawn here between recovering the historical identity of the author, and providing the author with a contemporary identity.

sometimes seeks to provide Knight's distinction with an identity significantly different from the one conventionally given it by the contemporary interpretative community. An example of this can be found in the recent rational reconstruction of Knight's distinction provided by Truman Bewley. Over the past four years, Bewley has explored the possibility of translating Knight's distinction between risk and uncertainty into the "language" of modern decision theory.²⁴ Traditionally, decision theorists have considered Knight's distinction to be of little or no consequence because the standard interpretation of his treatment of the applicability of the probability calculus to rational choice implied that Knight denied the consistency of choice that is essential to economic theories of rational decision-making.²⁵ Bewley does not challenge the standard interpretation by suggesting that it incorrectly reconstructs what Knight meant to say, but rather provides a reconstruction of what Knight might have said had he approached his

²⁴See Truman Bewley, "Knightian Decision Theory: Part I," Cowles Foundation Discussion Paper, no. 807, November 1986; idem, "Knightian Decision Theory, Part II: Intertemporal Problems," Cowles Foundation Discussion Paper, no. 835, May 1987; idem, "Knightian Decision Theory and Econometric Inference," Cowles Foundation Discussion Paper, no. 868, March 1988; and idem, "Market Innovation and Entrepreneurship: A Knightian View," Cowles Foundation Discussion Paper, no. 905, April 1989.

²⁵For the standard interpretation and its implication for the consistency axiom, see Kenneth Arrow, "Alternative Approaches to the Theory of Choice in Risk-Taking Situations," in *Essays in the Theory of Risk-Bearing* (Amsterdam: New Holland, 1970), 1-43; Karl Henrik Borch, *The Economics of Uncertainty*, Princeton Studies in Mathematical Economics, ed. Oskar Morgenstern, Harold W. Kuhn, and David Gale, no. 2 (Princeton, NJ: Princeton University Press, 1968), 77-87; and Milton Friedman, *Price Theory: A Provisional Text* (Chicago: Aldine, 1976), 282.

topic with the tools of the modern decision theorist (thus, Bewley's work is "Frank Knight in Modern Dress"). The result is a theory of decision-making under uncertainty which would be practically unrecognizable to Frank Knight (Bewley admits that it might be unfair "to apply Frank Knight's name to the theory described in the paper"²⁶). But Bewley is not trying to provide a historical reconstruction, nor is he trying to understand how modern decision theory came to interpret Knight the way it traditionally has. Rather, he is trying to see if Knight's distinction can be given a contemporary identity which will enrich the discourse of contemporary economic theorists:

The experiment presented here should not be seen as an attempt to interpret Knight's work, but rather as an attempt to develop ideas suggested by his work in order to gain economic insights. . . . Knight's work is too informal to permit a precise interpretation. His work is nevertheless very stimulating.²⁷

* * * * *

Before summarizing the historiographic distinctions between the three questions I posed regarding Knight's distinction between risk and uncertainty, I want to illustrate the confusion that can arise by failing to distinguish among them by referring to a recent interpretation of Knight's distinction provided by Stephen LeRoy and Larry Singell.²⁸ LeRoy and Singell take as their reference point the

²⁶Bewley, "Knightian Decision Theory: Part I," 4.

²⁷Bewley, "Market Innovation," 4.

²⁸LeRoy and Singell, "Knight on Risk and Uncertainty."

significant interest that contemporary theorists have shown in Knight's discussion of the role of moral hazard in chapter VIII of *Risk*. They correctly observe that the current interest in Knight's remarks on moral hazard cannot be reconciled with the standard interpretation of Knight's contribution to the theory of the firm. However, despite the historiographic primacy of their concern for the discourse of modern theory, rather than Knight's own discursive context, LeRoy and Singell propose to tell us what Knight really meant by his distinction between risk and uncertainty.

LeRoy and Singell attempt to use the contemporary interest in moral hazard as a key to uncovering what Knight himself meant. Hence, they insist that, for Knight, it is not the applicability of the probability calculus that determines the distinction between risk and uncertainty (as is often assumed), but rather, the existence of insurance markets. However, in order to sustain their interpretation, they explicitly ignore large portions of Knight's own defense of his definition of uncertainty on the grounds that those portions are irrelevant to the concerns of the contemporary theorist. What modern reader of Knight, they ask, does not simply skip over his "extended Austrian-like disquisitions on the foundations of human knowledge and conduct and the like"?²⁹ Such an approach inevitably fails to recover what Knight meant by his distinction because it rules out a large portion of the argument he used to defend it. By doing this, LeRoy and Singell

²⁹*Ibid.*, 402.

reveal their historiographic vantage point--they are not trying to uncover what *Knight* was trying to say by saying what he said, but rather, what *they* can make of what he said. Given the historiographic priority LeRoy and Singell place on the perspective of the contemporary theorist, their work would have been more successful if they had provided a study of contemporary economic discourse which explained why modern theorists refer to Knight's discussion of moral hazard while their predecessors did not and how theorists employ his discussion in their own work (i.e., an answer to question two); or a rational reconstruction of Knight's distinction which told us what Knight would have said had he recognized the difficulties that modern theorists have with his discussions of probability theory (i.e., an answer to question three).³⁰

The confusion engendered by studies such as the one by LeRoy and Singell can be avoided if historians recognize the historiographic relation among the three questions asked earlier. That relation can be summarized in the following manner. Although the second and third questions are generally identified as absolutist, in order to distinguish their primary concerns from the search for the historical identity of Knight's distinction associated with question one, they are different questions, requiring different historiographic methods. While the second question is primarily concerned with uncovering the identity that Knight's

³⁰To be charitable, one could suggest that LeRoy and Singell do provide a rational reconstruction, under the guise of a historical reconstruction--but then, are they not doing Knight a disservice by trying to say that what he would say now is what he did say then?

distinction has been given within a specific (and perhaps not contemporary) interpretative community, the third question is primarily concerned with providing Knight's distinction with an identity for a contemporary interpretative community. In order to answer the second question, the historian historically reconstructs the discourse of an interpretative community. In order to answer question three, the interpreter engages in a rational reconstruction in which some aspects of Knight's work are translated into the "language" of contemporary discourse, and others disappear in the process of re-education. Hence, questions two and three are related in that they are not concerned with recovering the historical identity of Knight's distinction (hence, they could be called "absolutist," except that the second question may address the interpretation of a past thinker's work in a scholarly community other than the present one), questions one and two are related in terms of their method (both employ the method of historical reconstruction) and questions one and three are related in that they are both reconstructions of the meaning of Knight's original text.

* * * * *

All things considered, therefore, the absolutist response to my historical reconstruction of Knight's early work is practically irrelevant, because it boils down to the claim that I have asked the wrong question.³¹ If the charge of being

³¹In a recent article, Mark Blaug admits that the questions which guide historical reconstructions are genuine and makes the same point I have been making throughout the introduction; namely, that historiographic problems arise

unscientific is aimed at my interest in recovering the historical identity of Knight's work, then my initial response stands, and the absolutist will have to convince me that it is either inappropriate for an economist *qua* historian to have such an interest (in which case there can only be "economic theory in retrospect," and never the history of economic thought), or, perhaps, that such a purpose is impossible to fulfill (e.g., by arguing, along with Stigler that authors are irrelevant and the only thing that matters is the discourse of a scholarly community). If the absolutist response, however, is aimed at the method of historical reconstruction, however, my reply would be that insistence upon the method of rational reconstruction will prevent absolutists from understanding how and why their interpretative communities came to interpret Knight in the way that they do, for such an understanding requires a historical reconstruction of the discourse of the contemporary community. In either case, my defense of historical reconstruction rests on the common sense claim that there are a variety of questions that might be asked in the interpretation of texts, and the answers to the various questions will require either different methods of reconstruction or attention to different discursive communities. In the chapters that follow, I will show how paying attention to the relation between Knight and his discursive context will enable us to understand what he said during the 1920's and early 1930's, and why he said it.

when the guiding questions are not suited to the type of reconstruction the historian wishes to provide. Mark Blaug, "On the Historiography of Economics," *J. Hist. Econ. Thought* 12 (Spring 1990): 35.

CHAPTER ONE

"THE ECONOMIST AS PHILOSOPHER"

FRANK KNIGHT'S THERAPEUTIC PHILOSOPHY AND HIS PARADOXICAL RELATION WITH AMERICAN SOCIAL SCIENCE

Raising questions [is] my purpose, not answering them.

*Frank H. Knight, "Sci. Econ. and Current
Polit. Movements" [1934]*

Frank Hyneman Knight (1885 - 1972) emerged from the intellectual backwaters of rural Tennessee in the fall of 1913 to pursue graduate studies in philosophy and political economy at Cornell University. Shortly thereafter, he dropped philosophy (or perhaps it dropped him--see chapter 4) and launched his career as an economic theorist. By 1935, when Knight reached the age of fifty, he had established himself as "the dominant intellectual influence" in the economics department at the University of Chicago--a university which, during that same period of time, had become "the intellectual center of American academic life, especially in the rapidly developing social sciences."¹

¹In Memoriam: Frank H. Knight, 1885-1972," *Amer. Econ. Rev.* 63 (December 1973): 1048; and Edward A. Purcell, Jr., *The Crisis of Democratic Theory: Scientific Naturalism & the Problem of Value* (Lexington: University Press of Kentucky, 1973), 3.

Knight's presence at the University of Chicago is a sign of the paradox which lies at the heart of my reconstruction of his work up to the mid-1930's. When economists today think of Frank Knight and the University of Chicago, they think of Knight's role as the co-founder, with Jacob Viner, of the Chicago School of political economy, which has played an important role in shaping American economic thought from the Thirties to the present. However, my concern here is not with Knight's relation to the Chicago School, but rather with a prior, and more fundamental, relation; that between Knight and the tradition of social science that the University of Chicago in the early twentieth century represented--namely, the search for an objective study of social organization, modelled after the natural sciences, which would enable the realization of America's liberal values within the context of modern society.

Throughout the dissertation, this tradition will be referred to as "scientific naturalism."² The term is appropriate because those within the tradition wanted to approach the study of society as scientists, and believed that the method of the natural sciences provided the best model for doing that. Other terms which might have been used are: empiricism, positivism, objectivism, or scientism. Each of these terms, however, has its limitations. Empiricism is generally reserved for reference to the epistemological theory which scientific naturalists accepted. Because scientific naturalists were concerned not only with the acquisition of

²See *ibid.*

knowledge, but also with its use, empiricism is too narrow a designation. Positivism is unacceptable because of its vagueness. For one thing, the term can be generally applied to almost any theory of social inquiry which seeks primarily to explain what is rather than what ought to be (and even to a few which explicitly focus on the normative--e.g., Comte's positivism). Also, "positivism" has been used so pejoratively in recent years that it is hard to give the term a "positive" image. Furthermore, in the history of economic thought, positivism is generally reserved for the tradition of methodological work which began with T.W. Hutchison's *The Significance and Basic Postulates of Economic Theory*.³ Objectivism is a term which will appear here as a substitute for scientific naturalism, but it is sometimes given a more narrow focus in the literature, referring specifically to the interwar tradition in American social science.⁴ Scientism (or the more cumbersome "scientificism") became one of Frank Knight's favourite terms for his opponents in his later work, and describes well the spirit of the naturalistic program. However, it shares with positivism both a rather vague referent and a set of unfavourable connotations.⁵

³T.W. Hutchison, *The Significance and Basic Postulates of Economic Theory* (London: Macmillan, 1938). See Bruce Caldwell, *Beyond Positivism: Economic Methodology in the Twentieth Century* (London: George Allen & Unwin, 1982).

⁴See Robert C. Bannister, *Sociology and Scientism: The American Quest for Objectivity, 1880-1940* (Chapel Hill: University of North Carolina Press, 1987).

⁵A good example of Knight's use of the term "scientism" can be found in Frank H. Knight, "The Sickness of Liberal Society," *Ethics* 56 (January 1946): 76-96, reprinted in *Freedom & Reform: Essays in Economics and Social Philosophy*,

Frank Knight and Chicago A Sign of the Underlying Paradox

During the 1920's, the University of Chicago achieved prominence for its promotion of a naturalistic program of social research which would provide a scientific basis for the successful re-integration of the rapidly fragmenting American society. Dedicated to research, and unfettered with the traditions of East Coast universities, Chicago had, from its beginning in 1892, attracted scholars who were repulsed by the "armchair speculation" of deductive theorizing and who wanted to open new paths of social inquiry through observation and experimentation. Located in a city that was a microcosm of the changes occurring within American society, the University's social scientists took an active role in bringing the results of their research to bear on the pressing questions of social betterment. When Americans began to call for more objective social research, in the wake of demise of morally-based social reform movements after the First

Essays selected by Hubert Bonner and others (New York: Harper & Bros., 1947; reprint (with a foreword by James M. Buchanan), Indianapolis: Liberty Press, 1982), 476-78. Knight apparently adopted the term from F.A. Hayek, who introduced its use in this regard in his article "The Influence of the Natural Sciences on the Social Sciences," in *The Counter-Revolution in Science: Studies on the Abuse of Reason*, 2nd ed. (Indianapolis, IN: Liberty Press, 1979), 19-25 (originally published in 1941). Dorothy Ross uses the term to describe the same tradition I refer to as scientific naturalism in her study of "The Development of the Social Sciences," in *The Organization of Knowledge in Modern America, 1860-1920*, ed. Alexandra Oleson and John Voss (Baltimore: John Hopkins University Press, 1979), 125-30.

World War, the University of Chicago was therefore uniquely situated to provide leadership.⁶

Frank Knight entered the world of Chicago social science in the fall of 1917 upon his appointment as a lecturer in the department of economics. Despite the fact that the promise of a secure position at the State University of Iowa in Iowa City lured him away from Chicago for eight years during the early 1920's (he returned to replace J.M. Clark in 1927 and remained for the rest of his life), it is still appropriate to identify Chicago as the center of his intellectual universe during the period under consideration, for two reasons. First, Knight's central concern was the same as that of the tradition of naturalistic social science that Chicago epitomized. He, too, sought to explore the contribution that social science could make to the realization of liberal democratic values in the context of modern society. As George Stigler recently remarked,

For Knight, the primary role of economic theory . . . is to contribute to the understanding of how by consensus based upon rational discussion we

⁶A chronicle of the development of the social sciences at Chicago is provided by Martin Bulmer in *The Chicago School of Sociology: Institutionalization, Diversity, and the Rise of Sociological Research*, *The Heritage of Sociology* (Chicago: University of Chicago Press, 1984), 12-44. Bulmer discusses the Chicagoans' vision of the social usefulness of their research at numerous points; see also Barry Karl, *Charles E. Merriam and the Study of Politics* (Chicago: University of Chicago Press, 1974); and Dennis Smith, *The Chicago School: A Liberal Critique of Capitalism*, *Theoretical Traditions in the Social Sciences* (New York: St. Martin's Press, 1988).

can fashion [a] liberal society in which individual freedom is preserved and a satisfactory economic performance achieved.⁷

Secondly, Chicago provided the *discursive context* within which Knight's response to the naturalistic program in the social sciences evolved. The notion of a "discursive context" may be unfamiliar and, hence, requires some explanation. One place to start is with the familiar Kuhnian notion of a scientific "paradigm."⁸ A paradigm, for Kuhn, is a shared way of looking at the world established by the paradigmatic example of a scientific discovery that could not have been made except by looking at the world in this revolutionary way. Kuhn's notion is helpful for explaining what I mean by a discursive context because it suggests that it is their shared way of seeing, rather than adherence to "the scientific method," that binds scientific communities together and establishes the rules and preconditions for "normal science."

However, to get from a "paradigm" to a "discursive context" we need to modify Kuhn's notion in two ways. First, because language is the means by which the members of a community express their way of seeing the world, it is appropriate to say that another way of expressing the notion of a paradigm is to speak of the shared "language"--i.e., the unique set of vocabulary, rules,

⁷George J. Stigler, "Frank Hyneman Knight," in *The New Palgrave: A Dictionary of Economics*, ed. John Eatwell, Murray Milgate, and Peter Newman, vol. 3 (New York: Stockton Press, 1987), 58.

⁸Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 2nd ed, enlarged (Chicago: University of Chicago Press, 1970).

preconditions, shared implications, and rhetorical styles--which characterizes the discourse of a community.⁹ Thus, "normal discourse" (analogous to Kuhn's "normal science") is that pattern of discussion (both verbal and written) which proceeds according to the rules and preconditions of a community's language. Secondly, Kuhn's notion of a paradigm is limited by his assumption that successful paradigms drive out their competitors; that a "paradigm shift" essentially precludes other ways of seeing the world. When we focus on the discourse of a community we can weaken this assumption and recognize that, even in science, the community's discourse may in fact be an intermingling of a number of different languages, which co-inhabit in an uneasy peace.¹⁰

To say that Chicago formed the discursive context for Knight's work, therefore, is to say that he shared in the language(s) which characterized social scientific discourse at the University of Chicago (chapter 3 describes these languages). Of course, this implies that his response to naturalism came from within--he had no language to use other than that of naturalism itself.

Despite the fact that Knight shared with scientific naturalism the goal of revitalizing America's liberal democratic values, and spoke its language, his major

⁹See J.G.A. Pocock, "The Concept of a Language and the *métier d'historien*: Some Considerations on Practice," in *The Languages of Political Theory in Early-Modern Europe*, ed. Anthony Pagden, Ideas in Context (Cambridge: Cambridge University Press, 1987), 21.

¹⁰An excellent example of how the intermingling of "languages" occurs can be found in the first chapter of Alasdair MacIntyre's *After Virtue: A Study in Moral Theory*, 2nd ed. (Notre Dame, IN: University of Notre Dame Press, 1984), 1-5.

work during the Twenties and early Thirties was a critique of the naturalistic program, for he believed that many of its assumptions were mistaken and, hence, the means by which it pursued its goal were fundamentally flawed. Not only were the methods of the natural sciences inappropriate to the human sciences for a variety of epistemological and ethical reasons (see chapter 6), but, as he realized fully in the early 1930's, the commitment to their extension into the human sciences was itself at odds with liberal values that the naturalistic program sought to promote (see chapter 7). Yet, therein lies the paradox of Knight's relation to scientific naturalism, for, by his own choice, the only language in which he could cast his criticism of the naturalistic program was the language of scientific naturalism itself. Thus, his effort to deconstruct scientific naturalism from within was necessarily limited by the constraints of naturalistic discourse. He had no external place (i.e., no other discursive context) from which to speak.

* * * * *

The claim that Knight was an internal critic of scientific naturalism, constrained by his self-adopted position within the discursive context of the naturalistic program, runs counter to the general trend among interpretations of his work. Although most interpreters recognize the primacy of Knight's concern for the relation between social science and liberal democracy, they hasten to show how that concern translated into opposition to the naturalistic program--as one interpreter remarked, "Knight devoted his career to developing and demonstrating

a workable alternative to the incorporation of positivism and pragmatism into the neoclassical paradigm."¹¹ The task these interpreters set for themselves is the identification and systematic reconstruction of the social scientific method that they believe Knight advocated as an alternative to those methods proposed within the naturalistic program. They seek, in other words, to find the place outside of naturalistic discourse from which Knight spoke. If my arguments here and in chapter 2 are correct, the majority of these reconstructions of Knight are misguided because they fail to stop and ask two basic questions about Knight's criticism of the naturalistic program; (1) what is the character or basic orientation of Knight's criticism, and (2) how did the language of naturalistic discourse, within which he thought and wrote, shape it? I have already given a general indication of the answer to the second question emerging from my reconstruction of his work. Now I turn to the first question.

Knight's Therapeutic Philosophy

Knight has been variously described as a sceptic, a metaphysician, a puzzler, a gentle cynic, and a Socratic gadfly.¹² My favourite description of him

¹¹Sheryl Davis Kasper, "Frank Knight's Case for Laissez Faire," paper presented at the annual meeting of the History of Economics Society, Richmond, VA, June 1989, 5.

¹²See James M. Buchanan, "Frank H. Knight," in *The International Encyclopedia of the Social Sciences*, ed. David Sills, vol. 3 (New York: Macmillan, 1968), 427; Melvin Knight (Frank's brother), as quoted in Donald Dewey, "The Uncertain Place of Frank Knight in Chicago Economics," paper presented at a joint session of the American Economic Association and the History of Economics

is James Buchanan's: "Knight is the economist as philosopher, not the economist as scientist."¹³ The point of Buchanan's remark is lost, however, if one reads it as either a type of disciplinary designation for Knight, or a description of the kind of questions Knight was interested in. In Knight's day, all of the academic disciplines, including philosophy, were trying to become "scientific." Thus, simply to describe him as a philosopher may be misleading, for it begs the question, what kind of philosopher was he? Similarly, to describe Knight as a philosopher merely because he was concerned about the relation between economics and ethics, or between social science and liberalism, also misses the mark because it fails to ask how he approached the issues involved, and how he used his understanding of these important relations in explaining the organization of economic life.¹⁴ Putting these questions together, one might ask: what is it about the manner in

Society, Chicago, 30 December 1987, 8; F.A. Hayek, "Two Kinds of Minds," in *New Studies in Philosophy, Politics, Economics and the History of Ideas* (Chicago: University of Chicago Press, 1978), 51, n.1; Patinkin, "Knight as Teacher," 48; and Purcell, *Crisis of Democratic Theory*, 43, respectively.

¹³Buchanan, "Frank H. Knight," 426.

¹⁴Most interpretations do imply that it is the nature of his concerns that make him a philosophical economist. See, for example, William Breit and Roger L. Ransom, "Frank H. Knight: Philosopher of the Counterrevolution in Economics," chap. in *The Academic Scribblers*, rev. ed. (Chicago: Dryden Press, 1982), 193-204; Richard A. Gonce, "Frank H. Knight on Social Control and the Scope and Method of Economics," *Southern Econ. J.* 38 (April 1972): 547-58; J. Daniel Hammond, "Frank Knight's Anti-Positivism," *Hist. Polit. Econ.*, forthcoming; John McKinney, "Frank H. Knight on Uncertainty and Rational Action," *Southern Econ. J.* 43 (April 1977): 1438-52; and Patinkin, "Knight as Teacher," 45-48.

which Knight approached his subject matter which prompted Buchanan to identify him as a philosopher?

The answer to that question was provided by Warner Wick at Knight's memorial service at the University of Chicago. Wick suggested that Knight be described,

in terms of an observation Aristotle made about his teacher, Plato, who used to remind his associates of the difference between moving *from* and moving *toward* first principles. Most of the time, we proceed from principles more or less agreed upon and established, using them to give an account of some subject matter. Frank was good at that, of course. But no man of my acquaintance has been more concerned with movement in the opposite direction, asking questions of such relatively established principles, noting in turn their presuppositions and their limitations, in the attempt to discern more clearly how they might fit together in some order according to principles more comprehensive and, of course, more elusive.¹⁵

Wick's distinction between "moving from and moving toward first principles" is useful because it points out that Knight did not intend to launch a new system of thought. Rather, his work was a kind of critical probing into the various limitations and constraints of our existing theoretical systems; as Don

¹⁵Warner Wick, "Frank Knight, Philosopher at Large," *J. Polit. Econ.* 81 (May-June 1973): 513-4 (italics in original). Two other studies which make similar remarks about Knight's work are Scott Gordon, "Frank Knight and the Tradition of Liberalism," *J. Polit. Econ.* 82 (May/June 1974): 571-77 ("He had the uncommon gift (and the curse!) of the compound eye" [p. 571]); and Mark Casson, "Frank Knight and the Theory of Society," University of Reading Discussion Paper in Economics, Series A, no. 162, April 1985 ("To those who measure success by the ability to discover certainties, and who measure achievement by the creation of a system of thought that commands popular assent, Knight was a failure. This, however, is to apply criteria different than those of Knight himself" [p. 48]).

Patinkin once described him, Knight was "the eternal asker of questions."¹⁶ He was a philosopher then, not in the modern sense of advocating a particular philosophical system, but in the ancient sense of questioning and criticizing the discourse of his intellectual community in order to assist it to achieve a greater degree of self-understanding.¹⁷ One of Buchanan's other remarks about Knight reinforces this interpretation of his description of Knight as a philosopher:

Frank Knight did not preach a gospel (despite the old University of Chicago saying that "there is no God, but Frank Knight is his prophet"). There was, to him, no gospel to be preached. He made no effort to present the "truth according to Frank Knight." He taught that "truth" was whatever emerged from the free discussion of reasonable men who approached the dialogue without prejudice and as good sports. . . .

As he himself acknowledged, and as many others have recognized, Frank Knight was essentially a critic. . . . His "social function" was that of exposing the fallacies, nonsense, and absurdities in what was passed off as sophisticated-scientific discourse. . . .

To Knight the task for economists (and for social philosophers) is not to be located at the extensive margin of "science." The task is to be located squarely at the level of elementary common sense.¹⁸

¹⁶Patinkin, "Knight as Teacher," 46.

¹⁷See Wick, "Knight, Philosopher at Large," 513.

¹⁸James M. Buchanan, foreword to reprint edition of *Freedom & Reform: Essays in Economics and Social Philosophy*, by Frank H. Knight (Indianapolis: Liberty Press, 1982), xi-xii.

* * * * *

In order to identify the kind of philosophy which I am attributing to Knight, I have found it useful to describe Knight as a *therapeutic* philosopher.¹⁹ Therapeutic philosophers are to be contrasted with philosophers of the systematic variety. Systematic philosophers build edifices of thought upon the foundation of certain basic principles; therapeutic philosophers probe around the foundations of other people's theoretical edifices to see what might be pulled away in order to expand the view. Systematic philosophers seek to tie up the loose ends in our theoretical systems; therapeutic philosophers merely seek to untie knots in our thinking. Systematic philosophers answer questions in the hope of expanding our knowledge; therapeutic philosophers ask questions in order to promote conversation and understanding. Systematic philosophers offer arguments to explain that which is; therapeutic philosophers offer aphorisms and stories to suggest that which might be. Thus, as Richard Rorty suggests, therapeutic philosophers "can never end philosophy, but they can help prevent it from attaining the secure path of a science."²⁰

As these comments imply, the notion of philosophy as therapeutic harkens back to the ancient understanding of philosophy mentioned above. After a long

¹⁹I originally came across the term "therapeutic" in the course of reading Richard Rorty's discussion of the importance of Dewey, Heidegger, and Wittgenstein in *Philosophy and the Mirror of Nature*, 5-6, 357-94.

²⁰Ibid., 372.

absence, however, the notion was re-introduced into modern philosophy by Ludwig Wittgenstein in his *Philosophical Investigations*, when he observed that "The philosopher's treatment of a question is like the treatment of an illness."²¹ A brief introduction to Wittgenstein's analysis of what it means to treat a philosophical problem as an illness will help us to understand what it means to identify Knight as a therapeutic thinker.

* * * * *

For Wittgenstein, a philosophical question only becomes a "problem"--i.e., something that troubles or disquiets us--when the language of the intellectual community is disordered. "A philosophical problem," he once said, "has the form: 'I don't know my way about.'"²² The task called for is the restoration of order; the reorientation of the language of the community in such a way that the disorder previously experienced disappears.

The results of philosophy are the uncovering of one or another piece of plain nonsense and of bumps that the understanding has got by running its head up against the limits of language. These bumps make us see the value of the discovery.²³

Philosophers cannot complete this task alone (it is the responsibility of the entire community), but they can contribute to it by clarifying exactly where in the

²¹Wittgenstein, *Philosophical Investigations*, 91, #255.

²²Ibid., 49, #123.

²³Ibid., 48, #119. See also, *ibid.*, 47, #109, and 51, #133.

language the disorder arises. "It is the business of philosophy, not to resolve a contradiction . . . , but to make it possible for us to get a clear view of . . . the state of affairs *before* the contradiction is resolved."²⁴ The philosopher's role is therapeutic, therefore, in the sense that it is diagnostic. In the case of language disorders, however, diagnosis is perhaps the central task, for, as Frank Knight once said, "most questions solve themselves if correctly stated."²⁵

We can follow Wittgenstein's understanding of philosophical problems one step further if we realize that it implies that philosophical problems are not only *language* disorders, but also signals of *social* disorders. As G.H. von Wright put it, for Wittgenstein,

The problems of philosophy have their roots in a distortion or malfunctioning of the language-games which in its turn signalizes that something is wrong with the ways in which men live.²⁶

Hence, "A philosophical question is like an inquiry into the constitution of society,"²⁷ for its treatment is simultaneously a treatment of the dysfunctioning of the society.

²⁴Ibid., 50, #125 (italics in original).

²⁵Knight made this remark on the first day of his course on economic theory. It is quoted in Patinkin, "Knight as Teacher," 27.

²⁶Georg Henrik von Wright, "Wittgenstein in Relation to His Times," in *Wittgenstein* (Minneapolis: University of Minnesota Press, 1982), 207.

²⁷Ludwig Wittgenstein, "The Big Typescript," 1933, Ludwig Wittgenstein Papers, Wren Library, Trinity College, Cambridge, 415, quoted in Anthony Kenny, "Wittgenstein on the Nature of Philosophy," in *The Legacy of Wittgenstein* (Oxford: Basil Blackwell, 1984), 42.

The claim that the treatment of a disorder in the language of society is simultaneously the treatment of a disorder in society suggests that the philosopher's diagnosis of the language disorder might assist other members of society to diagnosis, and possibly improve, the corresponding social disorder. But Wittgenstein shied away from this implication. For him, a philosophical problem was a purely private matter for the philosopher and would not change the way other people thought and acted: "Philosophy," he said, "leaves everything as it is."²⁸

Other therapeutic philosophers, however, do see their personal diagnosis of language disorders as a contribution to greater self-understanding on the part of the members of society, and thereby, to the improvement of society's actions (both individual and social). Because "language has its true being only in conversation,"²⁹ and there can be no purely private conversations, the philosopher's work of clarifying language disorders is always a profoundly social task. In the end, it is not simply the diagnosis of the dysfunctioning of a society's language, but an improvement in its conversation and practices. Thus, the

²⁸Wittgenstein, *Philosophical Investigations*, 49, #124; see also Kenny, "Wittgenstein on Philosophy," 47-56.

²⁹Hans Gadamer, quoted in Brice R. Wachterhauser, "Introduction: History and Language in Understanding," in *Hermeneutics and Modern Philosophy*, ed. Brice R. Wachterhauser (Albany: State University of New York Press, 1986), 45.

therapeutic thinker's goal is not simply clarification of a question, as Wittgenstein suggests, but also edification of a community.³⁰

* * * * *

The identification of Knight as a therapeutic thinker suggests that one will only understand his work by focusing on the ways in which he sought to edify the community of social scientists through asking questions that would stir up their imaginations and get them to look beyond the boundaries of their normal discourse, rather than by focusing on the reconstruction of some general "Knightian position" describing a coherent and comprehensive system of economic knowledge to which Knight allegedly subscribed.³¹ Knight did not respond to the

³⁰I should point out that after the mid-1930's Knight had similar doubts about the potential for edification among individuals in society. In his classes in the 1930's and 1940's, he often remarked: "You can be with the majority--or you can be in the right." Patinkin, "Knight as Teacher," 35; see also George J. Stigler, *Memoirs of an Unregulated Economist*, Alfred P. Sloan Foundation Series (New York: Basic Books, 1988), 26-27. However, it is essential to realize that Knight's cynicism developed gradually, speeding up during the early Thirties, and does not necessarily characterize his earlier work (see chapter 7).

³¹This is not to deny that some of his work may have played a clarifying role in the development of a more coherent neoclassical research program in economic theory. When the nature of that clarification is examined, however, one generally finds that, rather than constructing a new theoretical foundation, it "merely" clears away the underbrush of confusion resulting from illogically defined concepts. This applies as much to Knight's earliest theoretical work--such as Knight, *Risk*; idem, "Cost of Production and Price Over Long and Short Periods" *J. Polit. Econ.* 29 (April 1921): 304-35; and idem, "Some Fallacies in the Interpretation of Social Cost," (comment on "Some Aspects of Protection Further Considered," and "The Theory of International Value Re-Examined," by F.D. Graham, and *The Economics of Welfare*, by A.C. Pigou), *Quart. J. Econ.* 38 (August 1924): 582-606 (the latter two essays are reprinted in *The Ethics of*

naturalistic program by proposing an alternative system of thought. Rather, his response was characterized by a probing of the foundations of the naturalistic approach itself, by the offer to help naturalists ask ever-better questions (the "big job of economics," he once said, "is to divest people of prejudices--to have them see the questions as they are."³²), and by the effort to keep the naturalistic discourse of the social sciences engaged with the great conversation of humanity regarding the nature of the true, the good, and the beautiful. Knight's work, therefore, is not a giant jigsaw puzzle, which, when finally put together, reveals a picture of a coherent and comprehensive system of knowledge about the economy or society; it is, rather, an assortment of ruminations--i.e., repeated mastications of a few basic themes--which seek to destroy systems because they are seen as inimical to the continued health of that great conversation we call human society. George Shackle captured the character of Knight's work well when, after reading one of Knight's books, he remarked:

A passionate sincerity served by a mocking wit, a few hatreds, . . . an elusive mixture of scepticism and mysticism, a restless, endlessly dissatisfied mind searching for something beyond systems and beyond

Competition and Other Essays, essays selected by Milton Friedman and others, (London: George Allen & Unwin, 1935), 186-216 and 217-36 respectively)--as it does to his destruction of the "period of production" and "time preference" concepts in capital theory during the 1930's in idem, "Professor Fisher's Interest Theory: A Case in Point," *J. Polit. Econ.* 39 (April 1931), 176-212; idem, "Capital, Time and the Interest Rate," *Economica*, n.s., 1 (August 1934): 257-86; and idem, "The Quantity of Capital and the Rate of Interest," Parts I-II, *J. Polit. Econ.* 44 (August, October 1936): 433-63, 612-42.

³²Patinkin, "Knight as Teacher," 28.

science: all this is here, and if the reader has a strong head he will find this a heady wine, if not he will be laid out.³³

The Evolution of Frank Knight's Paradoxical Relation with Naturalistic Social Science

The identification of Knight as a therapeutic thinker provides a key to understanding his paradoxical relation with American social science in the Twenties and early Thirties. Almost inevitably, therapeutic philosophers become *internal* critics of the dominant intellectual system of their day, because they must use the language of the system if they hope to communicate with others. Paradoxically, their presence within the system both enriches and constrains their criticism of the system, for their work is always shaped by the very language they wish to subvert.

Knight is a case in point. The strength of his work lies in the manner in which he was able to use the naturalistic language of early twentieth-century social scientific discourse to communicate the limitations of that language. The weakness of his work lies in the manner in which his participation in the discourse of naturalistic social science prevented him from seeing beyond those limitations.³⁴ Thus, he could not convert scientific naturalists to another way of

³³G.L.S. Shackle, review of *On the History and Method of Economics: Selected Essays*, by Frank H. Knight, *Economica* 25 (February 1958): 65.

³⁴I would be the first to admit that this is a weakness we all share in regard to our own discursive context. Nevertheless, it is appropriate to identify it in Knight's case because it helps us to understand why his critique of naturalism, powerful as it was, rang hollow to so many. Perhaps Purcell was right to say of

studying society, but he could try to stir them up enough to see beyond the boundaries of their own point of view.

The primary task of the following chapters, therefore, is to explain the paradoxical nature of Knight's relation with the social scientific discourse of the Twenties and early Thirties. Because most studies of Knight make so much of his demonstration of the limitations of naturalism, I have sought to counter-balance that perspective somewhat by showing how much of his early work was shaped by his participation in the discourse of scientific naturalism. Chapter 3 sets the stage for my task by examining the role that scientific naturalism played in the re-orientation of American social discourse during the Twenties and early 1930's (in chapter 2 I pause to substantiate the claim, made earlier in this chapter, that most other studies of Knight's economic philosophy fail to pay attention to either his therapeutic orientation or his participation in the discourse of scientific naturalism).

The rest of the chapters trace, in a more or less chronological order, the pattern of Knight's response to scientific naturalism, from his early desire to participate in the development of a body of economic knowledge that would contribute to "improving the quality of human life through changes in the form of

him that "Knight perceptively pointed to unacknowledged moral assumptions in objectivist social science, but the vagueness of his own ethical theory undercut much of the force of his argument. . . . Though he was a Socratic gadfly to the objectivists, he remained within the naturalist camp." Purcell, *Crisis of Democratic Theory*, 43.

organization of want-satisfying activity,"³⁵ to his growing concern for the social consequences of allowing the scientific language of the social sciences to become the dominant means by which American society articulated what changes would improve the quality of human life. Chapter 4 shows both how Knight's early scepticism about religion and his desire to contribute to social progress led him to identify with the naturalistic program, and how his entrance into economics began to counter-balance his response to scientific naturalism. The fifth chapter examines the therapeutic quality of *Risk, Uncertainty, and Profit*, which began as Knight's doctoral dissertation and became, in its published version, a classic. Chapter 6 explores the way in which Knight's response to scientific naturalism changed as he began to become increasingly concerned about its ethical and methodological implications during the 1920's, and chapter 7 carries that story forward into the early 1930's, when Knight's response expanded as the emerging significance of naturalism in American social discourse created an authority crisis for liberal democracy.

The fact that my study of Knight's relation with scientific naturalism ends in the mid-1930's requires some explanation. The Twenties, it is often said, began in euphoria at the end of the Great War on the 11th of November 1918 and ended in despair on the 24th of October 1929 (Black Thursday). The stock market crash, and its aftermath, are also said to have ushered in a fundamentally

³⁵Knight, *Risk*, xi.

different era in American life--the Great Depression--an era in which a new deal was struck between the American people and their government. For my purposes, however, the Twenties and Thirties are linked together by at least one strong chord; for it was in the early Thirties that the naturalistic social science which had flourished at places like the University of Chicago was finally given center stage in American social discourse and was courted by those in power. Knight's ruminations on the ethical dilemmas of naturalism now took on a new dimension, for he had to consider more fully than he had before the broader social issues raised by the presence of a scientific social science within a liberal democratic society. Prior to this time, he had focused on the methodological and ethical difficulties which naturalism posed for the study of society, particularly within economics. By the mid-1930's, however, he had come to focus his concern on the crisis of authority in liberal democracy, the role that social science had had in creating it, and the role it could have in resolving it. The essay "Economic Theory and Nationalism," which was first published as the last essay in *The Ethics of Competition* in 1935, represents the culmination of this process of transition in Knight's thought.³⁶ By the time of its publication, Knight had moved from being simply "the economist as philosopher" to being "Frank Knight, philosopher at large."³⁷

³⁶Frank H. Knight, "Economic Theory and Nationalism," in *The Ethics of Competition*, 277-359.

³⁷The second phrase comes from Wick, "Knight, Philosopher at Large."

CHAPTER TWO

THERAPEUTIC PHILOSOPHY AND HISTORIOGRAPHY

A SURVEY OF THE LITERATURE ON FRANK KNIGHT'S ECONOMIC PHILOSOPHY

The relevant logical consideration is that no agent can eventually be said to have meant or done something which he could never be brought to accept as a correct description of what he had meant or done.

*Quentin Skinner, "Meaning and Understanding
in the History of Ideas"*

In the first chapter, two questions that underlie my reconstruction of the historical identity of Knight's early work were identified. The first was concerned with the nature of Knight's response to scientific naturalism; the second with the way in which his participation in the naturalistic language of American social scientific discourse shaped that response. Other questions may be asked of Knight's work, as I indicated in the introduction, but these two questions are of particular relevance to the task of understanding what Knight said about the various issues he addressed during the Twenties and early Thirties. Failure to attend to these questions has led other interpretations of Knight's work during that period astray.

The primary task of this chapter is to demonstrate the necessity of these questions, through an examination of the historiographic difficulties that previous reconstructions of Knight's work on the relation of economics and philosophy have encountered because of their failure to attend to them. The central conclusion of the chapter is a point made earlier in the introduction: an attempt to reconstruct the historical identity of a past author's work inevitably encounters difficulties when it is guided by the issues and concerns of contemporary discourse in the discipline. The introduction illustrated this point with examples from the literature on Knight's distinction between risk and uncertainty; here the focus will be on the literature concerning his broader economic philosophy (interpretations of specific aspects of his economic theory, therefore, are not included). The chapter will also extend the historiographic discussion of the introduction by introducing two different (historiographic) traps that efforts at historical reconstruction fall into when they are guided by contemporary concerns. Following the lead of Quentin Skinner, these traps will be called the "mythology of doctrines" and the "mythology of coherence" traps respectively.¹

The "Mythology of Doctrines" Trap

The *mythology of doctrines* trap can take one of two forms. The first occurs when the historian provides a reconstruction of the thinker's "doctrine" on a particular topic without paying sufficient attention to the thinker's own concerns.

¹Skinner, "Meaning and Understanding," 32 and 39.

The second form occurs when the historian criticizes a thinker for either failing to see the importance of a particular topic, or misrepresenting its importance. The latter form usually appears in the context of attempts to fit a thinker who is conventionally considered important into a "history" of an intellectual tradition constructed around certain common themes (i.e., the topics the contemporary disciplinary paradigm dictates as canonical), which do not seem to appear in the thinker's work.² In either case, the historiographic priority of the historian's own perspective leads the historian to produce an account of the thinker's work which cannot satisfy Skinner's maxim for historical reconstruction: that is, the account becomes one that the past thinker could never accept as a correct description of what was meant by what had been said.

The most obvious examples of what can happen when the mythology of doctrines trap is not avoided in the interpretation of Knight's work can be found in accounts of his "doctrines" on economic method and social policy. In each of these areas, historiographic difficulties emerge because interpreters employ the wrong method for the question they are asking. Most interpreters are primarily concerned with identifying Knight's contribution to the topics of contemporary economic discourse (uncovering the identity Knight's work has been given within the discursive context of an interpretative community), but their method is that of historical reconstruction (recovering the historical identity of Knight's work in its

²Ibid., 32-38.

own discursive context). As Quentin Skinner and John Dunn point out, this mixture often leads straight into the mythology of doctrines trap because the historian tends to attribute to Knight categories of thought alien to Knight's own discursive context.³

The interpretation of Knight's writings on economic method is a case in point. There has been a seemingly inevitable tendency among economic methodologists of the past fifty years to interpret Knight as seeking a solution to *their* problem of discovering a method for the adjudication of competing knowledge claims and, hence, to force his work into the epistemologically-oriented categories they have inherited from twentieth-century philosophy of science. The result has been a tradition of interpreting Knight as a fellow-traveller with the Austrians on the a priorist side of the positivist/a priorist methodological divide. This interpretative tradition is especially strong in the mainstream Hutchison-Friedman-Samuelson-Blaug methodological interpretative community (after all, if he isn't for us, he must be against us), but is also present in the anti- or post-positivist interpretative communities.⁴

³Ibid., 32-34; and Dunn, "Identity of the History of Ideas."

⁴See Mark Blaug, *The Methodology of Economics: or How Economists Explain*, Cambridge Surveys of Economic Literature (Cambridge: Cambridge University Press, 1980), 97-98; Caldwell, *Beyond Positivism*, 104-5; Gonce, "Knight on Social Control," 547; Eva and Abraham Hirsch, "The Heterodox Methodology of Two Chicago Economists," in *The Chicago School of Political Economy*, ed. Warren J. Samuels, Michigan State University Business Studies (East Lansing: Michigan State University, 1976), 60; Fritz Machlup, "The Problem of Verification in Economics," in *Methodology of Economics and Other Social Sciences: Economic*

The historiographic difficulty with this interpretative tradition is not its identification of Knight with the Austrians (an issue which need not be treated here), but the more basic question of whether these externally-imposed categories of positivism, rationalism, a priorism, etc., are in any sense relevant to his work. What this interpretative tradition has failed to see is that these epistemological distinctions, however relevant they are to *its* quest, are simply irrelevant to Knight. He denied our capacity to have the kind of knowledge of human beings that the philosophy of science tradition seeks and, therefore, did not offer a method for its discovery. Because Knight was not seeking for a *method*, his work undermined the attempt to manipulate the social sciences into epistemologically-determined categories. The interpretation of his writings on economic method, therefore, must begin with a different set of questions from those most often asked by contemporary methodologists.

Part of the problem this interpretative tradition faces emerges from its general tendency to classify Knight's methodological views on the basis of the article he wrote in reply to T.W. Hutchison's book *The Significance and Basic*

Theory, Econometrics, and Mathematical Economics (New York: Academic Press, 1975), 141-43; McKinney, "Knight on Uncertainty and Rational Action," 1441; and Ben B. Seligman, "Frank H. Knight and Abstractionism," chap. in *Main Currents in Modern Economics*, vol. 3: *The Thrust Toward Technique* (Glencoe, IL: The Free Press, 1962; reprint, Chicago: Quadrangle Books, with a preface by John K. Galbraith, 1971), 648-49.

Postulates of Economic Theory,⁵ rather than his earlier writings, which concentrate on the relations among ethics, epistemology, and the social sciences. The decision to judge Knight's work by the later article indicates more about the central methodological concerns of the interpretative tradition, I would suggest, than it does about Knight's methodology, because it is not at all clear that Knight was actually addressing the same questions as Hutchison was. Only by first examining the context within which Knight developed his methodological concerns in the earlier articles can we understand what questions he was really addressing and what battles he was fighting, and, hence, see why he would view Hutchison's book as a misguided, yet potentially lethal, attack. The historical reconstruction of those earlier writings provided in chapter six below, therefore, sets the stage for a more accurate analysis of the Hutchison-Knight debate.

One recent study which attempts to correct the mainstream interpretative tradition's oversight of the connection between Knight's early work and his response to Hutchison is a forthcoming article by Daniel Hammond.⁶ Although Hammond does cast Knight's response to Hutchison within the "language" of the

⁵Frank H. Knight, "'What is Truth' in Economics?" (review article on *The Significance and Basic Postulates of Economic Theory*, by T.W. Hutchison), *J. Polit. Econ.* 48 (February 1940): 1-32, reprinted in *History & Method*, 151-78.

⁶Hammond, "Knight's Anti-Positivism." Another account of Knight's response to Hutchison which avoids an overly simplistic classification is A.W. Coats, "Half a Century of Methodological Controversy in Economics: As Reflected in the Writings of T.W. Hutchison," in *Methodological Controversy in Economics: Historical Essays in Honor of T.W. Hutchison*, ed. A.W. Coats (Greenwich, CT: JAI Press, 1983), 18-23.

standard interpretative tradition (as the title "Frank Knight's Anti-Positivism" suggests), he escapes the mythology of doctrines trap by showing how Knight's response emerged out of Knight's earlier concerns about the place of naturalism in the social sciences. By doing this, Hammond is able to hint at the paradoxical nature of Knight's relation with the naturalistic discourse within which he conversed:

. . . Knight's anti-positivism was not so much opposition to viewing economics as a science or as a discipline similar to the natural sciences, but rather . . . it was opposition to the particular philosophical portrait of science put forth by the positivists.⁷

* * * * *

The same error that histories of economic method make--the attribution of categories of thought to Knight that are not necessarily his own, in the attempt to tell a story unified around certain canonical topics--is present also in most studies which attempt to reconstruct Knight's "doctrines" on social and economic policy. In order to illustrate how the mythology of doctrines trap appears in the context of those studies, I will focus on two recent essays by J. Patrick Raines. The first is Raines' attempt to articulate Knight's general position on the economic organization of society. The second essay is his attempt to define one major

⁷Hammond, "Knight's Anti-Positivism," 4 (page reference to pre-publication draft).

aspect of that general position; namely, Knight's "doctrine" on the role of religion and ethics in liberal society.⁸

Raines' article on Knight's "contributions" to a social-economy perspective is an introductory survey of those aspects of Knight's work which might be of interest to social economists, presented as "Frank Knight's system of social economics."⁹ Unfortunately, Raines' study is fraught with interpretative difficulties because he fails to identify which of the three questions that I differentiated in the introduction he is actually addressing.¹⁰

⁸J. Patrick Raines, "Frank H. Knight's Contributions to Social Economics," *Rev. Soc. Econ.* 47 (Fall 1989): 280-92; and idem, "Frank Knight on Religion, Ethics and Public Policy," paper presented at the meetings of the History of Economics Society, Atlanta, Georgia, 29 December 1989.

⁹Raines, "Knight's Contributions," 280. Raines' desire to construct a coherent system of thought out of Knight's therapeutic ruminations illustrates the close affinity between the mythology of doctrines and mythology of coherence traps.

¹⁰Other studies of Knight's views on economics and society which exhibit the same historiographic confusion include: Thomas R. DeGregori, "Ethics and Economic Inquiry: The Ayres-Knight Debate and the Problem of Economic Order," *Amer. J. Econ. Soc.* 36 (January 1977): 41-50; Kasper, "Knight's Case for Laissez Faire"; David B. Schweikhardt, "The Role of Values in Economic Theory and Policy: A Comparison of Frank Knight and John R. Commons," *J. Econ. Issues* 22 (June 1988): 407-12; and Arthur Schweitzer, "Frank Knight's Social Economics," *Hist. Polit. Econ.* 7 (1975): 279-92. A recent, but as yet unpublished, study which succeeds in communicating the therapeutic quality of Knight's ruminations on society despite the fact that it tends to reconstruct Knight on the basis of the contemporary theorist's concerns is Casson, "Knight and Society." One study which does not confuse the issues, but rather presents a clear and articulate rational reconstruction of Knight's views on the market is Jules Coleman, "Competition and Cooperation," *Ethics* 98 (October 1987): 76-90.

The title of Raines' article (Knight's contributions to . . .) suggests that it will be a study of the way in which Knight's work has been assimilated into the discursive community of *social* economists--a community which is (putatively) distinct from the dominant discursive community of economists. Such a study, as I suggested in the Introduction, would not be primarily concerned with Knight's own texts, but rather with the reading(s?) those texts have been given by social economists. Among the questions that might be raised in such a study would be: what is the standard interpretation of Knight's work among social economists, or what aspects of his work have drawn their attention? Why have social economists interpreted Knight in this way (i.e., what is it about *their* discursive context which leads them to read him as they do)? And what role has their interpretation of Knight played in the pursuit of their goals? None of these questions, unfortunately, occupies Raines' attention. In fact, he pays almost no attention to the question of Knight's actual impact on the discursive context of social economists. Rather, he focuses his efforts on the reconstruction of Knight's original texts in terms of the set of topics with which social economists are generally said to be concerned (the *Review of Social Economy* has published a number of similar studies over the past decade, and Raines borrows the set of canonical topics from past studies of such figures as Alfred Marshall, Gunnar Myrdal, and J. M. Clark).

Because Raines' primary concern is to draw Knight into the conversation of contemporary social economists, he should re-educate Knight; that is, rationally

reconstruct Knight's work in such a manner as to equip Knight with the "language" necessary to converse with modern social economists in their own terms, without losing the essential insights Raines believes the social economists need to hear (such as the "familism" that he suggests is Knight's "unique contribution"¹¹). Yet Raines does not rationally reconstruct Knight, satisfying himself instead with the excerpting of passages from Knight's work which seem to bear on the issues social economists are said to be interested in. Such a method militates against the goal of drawing Knight into participation in the discourse of modern social economists, however, because it provides little direction as to how social economists should read the excerpted passages. That is, the method Raines follows does not provide a contemporary identity for Knight's texts. Nor does it provide us with an account of the historical identity of Knight's texts. Because Raines stipulates the topics that Knight is allowed to talk about, we are prevented from seeing how Knight intended the remarks chosen as representative of his thought to be understood, and how he might have tied the remarks to the rest of his work. For example, how can we reconcile Raines' account of Knight's importance for social economics with Knight's widely-acknowledged role as a conservative social theorist and mentor of several of the twentieth-century's foremost proponents of free markets?¹² With no attempt to either recover the historical identity of Knight's

¹¹Raines, "Knight's Contributions," 281-83.

¹²Hayek once remarked that, "It is hardly an exaggeration to say that nearly all the younger American economists who really understand and advocate a

texts or provide them with a contemporary identity for social economists, the result of Raines' study is a set of Knight's words which has no identity because they are not presented in any particular "language" which could give them meaning.

Raines' study of Knight's argument against social reform movements that are said to be based on Christian ethics is subject to much the same criticism.¹³ "Social" economists are often distinguished from their "scientific" counterparts by their willingness to stipulate what the essential qualities of human welfare are, and to do so in explicitly religious terms. Knight, on the other hand, is well-known as an opponent of any attempt to apply Christian values to the organization of a liberal democracy. Hence, if Raines is going to provide Knight

competitive market system have at one time been Knight's students." F.A. Hayek, "The Transmission of the Ideals of Economic Freedom," in *Studies in Philosophy, Politics, and Economics* (Chicago: University of Chicago Press, 1967; Midway Reprint, 1980), 198.

¹³The paper by Raines is the most recent of several papers on Knight's general position on the relation between religion and public policy. All of these papers are susceptible to the criticism I raise here against Raines. See J. Patrick Raines and Clarence R. Jung, "Knight on Religion and Ethics as Agents of Social Change: An Essay to Commemorate the Centennial of Frank H. Knight's Birth," *Amer. J. Econ. Soc.* 45 (October 1986): 429-39; William S. Kern, "Frank Knight on Preachers and Economic Policy: A 19th Century Liberal Anti-Religionist, He Thought Religion Should Support the Status Quo," *Amer. J. Econ. Soc.* 47 (January 1988): 61-69; and idem, "Frank Knight on Scientism, Moralism, and Social Progress," paper presented at a session at the annual meetings of the Southwestern Social Science Association co-sponsored by the Association of Christian Economists, San Antonio, Texas, March 1986. My criticism of Raines' paper is adapted from remarks made at the History of Economics Society meetings in Atlanta, where I was the discussant for his paper.

with an identity for social economists, and thereby draw him into their conversation, he is going to have to reconstruct Knight's views on the relation of religion and social organization.

Historiographic problems arise, of course, because Raines is not clear about what kind of reconstruction he needs to undertake. The primacy of his interest in drawing Knight into contemporary discussions on religion and the organization of democratic capitalist societies (which is obvious from the "frame" provided in the introduction and conclusion of both his essays on the topic¹⁴) implies that he should direct his efforts at rationally reconstructing Knight. Yet his desire to let Knight speak for himself militates against such a reconstruction. How should Knight's remarks be translated to convey their meaning in the "language" of social economists, and where does Knight have to be re-educated in order to participate in their discourse?

At the same time, Raines' concern for issues dictated by the contemporary discourse of social economists prevents him from uncovering the historical identity of Knight's writings. Are we sure that Knight was concerned with exactly the same issues that the social economists are? How do we account for Knight's therapeutic orientation when we are reconstructing his views for a contemporary audience? Should we try to establish "the principles of Knight's systematic attack

¹⁴Raines, "Knight on Religion, Ethics, and Public Policy," 1 and 12-14; and Raines and Jung, "Knight on Religion and Ethics," 429-30 and 437-38.

on religious and ethical rationales for socio-economic policy prescriptions"¹⁵ if Knight was not a systematic thinker? How important is it for our understanding, and reconstruction, of Knight's writings to recognize that early in his life religion and social science were engaged in mortal combat for control of the "language" of social discourse in America and that, during his time, and partly because of his efforts, social science won? And of what importance is it to Knight's writings to note that he entered economics because of concerns which emerged from his religious upbringing? All of these questions are necessary to a reconstruction of the historical identity of Knight's work, yet none of them play an important role in Raines' study. The result, once again, is a mythology of doctrines; a study which neither helps us to understand what Knight said and why he said it nor enriches the present-day conversation of social economists regarding the relation of religion and economics.

* * * * *

A similar form of the mythology of doctrines trap is present in James Buchanan's interpretation of the ethical critique of capitalist society Knight presented in his famous essay on "The Ethics of Competition."¹⁶ Buchanan's

¹⁵Raines, "Knight on Religion, Ethics and Public Policy," 12.

¹⁶James M. Buchanan, "The Economizing Element in Knight's Ethical Critique of Capitalist Order," *Ethics* 98 (October 1987): 61-75. Knight's essay was originally published in *Quart. J. Econ.* 37 (August 1923): 579-624, and was reprinted in *The Ethics of Competition*, 41-75.

central concern is a rational reconstruction of Knight's understanding of the limits to any ethical defense of the market form of social organization *after* substituting his own catallactic (exchange) perspective for the maximizing (choice) perspective that Knight shared with most other economists.

I shall, . . . limit discussion largely to the influence of the economizing-*maximizing element* on the classical Knightian evaluation of competitive order. How might this critique have been different if Knight had been able to escape from the maximizing paradigm? Specifically, how and to what extent does a substitution of a *catallactic* for a *maximizing* perspective on economic interaction mitigate the Knightian listing of the limits to any measured ethical defense of market organization?¹⁷

According to Buchanan, the substitution of his catallactic for Knight's maximizing perspective reverses Knight's negative evaluation of capitalism, thereby lending "positive ethical weight . . . to competitive order."¹⁸

If Buchanan had simply stuck to rational reconstruction, there would be no problem with his interpretation of Knight, and in fact no reason to include him in my survey, because he would be asking a question fundamentally different from my own. Unfortunately, however, Buchanan does not stop with rational reconstruction, but goes on to claim that Knight's failure to escape the maximizing

¹⁷Buchanan, "Economizing Element in Knight's Critique," 61 (italics in original).

¹⁸*Ibid.*, 73. For earlier comments by Buchanan on Knight's theoretical compatibility with the maximizing or choice-theoretic framework, see his discussion of the Knight-Ayres debate of 1935 in James M. Buchanan, "Methods and Morals in Economics," in *What Should Economists Do?*, with a preface by H. Geoffrey Brennan and Robert D. Tollison (Indianapolis: Liberty Press, 1979), 202-17.

paradigm (in favour, of course, of Buchanan's own catallactic paradigm) constitutes the single most important methodological flaw in his work.¹⁹ It is this second part of Buchanan's interpretation that leads him into the mythology of doctrines trap.

Buchanan's criticism of Knight is problematic for a very simple reason: it is one thing to ask what Knight's ethical evaluation of capitalism would look like if he knew as much about economics as we do now; it is another thing to criticize him for not knowing as much as we know now.²⁰ Such an assessment fails to recognize that paradigms or "languages" are not items of clothing which are always available and can be put on and taken off at will, but rather are elements of the environment in which we are located and hence affect the things that we see and the way that we think and live. Before criticizing Knight for failing to escape the maximizing paradigm, therefore, we have to ask whether or not it was possible for him to avoid it. Was it possible, within the range of discourse available, for him to speak of price theory and social organization without reference to the "language" of choice and economic rationality? And if it was possible, could there have been a *reason* why Knight did not give up the maximizing paradigm?

Asking these questions leads us into historical reconstruction, which was not Buchanan's aim. But since he (mistakenly) raised the issue, I can say two

¹⁹Buchanan, "Economizing Element in Knight's Critique," 61.

²⁰Skinner, "Meaning and Understanding," 36-38.

things about it, both of which are explored in greater detail in later chapters. The first is that Knight's participation in the discourse of scientific naturalism constrained the range of vocabulary and language rules available to him. Thus, in part, he could not escape the maximizing paradigm because to do so would have been to deny him the use of the language he was accustomed to speaking. But we can go one step further than this. The second thing we will find is that the therapeutic nature of his relation with his discursive context led him to play upon the ambiguity of the words "rationality" and "value" within the maximizing paradigm. By preserving reference to these terms, Knight was able to keep before economists a reminder of the limitations of economic rationality and, consequently, the need for a theory of moral value as well as a theory of price. A clear example of Knight's desire to maintain both senses of the word "value" is found in a book review published two years before "The Ethics of Competition," where he says,

the repudiation of value theory is very good, and the writer is altogether in favor of it . . . But should it not be kept in mind also that the ultimate object of economic theorizing is a criticism in ethical and human terms of the workings of the economic machine, and that a theory of value as well as price is indispensable?²¹

Ironically, Buchanan himself admits the power of Knight's therapeutic probing of naturalism when he says, at the end of his article,

²¹Frank H. Knight, "Cassel's *Theoretische Sozialökonomie* (review of *Theoretische Sozialökonomie*, by G. Cassel), *Quart. J. Econ.* 36 (November 1921): 146.

It is, of course, possible that it was precisely the methodological ambiguity that created the tension in Knight's analysis and that it is this tension that allows us to remain fascinated with his works.²²

* * * * *

Thus, interpreters of Knight's work may fall into the "mythology of doctrines" trap because their interest in the central issues of *their own* discursive context takes precedence over their interest in uncovering Knight's therapeutic response to the central issues of *his* discursive context, even though they are trying to say something about Knight's own interests. Because Knight did not share the contemporary practitioner's concerns, and developed his ideas as therapeutic responses to questions being asked in a different discursive context, the historiographic priority of the contemporary practitioner's perspective prevents interpreters from presenting a reconstruction which is closely related to what Knight actually meant to say.

The "Mythology of Coherence" Trap

Closely related to mythologies of doctrines, a *mythology of coherence* is created when the historian, in the process of seeking for the past thinker's contribution to the doctrinal development of the contemporary set of canonical topics, attempts to render the thinker's work internally coherent by combining through it again and again in order to somehow discover the set of underlying

²²Buchanan, "Economizing Element in Knight's Critique," 74.

principles upon which it can be said to be systematically constructed. When this happens, the historian's account

very readily ceases to be an historical account of any thoughts which were ever actually thought. The history thus written becomes a history not of ideas at all, but of abstractions: a history of thoughts which no one ever actually succeeded in thinking, at a level of coherence which no one ever actually attained.²³

In Knight's case, a mythology of coherence often results from reconstructions which fail to attend to his unusual intentions. While it may be appropriate to consider large parts of the work of some systematic thinkers as contributions to the development of a particular research program and therefore legitimately assume that they were seeking to achieve a high degree of internal coherence, such an assumption seriously misconstrues the work of therapeutic thinkers such as Knight. Approaching the ruminating character of his work from a systematic perspective would lead to the anomalous position of attributing to him a unity of thought and purpose which Knight himself could never have attained. Once again we see that interpretations of Knight which construct a unified, integrated, and coherent account of all (or even part) of his work have failed to capture its historical identity.

* * * * *

The difficulties which emerge from treating Knight's therapeutic ruminations as a coherent system of thought can be illustrated by reference to

²³Skinner, "Meaning and Understanding," 40.

several of the most important previous studies of his work. Consider first the account of Knight's work provided in the least successful, yet most ambitious, of these studies--John Wesley McKinney's doctoral dissertation on the entire sweep of Knight's philosophical writings on economic theory and method, human rationality, ethics, and liberal society.²⁴ McKinney's account of Knight's thought begins with the assumption that "in spite of the broad range of his interests, there is an underlying unity to his thought."²⁵ That unity is provided, McKinney claims, by Knight's voluntaristic theory of the nature of human action. McKinney then proceeds to substantiate that claim by showing how Knight's economic theory, philosophy of the social sciences, and understanding of liberal society are all founded on voluntarism. Throughout his reconstruction, he also argues that Knight's arguments in each of the areas mentioned must be rejected because the underlying theory of human agency is wrong (McKinney prefers a pragmatist account).

The problem with McKinney's interpretation is neither his identification of a voluntaristic account of human agency as the central theme of Knight's work (for the same theme will play a major role in the following chapters) nor his

²⁴McKinney, "A Critique of Frank H. Knight's Economic Philosophy," Ph.D. diss., Columbia University, 1967. McKinney's interpretation of Knight has since published in two articles: idem, "Frank H. Knight and Chicago Libertarianism," in *The Chicago School of Political Economy*, ed. Warren J. Samuels, Michigan State University Business Studies (East Lansing: Michigan State University Press, 1976), 191-213; and idem, "Knight on Uncertainty and Rational Action."

²⁵Ibid., 1438.

rejection of it in favour of a different set of first principles, but rather his attempt to see Knight's thought as *systematically* built around it. There are simply too many places in Knight's work where he counterbalances his concern for free moral agency with the psychological and social necessity of constraints on our action (both self-imposed and external), for it to be plausible to make free human agency the cornerstone of his work. Instead of seeing Knight's work as a systematic account of human behaviour organized around a voluntaristic theory of human agency, it is more appropriate to see Knight employing free moral agency at one point as a therapeutic reminder of the limitations which face attempts to reduce human conduct to mechanistic order and control, and, at another, employing notions of order and control to remind us of the ways in which we try to contain the uncertainties a completely voluntaristic universe would present.

Another way to see the historiographic problem in McKinney's treatment of Knight is to focus on his desire to classify Knight's economic philosophy as Jamesian or Bergsonian.²⁶ Once Knight has been classified in such a manner, McKinney's criticism of him can focus on the theoretical system to which he is

²⁶McKinney's most succinct statement of the influence of William James and Henri Bergson on Knight is found in the first section of "Knight on Uncertainty and Rational Action," 1438-39. The difficulties described here, however, are most obvious in his dissertation, where he spends pages describing a philosophical or psychological theory to which Knight is said to subscribe, with little reference to Knight's own writing, and little evidence that Knight himself was as familiar with the writings of James and Bergson as McKinney is.

said to subscribe.²⁷ Such a focus, however, misses the way in which Knight employed for his own therapeutic purposes concepts borrowed from other thinkers (and James and Bergson were not the only ones from whom he borrowed). Typically, Knight's own purposes shaped the way in which he used another thinker's idea in such a manner as to give the original idea a different meaning--one appropriate to Knight's therapeutic participation in his own discursive community. Thus, McKinney's failure to see the therapeutic quality of Knight's work leads him to achieve coherence at the expense of understanding and allows him to criticize Knight without having to accept the challenge of Knight's ideas.

To be fair to McKinney, I should point out that his published accounts of Knight's work exhibit an awareness of the non-systematic nature of Knight's thought that is rarely present in his earlier dissertation. However, where McKinney notes Knight's therapeutic orientation, which he attributes to a pluralistic epistemology, it is not a source of insight into the patterns of his thought, but rather, simply a disturbance:

It is Knight's pluralism that presents the greatest difficulty to his interpreters and critics, for it implies holding two or more inconsistent positions simultaneously. This philosophy may be useful as an antidote to a simple-minded monism . . . but an overdose of pluralism calls for its

²⁷McKinney says that he is "concerned to point out how James's psychology offers two alternative, doubtfully consistent ways of taking account of the creative mind. Our study of Knight's ideas is essentially a comparison of two interpretations of the active character of thought, and how they lead to contrasting views of the nature of economic science and its relevance to action." McKinney, "A Critique of Knight's Philosophy," 23. Once again we recognize that mythologies of doctrines and mythologies of coherence are closely related.

own antidote. It is the function of intelligence to render our experience coherent, yet the pluralist finds the highest truths in logical contradictions. Much of Knight's analysis consists in showing how his conceptions, such as 'freedom' or 'rational action' lead to paradox and confusion when one attempts a consistent application of them--thus, 'it would be irrational to be, or try to be, perfectly rational.' Rather than going on to develop more useful conceptions, he stays to enjoy the reader's perplexity.²⁸

* * * * *

The same kind of problem which plagues McKinney's interpretation of Knight appears in Eva and Abraham Hirsch's article on Knight's economic methodology, although the Hirsches see a somewhat different *basic* principle at work in Knight's thought than did McKinney.²⁹ The Hirsches set out to show that Knight's general methodological position is heterodox, within the context of the mainstream of economic thought, because he consistently espoused an "assumptive" (i.e., a priorist or rationalist) doctrine while the rest of the discipline generally held to a "predictive" (i.e., positivist or empiricist) methodological doctrine.³⁰ According to the Hirsches, Knight's methodological writings are to be understood as a bold attempt to remove economic theory completely from the realm of science in order to gain both methodological consistency and the capacity to intertwine freely political values and economic analysis.

²⁸McKinney, "Knight and Chicago Libertarianism," 208.

²⁹Hirsch, "Heterodox Methodology."

³⁰Ibid., 60, 63.

In the process of describing the system Knight constructed, however, the Hirsches run into a major snag: although Knight argued, in a manner consistent with the a priorist side of his thought described by the Hirsches as the central characteristic of his work, that economics *is not* a "science"--understood in terms of empirical observation and prediction--he also insisted that economics *is* a science. The Hirsches do not know exactly what to do with this paradox. They suggest several interpretations which might render the paradox consistent with their interpretation of the rest of Knight's thought, but then show that each possible interpretation is in some way inconsistent with other aspects of their account of his work. Therefore, they conclude with a statement of their belief "that this is the most vulnerable portion of Knight's methodological formulations," and they suggest "that it is not an inherent element in the methodological vision which Knight was trying to rationalize."³¹

The treatment the Hirsches give this paradox in Knight's thought reveals their failure to avoid the mythology-of-coherence trap. Note first that they begin by defining Knight's work as exhibiting a *general position* which can be characterized by the application of the more contemporary distinction between apriorism and positivism. Then, in the process of describing that "general position," they encounter an important anomalous proposition, which they cannot render consistent with the rest of their account. What is to be done? Instead of

³¹Ibid., 65.

wondering whether their characterization of Knight's "general position" might not be the problem, the fixity of their modern categories leads them simply to explain away the anomaly as an *unessential* part of his ideas--because it is inconsistent with the general position which they assumed from the beginning that he was articulating. The Hirsches, therefore, never stop to consider whether Knight might have *intended* to hold the two sides of the paradox in tension in order to make methodological points which cannot be made by the simple espousal of a consistent--yet one-sided--position.³² Once again, coherence becomes a substitute for understanding, and consistency with a well-defined (by the historian) "general position" becomes the sole criterion of methodological insight.

* * * * *

Some might suggest that the problems raised by interpretations of Knight such as those provided by McKinney and the Hirsches are the result of organizing Knight's thought around only *one* basic theme--which, like a one-legged stool, will not stand up. The solution, they might suggest, is not to give up trying to construct a more coherent system out of Knight's work, but rather to examine that work more carefully to see what other elements Knight might have placed in the foundation to provide more stability. The type of intellectual system such an

³²Daniel Hammond's article, mentioned earlier, can be read as a direct rebuttal of the Hirsches' interpretation. For Hammond, the paradoxical nature of Knight's views on science and economics is not to be explained away, but to be resolved by understanding both its sides. Hammond, "Knight's Anti-Positivism," 27.

investigation might produce would probably look a lot like the one Richard Gonce produced in his comprehensive study of Knight's theory of economics and social control.³³

Gonce begins by describing Knight's work as an attempt to provide a systematic response to the methodological challenge posed to traditional economic theory in the early part of this century by those articulating various types of scientific naturalism (e.g., positivism, behaviourism, and evolutionary determinism).³⁴ According to Gonce, Knight's system is based upon an alternative, rationalistic philosophical foundation comprised of: (1) an account of human nature which, while recognizing the objective aspects of our behaviour, emphasizes the subjective (and hence non-empirical) aspects of human motivation; (2) an instrumentalist account of human knowledge (because the mind cannot grasp "reality," it must create instruments to help it achieve its purposes); and (3) a rationalistic libertarianism.³⁵ Upon this stable three-legged foundation, Gonce argues, Knight built a coherent set of "remarkably comprehensive" methodological principles which provide "answers to the questions over the nature, application, and empirical verification of [economic] theory."³⁶ Those principles can be summarized as follows:

³³Gonce, "Knight on Social Control."

³⁴Ibid., 547.

³⁵Ibid., 548-50.

³⁶Ibid., 547.

Principle 1. *Economic theory* is an abstract science which provides an *idealized* description of an *aspect* of human behaviour, rather than a *positive* description of *actual* behaviour.³⁷

Principle 1.1. The ideal-type which economic theory describes is the behaviour of a value-seeking, rational individual set in the context of a free social environment in which the individual's *only* problem is that of allocating scarce resources among competing, but known, ends.

Principle 1.1.1. The fundamental propositions about this ideal-type of behaviour form a set of *a priori* assumptions, known by introspection rather than observation, from which economic theorems are deduced in a manner similar to geometry.

Principle 1.1.2. Because economic theory studies an idealized description of an aspect of *all* human behaviour, all inquiry into human conduct and social phenomena must make reference to it.

Principle 1.1.3. Assuming the validity of the ethical imperative of maximum individual freedom, the ideal-type describes both the behaviour of the "*ethically ideal individual*"--because no one "has coercive power over another, liberty is perfect, and all economic relations are *impersonal* and brought about by *mutual consent*."--and the conditions for the ethically ideal state--in pure competition, "the state enforces a *minimum* of laws while the real governor, the competitive market mechanism, by a process of *direct democracy impersonally* creates and adjusts laws (prices) that are obeyed by voluntary cooperation and need *no enforcement*."³⁸ Economic theory, therefore, can provide a *normative guide* to social policy in a liberal democracy.

Principle 1.1.4. Price theory is a description of how an impersonal mechanism adjudicates opposing forces (competing self-interests) and is best served by the Marshallian method of *comparative statics*.

Principle 1.2. Economic theory is only a *partial* account of human behaviour. The scope of economic theory is limited by the degree to which

³⁷Each of the principles stated here are condensed versions of Gonce's descriptions, found in *Ibid.*, 551-56.

³⁸*Ibid.*, 552 (italics in original).

actual human behaviour fits the ideal-type, and the degree to which the social environment fits the conditions necessary for the perfect operation of the ideal-type. These limiting conditions set the boundaries for the application of economic theory in social policy and provide a guide to the direction of social policy.

Principle 2. *Applied economics* supplements economic theory to align it with empirical phenomena.

Principle 2.1. The method of applied economics is similar in kind to the methods of the natural sciences, inasmuch as it makes use of statistical and other empirical techniques. However, applied theory does *not* issue in economic laws analogous to scientific laws, and offers little in the way of empirical prediction and control because of the complexity of actual human behaviour and social phenomena--it is as much an *art* as a *science*.

Principle 2.2. From the standpoint of applied economics, economic theory acts *solely* as a guide to the construction of empirical hypotheses. The theory itself cannot be verified or falsified by the success or failure of those empirical hypotheses.

Principle 3. *Institutionalism* is a *historical* study of long-run changes in the variables assumed constant by the pure and applied sciences.

Once again, the question to ask of such an interpretation of Knight's thought is not whether these themes are to be found in his work--for there is no denying that they are--but rather, whether *any* construction of Knight's "general position," even one as comprehensive and sensitive as Gonce's, can adequately capture the therapeutic quality of Knight's work (perhaps the proper analogy for Knight's work is not a stable stool, but a spinning top, which stands up on quite different principles³⁹). There are, certainly, at least a couple of things to be said in favour of Gonce's interpretation. First, Gonce's reconstruction of Knight's

³⁹A.M.C. Waterman first suggested the analogy of a top to me in his comments on an earlier draft of this chapter.

work is carefully articulated in order to provide a sense of the balance among ideas found there. For example, he is careful to resist the identification of Knight's theory of human nature as voluntaristic as McKinney did, because he recognizes Knight's sensitivity to the paradoxical nature of the interaction between the objective and subjective in human experience. Furthermore, the way in which Gonce presents his interpretation of Knight highlights, perhaps without his own recognition of this, the therapeutic quality of Knight's work. Gonce's recognition of the fact that Knight's work was developed in response to the challenge of scientific naturalism leads him to articulate the philosophical foundations of Knight's system in a manner which emphasizes the limitations those themes place upon the application of the empirical method to social inquiry.⁴¹ But none of this can remove completely the suspicion one should have of accounts of Knight's ruminations which seek to portray them as coherently advancing a general position. Evidence supporting that suspicion will have to be produced in the following chapters, of course, but for the moment it will be sufficient simply to point the way toward a more adequate interpretation by asking a number of leading questions of Gonce.

The first area in which questions need to be asked has to do with Gonce's treatment of inconsistencies and anomalies in Knight work. What does one do

⁴⁰Ibid., 548.

⁴¹Ibid., 548-50.

with the themes in Knight's work which, although he obviously believed them with some conviction, are nevertheless inconsistent with the general position ascribed to him? An example of an appropriate question one might ask of Gonce would be: how could Knight be as profound a rationalist as Gonce believes him to be, when he once described himself as a "radical empiricist" in the Jamesian tradition, wrote to Wesley Mitchell saying that he was "as thorough-going an empiricist as you or anyone else," and, at another point, stated that the laws of mathematics and logic differed from the laws of the natural order only in their degree of abstraction, and that *both* sets of laws were empirically verifiable?⁴² Does one simply search for a higher level of coherence, only ultimately to run afoul of Skinner's condemnation of studies which produce coherence at a level that no human being, especially a puzzler and ruminator like Knight, could ever have actually operated? Surely some means must be found to interpret Knight's work in a way that sustains the tensions he held among ideas *without* always trying to reconcile them through the application of some unifying meta-level principle.⁴³

⁴²See respectively: Knight, *Risk*, 201, n.; idem to Wesley C. Mitchell, TL, 17 April 1934, FHK B61 F8; and idem, "What is Truth?," 157.

⁴³I do not intend this criticism of Gonce's interpretation of Knight to sound too negative and detract too much from his accomplishment, because he is generally sensitive to the tensions among ideas within Knight's work, even though he argues that they are unified within a coherent system. Other interpreters, such as the Hirsches mentioned above, are not quite as aware of what Knight was doing and are therefore even more susceptible to the criticism aimed here at Gonce.

The second set of questions to ask of Gonce have to do with his suggestion that Knight held, without change, to the central elements of the general position Gonce ascribes to him from the early 1920's to the end of his life. If this is so, two questions emerge. First, what does one do with *Risk*, which Knight described as being written at a time when he regarded himself "as an advocate of the objective method," and believed "that economics ha[d] to be based on 'behavioristic' psychology"?⁴⁴ If, as Knight claims, he changed his mind during the early 1920's, surely this calls for some explanation, as well as an investigation of the relationship between the ideas about economic method and social control expressed in *Risk*, and those expressed in his later writing.⁴⁵ Secondly, the possibility of a change in Knight's thinking raises the question of whether he recognized the full implications of his new alignment immediately, or, as is more likely, grew slowly into them. Perhaps one needs to focus on constructing an account of how the implications of that change became apparent to him *over time*.

Finally, one needs to ask Gonce what is to be done about the fact that Knight tended to avoid allying himself with other rationalists and anti-empiricists against the scientific naturalists and, indeed, in at least one instance deliberately sided *with* the naturalists in a battle over the validity of scientific thought in the

⁴⁴Frank H. Knight to Jacob Viner, TLS, 9 September 1925, Jacob Viner Papers, Statecraft Collection, Princeton University Library, Princeton, NJ.

⁴⁵Gonce makes little reference to *Risk* in his interpretation, emphasizing instead the foundational nature of the essays Knight wrote during the 1920's. Gonce, "Knight on Social Control," 547, n. 3.

social sciences?⁴⁶ Why did Knight both oppose and support the scientific naturalism which formed the dominant philosophical framework of American social science in the first several decades of this century? Is it possible that Knight should be understood as presenting an *internal* critique of that framework, rather than a competitive philosophical doctrine?

Each of these problem areas in Gonce's interpretation highlight the fact that, with a therapeutic thinker such as Knight, no description of the thinker's *general intellectual position* will be able to capture completely the *intentions* which lie behind the thinker's intellectual activity. Given the ruminating nature of Knight's thought, reconstructions of his work which seek to recover its historical identity cannot construe it as a comprehensive and cohesive whole, to be examined solely on the meanings of the words in his standard texts. The ruminating complexity and therapeutic intention of his work imply that reconstructions of his work must be less ambitious in the scope of their coverage and more attuned to the paradoxical nature of his participation in the naturalistic "language" of social scientific discourse in his time.

⁴⁶That instance was the famous "Chicago Fight" described in more detail at the beginning of the next chapter.

CHAPTER THREE

THE RE-ORIENTATION OF AMERICAN SOCIAL DISCOURSE IN THE TWENTIES AND EARLY THIRTIES

RELIGION, SOCIAL SCIENCE AND THE CRISIS OF DEMOCRATIC THEORY

How is science to be accepted and yet the realm of values to be conserved?

*John Dewey, *The Quest for Certainty*, [1929]*

The Chicago Fight¹

On the 9th of February 1934, the University of Chicago was the scene for an event which brought to a head the academic skirmishing that had been going on within the University for several years. Ostensibly, the event was simply a debate between a philosopher of law and a physiologist over the prospects for, and respective merits of, scientific, as opposed to metaphysical, knowledge. But there was nothing simple about the debate. For one thing, there was the question of the place. During the early years of the twentieth century, Chicago had

¹My description of the debate, and the ensuing events, which comprise what Mortimer Adler calls the "Chicago Fight," is drawn from Mortimer J. Adler, *Philosopher at Large: An Intellectual Autobiography* (New York: Macmillan, 1977), 163-66; Bulmer, *Chicago School of Sociology*, 202-4; and Purcell, *Crisis of Democratic Theory*, 3-5.

become the bastion of scientific naturalism; a place where all "idle speculation" regarding metaphysical questions had been banished by the dictates of empirical science. Under the central bay window of the new Social Science Research Building was emblazoned a motto worthy of the place naturalism held in the University: Lord Kelvin's dictum, "When you cannot * measure * your knowledge is * meager * and * unsatisfactory *."² The naturalists were in firm command of most of Chicago's research programs, both in the natural and social sciences, and their program for the scientific control of society had recently become the cornerstone of American efforts to deal with the Great Depression. Anyone who challenged the primacy of scientific knowledge at Chicago had to be either extremely courageous or foolhardy (or, perhaps, both).

Secondly, there were the debaters: Mortimer Adler and Anton Carlson. Adler, as yet unknown to the American public, was a young law professor whose philosophical rationalism had begun to win support among his students and in the University administration--particularly with the University's new president, Robert Hutchins. Adler had arrived at the University in the fall of 1930 upon the personal request of the new president, and had immediately established the tone of his approach to the University's dominant tradition, by proclaiming that:

²The asterisks represent a rose-like symbol inserted in place of ellipses by the stonemason. For a fascinating account of the Kelvin dictum's place on the Social Science Research Building, see Robert K. Merton, David L. Sills, and Stephen M. Stigler, "The Kelvin Dictum and Social Science: An Excursion into the History of an Idea," *J. Hist. Behav. Sci.* 20 (October 1984): 319-31.

current research programs in the social sciences are misdirected and methodologically ill-advised because of erroneous conceptions of the nature of science which comprise the "raw empiricism" characteristic of contemporary social science.³

Among the social sciences, the only discipline which Adler could praise was theoretical economics; sociology, which at the time was at the peak of its power in the University, he condemned as inexact and, hence, unscientific.⁴

Remarks such as these had sparked the controversy that was now sweeping the University community. Both Adler and President Hutchins had challenged the naturalists in almost every aspect of academic life at the university, from departmental appointments to the general shape of the curriculum. Only a month before the debate, at the annual dinner for the University's board of trustees, Hutchins had labelled the scientific naturalists' approach to education "anti-intellectual."⁵

Anton Carlson, the other debater, was a physiologist of world renown and one of the more outspoken supporters of scientific naturalism. The rationalism of Adler and Hutchins, he believed, needed to be nipped in the bud before it infected the minds of the young and led them to question the veracity of science. Carlson arrived at the debate late, dressed in his white laboratory coat; at the beginning of his remarks he apologized for his lateness by saying that he had

³Quoted in Adler, *Philosopher at Large*, 135.

⁴Bulmer, *Chicago School of Sociology*, 203.

⁵Robert Hutchins, quoted in Adler, *Philosopher at Large*, 163.

come straight from his research (the remark was met with thunderous applause). Both Carlson and Alder were obviously not the types to admit any truth in the position of the other.

Finally, there was the audience. Somehow, the entire University community recognized that the debate would reach to the roots of Chicago's intellectual heritage and pose the challenges which that tradition now faced in the early 1930's. Everyone turned out for the event. In anticipation of a large crowd, the debate was held in the largest auditorium on campus, Mandell Hall. However, despite the fact that tickets were free, seating was not, and enterprising students (ever aware of the principle of scarcity) were able to "hawk" tickets for as much as one dollar apiece. Some of the departments bought box seats for their entire faculty.

The debate was long and acrimonious. Adler argued that the light of reason illuminated both the True and the Good. Carlson replied that all that metaphysical speculation had revealed in the past was ignorance and superstition. There were no absolutes, he claimed, except the scientific method, which alone could yield knowledge of the natural and social world. Adler pointed out that science was an insufficient foundation for human knowledge, because it could not move beyond the world of facts to explain the principles that govern the natural world. Carlson rebutted him by arguing that there *was* nothing beyond the world of facts: knowledge was empirical, not metaphysical; particular, not universal; and

verifiable only by experiment, not philosophical speculation.⁶ Carlson demanded that Adler defend a string of "outrageous statements" taken from President Hutchins' speeches. Adler, who had helped to write the speeches, showed that the statements were not so outrageous when taken in context.⁷ The audience, meanwhile, reacted passionately to every thrust and parry, erupting in thunderous applause whenever a particularly telling point was made by either side.

Neither side emerged victorious, although both thought that they had gotten the better of their opponents, and the debate continued outside the walls of Mandell Hall. The campus newspaper, *The Daily Maroon*, soon became the centre of the controversy. Besides publishing numerous letters attacking one or the other side, the editor of the paper, one of Adler's students, used his editorial space to promote Adler's cause--eliciting howls of outrage and cries for "freedom of the press" from Adler's opponents. In protest against the one-sidedness of the newspaper's editorials (guest editorials for the other side were not accepted), one of the economists on campus, Harry Gideonse, began to post the editorials on the wall outside his office, with appropriately acerbic commentary added in the margins. The editor's reply did nothing to assuage his opponent's fears: "Rational men," he said, "have a right, if they wish to save time, to be intolerant of simple or

⁶Purcell, *Crisis of Democratic Theory*, 3.

⁷Adler, *Philosopher at Large*, 165.

intentional stupidity."⁸ A special issue of the newspaper was eventually devoted to the controversy. It sold more than 5,000 copies on campus, and brought requests for bulk orders from around the country.

The battle was carried forward at the curricular level, also. President Hutchins and Adler continued their push for the establishment of a separate college within the University, entirely devoted to the study of the "Great Books." The social scientists fought the establishment of the college (they vetoed Hutchins' curriculum reform proposal three times before a Great Books program was eventually established in the early 1940's), and countered Hutchins' not-so-subtle rebuffs by forcing all University students enrolled in the Introductory General Course in the Study of Contemporary Society to read Frank Knight's scathing attack on the Adler-Hutchins camp. Knight's essay was entitled "Is Modern Thought Anti-Intellectual?"; the conclusion he drew was that modern thought was not anti-intellectual, but that the "medievalism" of Adler and Hutchins was, because their defense of philosophical rationalism was tantamount to an appeal for the right to form an intellectual dictatorship:

The very notion of self-evident or logically demonstrated truth is essentially a justification for the use of force. Any proposal of a rationalistic ethics, sociology, or jurisprudence is a proposal for a dictatorship, under the high-priesthood of its promoter. . . . Any proposition about which there is discussion or disagreement is, on the face of it, not self-evident or demonstrated, and the only purpose in

⁸*The Daily Maroon* (University of Chicago), 6 June 1934; quoted in Purcell, *Crisis of Democratic Theory*, 4.

asserting that it is such--if more than calling names--is to justify the forcible suppression of disagreement.

If modern thought is to be criticized in this connection at all, it is on the ground of being still, or of having been until recently, excessively rationalistic, and much too tolerant and respectful of "theorizing," uncriticized and unsubstantiated by facts.⁹

* * * * *

The Chicago Fight raged on within the University until the mid-1940's, tearing departments apart, driving away reputable faculty-members in a number of fields (e.g., James Tufts and George Herbert Mead in philosophy both retired early, and Harold Laswell and Harold Gosnell in political science left for other positions), and bringing in faculty members unsympathetic to the naturalistic program (e.g., Leo Strauss, Hans Morgenthau, and the various appointments made to the Committee on Social Thought, including that of F.A. Hayek). The University of Chicago would never again be the bastion of scientific naturalism that it had been in the 1920's.

Nor was the University of Chicago the only place affected by the issues at stake in the Chicago Fight. The debate over scientific naturalism became the central issue of academic discussion in the United States during the late 1930's and early 1940's--appearing in conflicts over academic appointments, curriculum

⁹Frank H. Knight, "Is Modern Thought Anti-Intellectual?," *University of Chicago Magazine* 27 (November 1934), reprinted in "Introductory General Course in the Study of Contemporary Society (Social Science I): Syllabus and Selected Readings," ed. H.D. Gideonse, W.H.C. Laves, and L. Wirth (Chicago: University of Chicago Press, 1934), 156-57 (page references are to reprinted version).

reform, and control of professional associations. But the debate also reached beyond the hallways of America's universities and colleges.

As events in the early 1930's posed several new challenges for American democracy (e.g., the Great Depression, and the emergence of new dictatorships in Europe), Americans turned to their liberal tradition to interpret the meaning of those challenges and to find the resources to face them. What they found, however, was that the old certainties were gone, and in their place stood the naturalists' appeal to the certainty of science. Of course, Americans had come to trust science during the nineteenth century, and therefore did not find the naturalists' appeal completely out of place. But in the past, the conclusions of science had always stood alongside the older certainties of classical liberalism and American Protestantism,¹⁰ and found its strength in its relation to them. Now the naturalists were appealing directly to the authority of science, as against the authority of these older traditions. Furthermore, they were doing so, in part, because they claimed that the conclusions of scientific research in the social and

¹⁰The use of the term "Protestantism" to describe the dominant tradition of religious expression in American history is something of a misnomer: there are several traditions other than the one which dominated American social discourse that are known as "Protestant," and many of them have also found a place in American society. Nevertheless, throughout the dissertation I will use the term in the manner in which it is commonly used in American history; that is, to refer to the Calvinist heritage of the Puritans, which was closely associated with the dissenting tradition in eighteenth century England, and which found its fullest expression in the writings of Jonathan Edwards. To provide some balance to this typical American usage, however, I will use the term "American Protestantism" wherever it is appropriate.

natural sciences called into question the certainty of the assumptions undergirding America's liberal tradition. But was science enough to protect democracy?

In this wider context, the connection that Frank Knight had made between the epistemological and political dimensions of the debate over scientific naturalism was an especially prescient one, for the broader social debate soon focused on the notions of authority and control in a democratic society. And the debate, which had begun as an academic squabble, became a crisis of authority in democratic society.

* * * * *

Because my purpose in this chapter is not to tell the story of how the crisis of democratic theory was resolved in the ensuing years, but rather to set the stage for my examination of Frank Knight's participation in both the early stages of the crisis and the discursive context from which the crisis arose, I will conclude my story of the crisis at this point and turn instead to an examination of how, and why, the crisis arose in the first place (I will return to the crisis at the end of the chapter). My thesis can be stated quite simply: the crisis of democratic authority had its roots in a fundamental re-orientation of American social discourse during the 1920's, in which scientific naturalism played an important role.

Although the Twenties have often been viewed as a self-contained unit of time, a "return to normalcy"¹¹ out of step with the general direction of American

¹¹Warren G. Harding's famous campaign promise in the election of 1920.

thought since the great watershed of the 1890's,¹² the decade was actually a critical watershed in American intellectual life because it was the occasion for a fundamental shift in the language which dominated social discourse. The older language of individualism, rooted in the combined heritage of classical (Lockean) liberalism and American Protestantism, was finally pushed aside by the rising power of the new, scientific language of social control.

The social, political, and intellectual upheaval which had swept across American society during the four to five decades prior to the Twenties had introduced new terms such as "social question," "social cohesion," "social responsibility," and "interdependence" into American discourse. These terms, and the language within which they were usually set, did not consort well with the individualistic language of America's past. Around the turn of the century, a variety of social reform movements sought to broaden the realm of discourse within which notions of social obligation and integration might have a place, but they met with only limited success because they drew upon the same resource that individualism had drawn upon--the religious language of America's Protestant heritage. When the theological domination of American Protestantism broke up under the onslaught of scientific naturalism and pluralization, and when President Wilson's foreign policy failed, the moral authority of the various reform

¹²See Frederick Lewis Allen, *Only Yesterday: An Informal History of the Nineteen-Twenties* (New York: Harper & Bros., 1931). The bibliographic essay mentions several studies which erode the legitimacy of Allen's interpretation.

movements evaporated. But the new language of social cohesion, now firmly rooted in the mainline churches, the professions (including the business community), and the social sciences, did not.

It was to be the social sciences, assisted by the professions that drew upon them, and not the churches (however) that carried the language of social cohesion forward during the Twenties. While the public and private rhetoric of American life seemed to return to the individualism of the past (although, stripped of its millenarian hopes of American Protestantism, individualism in private rhetoric now often bordered on nihilism), the social sciences continued to augment the discursive power of the language of social integration and obligation. The chief means by which they did this was by consummating a marriage between the language of social cohesion and the language of scientific objectivity, which had been courting each other since before the turn of the century. The result was a powerful language of social control which achieved the place of dominance in American social discourse that the language of social integration had failed to achieve on its own. When America once again faced a crisis on a scale which required it to draw on the deepest resources of its common language--the Great Depression--it was the new, "scientific" language of social control, rather than the old, "religious" language of individualism, to which Americans turned. And it was the newfound power of the language of social control which brought about the crisis of authority in democratic theory described above.

From Individualism to Social Control: The Changing Language of Social Discourse in America

During the last couple of decades of the nineteenth century, the growing set of interrelated social, political, and moral problems which were often grouped together as the "social question" came to occupy centre-stage in American social thought.¹³ Until the end of the century, discussion of the social question largely drew on two traditional themes. One was the *language of individualism*, expressed in the beliefs that prosperity was largely the result of good character and hard work, poverty the result of intemperance and indolence, and good government the result of placing men of trust and integrity in office. The other was the *language of anti-monopolism*,¹⁴ that distrust of privilege, status, and concentrations of wealth which found expression in the journalistic endeavours of the muckrakers, the campaigns of the single taxers, the public's reaction to the manipulation of the

¹³I first encountered the term "social question" in Bruce Kuklick, *Churchmen and Philosophers: From Jonathan Edwards to John Dewey* (New Haven: Yale University Press, 1985), 226-27. The importance of the last decade of the nineteenth century in American social discourse is emphasized in Henry Steele Commager, *The American Mind: An Interpretation of American Thought and Character Since the 1880's* (New Haven: Yale University Press, 1950); Thomas L. Haskell, *The Emergence of Professional Social Science: The American Social Science Association and the Nineteenth-Century Crisis of Authority* (Urbana: University of Illinois Press, 1977), 1-23; John Higham, "The Reorientation of American Culture in the 1890's," in *Writing American History: Essays on Modern Scholarship* (Bloomington: Indiana University Press, 1970), 73-102; and James T. Kloppenberg, *Uncertain Victory: Social Democracy and Progressivism in European and American Thought, 1870-1920* (New York: Oxford University Press, 1986).

¹⁴Daniel T. Rodgers, "In Search of Progressivism," *Rev. Amer. Hist.* 10 (December 1982): 123.

market by financiers, and the passage of the Sherman, Clayton, and Federal Trade Commission Acts.

Both of these languages had their roots deep in the American heritage, and drew upon sources from within that heritage for their discursive power and domination. Two sources were of particular relevance: liberalism and American Protestantism. Liberalism was important, not because the American political tradition was, strictly speaking, liberal (there were a number of other traditions of social and political discourse present as well), but because, at certain key moments in American history, liberalism had provided words and expressions around which the nation had rallied. Over time these key words and phrases had continued to be used, and had acquired a host of meanings which Americans could evoke simply by hinting at the expression. Thus, Jefferson's proclamation in the Declaration of Independence that "all men are created equal by their Creator with certain unalienable rights," had become the cornerstone of American political life and the rallying point for any number of different political agendas. And when the life of the nation had been splintered by fractious civil war, Lincoln had reminded Americans that their government was "of the people, by the people, and for the people." Such rhetoric did more than simply rally political support at particular moments in time; the expressions shaped and moulded social discourse long after the particular moment was past.¹⁵

¹⁵See Louis Hartz, *The Liberal Tradition in America: An Interpretation of American Political Thought Since the Revolution* (New York: Harcourt, Brace &

The other source of discursive power for the languages of individualism and anti-monopolism was American Protestantism. The themes of personal salvation, individual responsibility for one's destiny, the dignity of work, and the voluntaristic covenant community provided a rich vocabulary for these languages to draw upon. And underlying both languages, of course, was the belief that American Protestantism was the custodian of the nation's divinely appointed task "of exemplifying to the nations of the world the principles of righteousness found in the Word of God."¹⁶

By the end of the nineteenth century, however, the languages of individualism and anti-monopolism were being stretched to their limits by the changing reality of American social life. The historical contingencies of the nation's origin and subsequent development had allowed Americans to use the individualistic language of classical liberalism without recognition of the "dense and complex structure of constraint and obligation" within which that language

World, 1955); and Daniel T. Rodgers, *Contested Truths: Keywords in American Politics since Independence* (New York: Basic Books, 1987).

¹⁶Woodrow Wilson, source unknown; quoted in Martin E. Marty, *Righteous Empire: The Protestant Experience in America*, Two Centuries of American Life: A Bicentennial Series (New York: The Dial Press, 1970), epigraph. For a series of essays on the web of meaning that American Protestantism provided for social discourse see Giles Gunn, ed., *The Bible and American Arts and Letters* (Philadelphia: Fortress Press, 1983); and James T. Johnson, ed., *The Bible in American Law, Politics, and Political Rhetoric* (Philadelphia: Fortress Press, 1985).

had originally been set.¹⁷ Now, when society was increasingly dominated by industrial giants and the underlying heritage of Protestant theology was cracking under the combined threat of biblical criticism, Darwin's theory of evolution, and the pluralization of American society, that language sounded hollow. What did individualism have to do with the masses of nameless workers, many of whom were non-Protestant, whose lives were sacrificed for the advancement of industrial America? Why did the rhetoric of anti-monopolism become a tool to be wielded against the rise of unions, cooperatives, and other forms of "anti-American" social combination, despite the fact that those who wielded it formed giant corporate combinations whose monopoly power exceeded anything the labour movement could amass? And what was to be made of the increased pluralism of American society, not only by the introduction of new cultures and new forms of religious expression through immigration, but also by the introduction of new tastes, new values and new ideas? As their society became increasingly industrialized, pluralized, and, in the eyes of many, polarized, Americans began to discover that their traditional rhetoric of social discourse had depended upon a unified community identity of white, Anglo-Saxon, Protestant men which could no longer be assumed. How were the traditional values of liberal democracy to be articulated in the context of an industrialized economy and a pluralistic society? In response to that question, notions of social structure, social obligation and

¹⁷Geoffrey Hawthorn, *Enlightenment and Despair: A History of Social Theory*, 2nd ed. (Cambridge: Cambridge University Press, 1987), 192-93.

responsibility, and social integration began to find their way into American discourse.

* * * * *

The *language of social interdependence and cohesion* was alien to most late nineteenth and early twentieth-century Americans.¹⁸ Accustomed to the American Protestant notion of society as a voluntary covenant of individuals for the purposes of fellowship and mutual edification, many Americans found the socialized Protestantism of the progressives, with its talk of social evil, the common good, and the dissolution of the boundary between self and society, difficult to assimilate. However, because its introduction coincided with the tremendous upheaval of American society during the last two decades of the nineteenth century--changes which made the older languages seem outmoded and impotent--the new language quickly began to make inroads into social discourse.

¹⁸Rodgers introduces the "language of social cohesion" and discusses its various origins in American thought in "Progressivism," 124-26. The term "interdependence" comes from Haskell, *Emergence of Professional Social Science*, 14. One can argue that, although the language of social cohesion was alien to Americans at the turn of the century, it took up some aspects of a language which was present at the founding of the American republic, and which, although largely replaced by classical liberalism, still gave meaning to some keywords in American social discourse. That language emerged out of the tradition of civic republicanism, with its talk of the public good and the value of self-constraint, its distrust of the market, and its commitment to the notion of a community at whose centre are notions of Virtue and the Good. See J.G.A. Pocock, *The Machiavellian Moment: Florentine Political Thought and the Atlantic Republican Tradition* (Princeton, NJ: Princeton University Press, 1975); and Joyce Appleby, "Republicanism in Old and New Contexts," *William & Mary Quart.*, 3rd series, 43 (1986): 20-34.

Writing in 1911, F.W. Taylor, the father of scientific management, expressed the new way of speaking when he said: "In the past the man has been first, in the future the system must be first."¹⁹

The presence of the new language can be seen in the transformed meanings it gave to a number of key words in American discourse. Consider, for example, the word "responsibility." Within the older language of individualism, responsibility referred to particular qualities of an individual's character and work habits--Wesley's admonition to "gain all you can, save all you can, give all you can," had been followed by several generations of Americans.²⁰ By the early twentieth century, however, the term referred to the obligation which the institutions of society had to provide for the welfare of the individual. John Maurice Clark, an economist at the University of Chicago, expressed the shift in the meaning of the word when he wrote (in 1916):

"Twenty years ago an economist writing [on economic responsibility] would have been expected to deal chiefly or solely with the responsibility of the individual for his own economic destiny: his responsibility for paying his debt and keeping out of the poor-house. Economic responsibility meant self-reliance and self-dependence. Today any treatment of the subject from such a limited standpoint would be an anachronism. The ideas of obligation which embody the actual relations of man to man in the twentieth century, and answer the needs of the

¹⁹F.W. Taylor, *The Principles of Scientific Management* (New York, 1911), 7; quoted in R. Jeffrey Lustig, *Corporate Liberalism: The Origins of Modern American Political Theory, 1890-1920* (Berkeley: University of California Press, 1982), 2.

²⁰John Wesley, source unknown; quoted in Paul A. Carter, *The Decline and Revival of the Social Gospel: Social and Political Liberalism in American Protestant Churches, 1920-1940*, rev. ed. (Hamden, CT: Archon Books, 1971), 13.

twentieth century, are radically different from the ideas which dominated the nineteenth."²¹

The shift in the meaning of the term "responsibility" occurred across a wide spectrum of American society, from business and industry to the churches, social service agencies and universities. In the business community, for example, the term came to refer to the obligation that the corporation (an institution that itself required a whole new language) had to extend its provision for the welfare of its employees beyond the payment of the prevailing low wages. The success that met Henry Ford's decision to pay his workers \$5.00 per day in 1914, at a time when he could have paid them only half of that and still had potential employees waiting outside his gate for a job, encouraged other corporate leaders to accept higher wages, benefit packages, and even employee representation. Such measures, said one business leader, were "a simple duty that industry owes to labor."²²

In the churches, the universities, and the social reform movements that linked church and university together, "responsibility" increasingly came to refer to

²¹J.M. Clark, "The Changing Basis of Economic Responsibility," in *Preface to Social Economics: Essays on Economics Theory and Social Problems*, Reprints of Economic Classics (New York: Augustus M. Kelley, 1967), 66.

²²Elbert Gary, source unknown; quoted in David Brody, "The Rise and Decline of Welfare Capitalism," in *Change and Continuity in Twentieth-Century America: The 1920's*, ed. John Braeman, Robert Bremner, and David Brody, *Modern America*, no. 2 (Columbus: Ohio State University Press, 1968), 151. The shift in the meaning of the word responsibility within the business community is also noted in James Weinstein, *The Corporate Ideal in the Liberal State: 1900-1918* (Boston: Beacon Press, 1968), x-xi.

the government's obligation to provide for the general welfare.²³ Among Protestant theologians, the question was now "not how every individual was responsible, but how they [i.e., society's Protestant leaders] could be responsible for the many who were not."²⁴ The advocates of the new "Social Gospel" believed that the establishment of the new Jerusalem in America could no longer depend solely on the voluntary actions of the members of the covenant community, for evil reached beyond the heart into the institutions of society. "Social ills," said Walter Rauschenbusch, the movement's foremost theologian, "are bred in the unChristianized areas of modern life," chief among which was capitalism--"an unregenerate part of the social order."²⁵ Salvation lay, therefore, not in personal redemption, but in the regeneration of the social order. "It is not a matter of saving human atoms," Rauschenbusch wrote, "but of saving the social

²³See Sidney Fine, *Laissez Faire and the General-Welfare State: A Study of Conflict in American Thought, 1865-1901* (Ann Arbor: University of Michigan Press, 1956; Ann Arbor Paperbacks, 1964); Kloppenberg, *Uncertain Victory*; Lustig, *Corporate Liberalism*; and R. Jackson Wilson, *In Quest of Community: Social Philosophy in the United States, 1860-1920* (New York: John Wiley, 1963).

²⁴Kuklick, *Churchmen and Philosophers*, 227.

²⁵Walter Rauschenbusch, *A Theology for the Social Gospel* (New York: Macmillan, 1917), page reference unknown; quoted in Carter, *Decline and Revival of the Social Gospel*, 14. The first chapter of Carter's book contains a description of the intimate relation between the introduction of the language of social cohesion and the rise of the Social Gospel.

organism. It is not a matter of getting individuals to heaven, but of transforming the life on earth into the harmony of heaven."²⁶

Throughout the last two decades of the nineteenth century and the first two decades of the twentieth, the "Social Gospel" provided much of the language within which the progressive movement set its call for a new social order in which the government would assume its responsibility for the general welfare. Because many social scientists were closely connected with the "Social Gospel" and related movements for social reform, it is not surprising to find that the central problems of the social sciences emanated "from the dilemmas and contradictions in the relationship between God, the state, and civil society."²⁷

However, the social sciences co-existed with American Protestantism in an uneasy relationship. For one thing, Protestantism, even in its socially progressive form, left little room for intellectuals who were entitled to speak authoritatively

²⁶Walter Rauschenbusch, *Christianity and the Social Crisis* (New York: Macmillan, 1907; reprint, New York: Harper and Row, 1964), 65; quoted in William R. Hutchison, *The Modernist Impulse in American Protestantism* (Oxford: Oxford University Press, 1976), 173.

²⁷Vidich and Lyman, *American Sociology*, 281. Vidich and Lyman's study is one of several that show the close connection between religion and the rise of the social sciences. See also, A.W. Coats, "Religion, Economics, and the Emergence of the Social Sciences in Victorian Britain and the United States," paper presented at a meeting of the History of Economics Society, Atlanta, GA, 29 December 1989; J.R. Everett, *Religion in Economics: A Study of John Bates Clark, Richard T. Ely, and Simon N. Patten* (New York: King's Crown Press, 1946); Mary O. Furner, *Advocacy & Objectivity: A Crisis in the Professionalization of American Social Science, 1865-1905* (Lexington: University Press of Kentucky, 1975); and Kuklick, *Churchmen and Philosophers*.

on the basis of their knowledge, rather than their moral commitments.²⁸ For another thing, the scientific study of nature and of history had seriously called into question the authority of Protestant theology. In order to distance themselves from the difficulties that American Protestantism was experiencing theologically, and to gain an even greater voice in social discourse, the social sciences and the professions that drew upon them--management, social work, psychiatry, etc.--needed to redefine the pressing concerns of American society in such a way as to assert the indispensability of their knowledge (and, hence, of themselves) to the preservation of liberal democracy.²⁹

²⁸See Richard Hofstadter, *Anti-Intellectualism in American Life* (New York: Alfred Knopf, 1969).

²⁹I will concentrate on the development of the new language in the social sciences, which comprise the field of discourse most appropriate to Frank Knight's work. For studies of the development of the language in the professions see: Clarke A. Chambers, *Seedtime of Reform: American Social Service and Social Action, 1918-1933* (Ann Arbor: University of Michigan Press, 1963; Ann Arbor Paperbacks, 1967); Alfred D. Chandler, Jr., *The Visible Hand: The Managerial Revolution in American Business*. Cambridge: Belknap Press (Harvard University Press), 1977); Samuel Haber, *Efficiency and Uplift: Scientific Management in the Progressive Era, 1890-1920* (Chicago: University of Chicago Press, 1964); and Ellis Hawley, *The Great War and the Search for a Modern Order: A History of the American People and Their Institutions, 1917-1933* (New York: St. Martin's Press, 1979). William J. Barber's *From New Era to New Deal: Herbert Hoover, the Economists, and American Economic Policy, 1921-1933*, *Historical Perspectives on Modern Economics* (Cambridge: Cambridge University Press, 1985), 1-41 traces the common lines of the new language's development in business and economics. The different perspectives that the language of social control provided the social sciences and the business community are described in Henry May, "Shifting Perspectives on the 1920's," *Mississippi Valley Hist. Rev.* 43 (December 1956): 406-7.

* * * * *

The *language of social control*,³⁰ which emerged from the redefinition of the central concerns of American democracy in light of social scientific knowledge, emphasized the need to apply scientific intelligence to the problems of social action. Stripping the language of social cohesion of the vestiges of Protestantism, the language of social control appealed to the one certainty that had weathered the troubled years of uncertainty and doubt; namely, science. Despite a lingering debate over exactly what science was, and in particular what a science of society was (which provided the best model--physics, biology, or chemistry?; what role did evolution play in scientific inquiry?; what about mathematical modelling, statistics, etc.),³¹ social science relied upon the fact that, for most Americans, there was little doubt about what science could do. New advances in the control of nature had emerged from the scientific study of the natural order; similar advances in the control of society, the social scientists

³⁰Rodgers, "Progressivism," 126.

³¹The general lines of the debate are traced in Ross, "Social Sciences," 125-30. Recognition of the common purpose uniting groups of social scientists who otherwise argued bitterly over the nature and method of scientific study suggests that the mainstream of economics in the early twentieth century, which emphasized theory (marginalism) in an era of anti-theorists, was not as separate from the other social sciences (or, for that matter, from the so-called "Institutionalists") as it is sometimes portrayed. Marginalism provided economists with a "scientific" seal, certifying their authority to speak as experts on questions related to social action. See Robert L. Church, "Economists as Experts: The Rise of an Academic Profession in America, 1870-1920," in *The University in Society*, vol. II: *Europe, Scotland, and the United States from the 16th to the 20th Century*, ed. Lawrence Stone (Princeton: Princeton University Press, 1974), 571-609.

argued, were to be expected from the development of a scientific study of the social order. The demise of American Protestantism as the prominent language of social discourse had left the ship of democracy adrift in a sea of uncertainty. Who better could take control of the ship and lead it to safe harbour than themselves--masters of the scientific method?³² Thus, as Robert Church has said about economics in the period:

The shift from a stress on moralism and reform to a stress on objectivity and science . . . is best seen as a shift in strategy designed to enhance the economist's capacity to affect society.³³

The new language of social control did not sweep the field of social discourse immediately: revolutions in language are not the "*gestalt* switches" which Thomas Kuhn described revolutions in science to be.³⁴ American Protestantism and classical liberalism lost their place of prominence slowly, and continued to shape discursive practices, even in the social sciences, long after they had lost their dominant position. Nevertheless, it is fair to say that the Twenties marked the crucial transition period. Before the end of the Great War, despite the inroads made by the social reformers, the place of prominence still belonged to the older languages of individualism and anti-monopolism, and, hence, to

³²The metaphor used here is an adaptation of imagery Walter Lippmann introduced in his *Drift and Mastery: An Attempt to Diagnose the Current Unrest* (New York: Mitchell Kinnerley, 1914).

³³Church, "Economists as Experts," 573.

³⁴See Kuhn, *Scientific Revolutions*, 111-35, and 150.

American Protestantism and classical liberalism. By the time the Great Depression began in the early 1930's, the same place of prominence belonged to the new language of social control and, hence, the social sciences and their related professions.

Interdependence and Social Control Social Scientific Discourse in the Twenties

In order to understand how the language of social control emerged out of a union of the languages of social cohesion and scientific objectivity in the social sciences, one needs to start with the relation between the notions of science and social interdependence during the late-nineteenth-century methodological controversy between "historicists" and "theorists." Historicism was introduced into American social science by the scores of young scholars who, during the latter half of the nineteenth century, spent their graduate school years studying in Germany.³⁵ For these young Americans, the lessons of the German historical school were threefold. First, truths were always contingent, rooted in the historical and social particularities of a specific time and place. Because the older social scientists emphasized the universal character of the truths of economic theory--among which were the efficiency of the market and the inefficiency of government intervention--the younger historicists held them in disdain (the favour was, of course, returned).

³⁵See Church, "Economists as Experts," 571-609; Furner, *Advocacy & Objectivity*; and Ross, "Social Sciences," 113-21.

Secondly, the young American students of German historicism learned that they were to study history "*wie es eigentlich gewesen*";³⁶ those more interested in current affairs easily translated this into the study of society "as it is really happening." For young Americans schooled to think of objective science as a form of Baconian inductivism,³⁷ it was not hard to read this directive from Germany as a call to forebear theory and turn to the collection and interpretation of the actual circumstances of society ("the facts"). Because the experience of social life "as it really is" was a "rich, moving, living current," unapproachable by the abstract formalism of economic theory, the historicists "touched off a large-scale revolt against formalism in philosophy and the social sciences."³⁸

³⁶Generally translated as "as it really [or actually] was." The quotation is the most famous expression of Leopold von Ranke, the nineteenth-century German historian whom American historians believed embodied the spirit of objectivity in history more than any other. For an account of how the Americans *misunderstood* Ranke and the German historical school, see Peter Novick, *That Noble Dream: The "Objectivity Question" and the American Historical Profession*, Ideas in Context (Cambridge: Cambridge University Press, 1988), 21-40. One mark of their misunderstanding is their mistranslation of "*eigentlich*." In the nineteenth century, the word could also mean "essentially," and this is how Ranke—who was an Idealist—used it in the expression quoted here. Of course, what matters here is not Ranke's use of the expression, but how the young American scholars read him.

³⁷As Novick points out, the notion of science in nineteenth-century America was usually a rather crude version of Francis Bacon's account of scientific method, which was supported by the esteem in which Americans held the epistemological work of John Locke and J.S. Mill, and the supposition that Darwin's account of evolution had been arrived at by this method. *Ibid.*, 34-36.

³⁸Morton White, *Social Thought in America: The Revolt Against Formalism*, with a new Preface and an Epilogue (Boston: Beacon Press, 1957), 11.

Finally, historicism suggested to the young American scholars that, because ideas are always an expression of their historical and social context, there could be no ethically neutral approach to social inquiry. Freed from the need to seek neutrality, the younger social scientists also gave up the effort to remain detached, and sought to attach their new school of social research to various social reform movements. That attachment also placed them at odds with the older social scientists, who, for a variety of reasons, found the reform movements objectionable.

Each of these three lessons became an integral part of the scientific naturalism endemic in American social science during the early twentieth century, though in forms different than those imagined by the historicists. The historicists' emphasis upon the contingent, rather than the universal, aspects of human experience was carried over in two forms. The first was the dissolution of the realm of absolutes; the second was what Wesley Mitchell referred to as a "predilection for the concrete"³⁹--a nominalistic outlook which refused to go beyond the observable particularities of things. The two notions were related, of course, for nominalism was favoured because it relieved social scientists of the need to defend something which naturalists believed could not be defended--

³⁹Wesley C. Mitchell to John M. Clark, 9 August 1928; quoted in J.M. Clark, "Wesley C. Mitchell's Contribution to the Theory of Business Cycles," in *Methods in Social Science: A Case Book*, ed. Stuart A. Rice, compiled under the direction of the Committee on Scientific Method in the Social Sciences of the Social Science Research Council (Chicago: University of Chicago Press, 1931), 678.

namely, a teleological system which depended upon the absolute truth of a theory of moral value.

Ethical relativism was a common theme among social scientists by the 1920's.⁴⁰ Trained to provide a social explanation for the origin and nature of anything which humans value, social scientists were quick to point out that the moral values of American Protestantism could be explained without reference to divine revelation. And they presumed that if social science could provide a natural explanation of such values, no other explanation could simultaneously be legitimate.⁴¹ The anthropological discovery of ethical systems in other cultures which valued things Protestantism devalued only reinforced the social scientists' relativistic and reductionist outlook. Ethics became a form of deductive system-building, similar to geometry, in which different metaphysical assumptions yielded different moral values (the analogy of Euclidean vs. non-Euclidean geometry was a popular one⁴²). The only difference between ethics and geometry was that, in

⁴⁰See Purcell, *Crisis of Democratic Theory*, 41-43.

⁴¹The latter assumption was one which placed naturalists at odds with those who appealed to tradition, and not necessarily divine revelation, as the foundation for contemporary ethics (humanists). Naturalists and humanists sparred over ethics throughout the Twenties almost as much as naturalists and supernaturalists did. See Roderick Nash, *The Nervous Generation: American Thought, 1917-1930*, The Rand McNally Series on the History of American Thought and Culture (Chicago: Rand McNally College Publishing Co., 1970), 104-10.

⁴²See Purcell, *Crisis of Democratic Theory*, 47-73.

the former, no empirical method existed for determining which set of initial assumptions were correct.

The relativistic outlook of most social scientists encouraged the emergence of a nominalistic emphasis upon observation of the particularities of specific things. Convinced that going beyond the mere recording, classifying, and correlating of human actions inevitably led to metaphysical speculation regarding the essence of human nature, social scientists sought ways to eliminate unobservable things such as preferences, desires, and instincts from their explanations of human activity. "Conceptualism," wrote Rexford Tugwell, "is the particular bugbear of the social sciences, as, a century or two ago, it was the bugbear of the natural sciences."⁴³ The result was a emphasis upon the functions of human conduct--an emphasis which received its most important expression in behaviourism.⁴⁴

The nominalism of early-twentieth-century social science was also informed by the second lesson the historicists learned from their German teachers; namely, that to study society required one to study it objectively. But for social scientists of the twentieth century, the call for an objective study of society implied more than a nominalist outlook. It also implied that objectivity could only be gained by the proper application of "the" scientific method.

⁴³Rexford G. Tugwell, "Human Nature in Economic Theory," *J. Polit. Econ.* 30 (June 1922): 320.

⁴⁴Purcell, *Crisis of Democratic Theory*, 22-23, and 35-40.

The linking of science and objectivity was nothing new, of course, for questions of method in the social sciences has been discussed constantly throughout the nineteenth century and the older, pre-historicist tradition of social scientists also claimed to be scientific. What historicism had introduced, and what the scientific naturalists had accepted, was the explicit identification of science with a method rather than a body of doctrines: Darwin's conclusion regarding the evolutionary process of natural selection was brilliant, of course, but, for the scientific naturalists, his real accomplishment was the careful empirical analysis of species.⁴⁵

If the social sciences were truly to be scientific, therefore, they must employ the scientific method.⁴⁶ All *a priori* statements were suspect; all the conclusions of inquiry were bound to be changed by future research. The only certainty was method. To rise above the circumstances of one's own time and place one had to employ the scientific method. Thus, it was method that could enable one to be objective, and the method that mattered was that of the natural sciences. This is what the young American historicists heard when the German

⁴⁵The Darwin example comes from David M. Ricci, *The Tragedy of Political Science: Politics, Scholarship, and Democracy* (New Haven: Yale University Press, 1984), 37.

⁴⁶See *ibid.*, 15-30.

historical school spoke of "*wissenschaftliche Objektivität*."⁴⁷ And it is what social scientists in the Twenties meant when they too spoke of "scientific objectivity."

Finally, objectivist social science in the Twenties carried forward the intertwining of the languages of social cohesion and scientific objectivity which the historicists had begun in their efforts to link social science to progressive social reform. When the historicists referred to the older social scientists as lacking in scientific objectivity, one of the things they meant was that the older school's ties to the abstract, deductive theorizing of classical economics attached it too closely to (what the historicists believed to be) the classical economists' *laissez-faire* policy conclusions. What the American historicists wanted was a science of society that was detached from both the method and policy conclusions of classical economics. Of course, their definition of objectivity in terms of method allowed them to maintain that their own attachment to progressive social reform movements did not detract from their ability to be objective scientists.

By the 1920's, scientific naturalists looked back upon the moral attachments of their historicist predecessors with some embarrassment. They were not interested in how society ought to be organized, only in how it was organized. Nevertheless, they also believed that they had a moral obligation to

⁴⁷Given my remarks about the mistranslation of "*wie es eigentlich gewesen*" above, it should come as no surprise that the Americans seriously mistranslated the German expression "*wissenschaftliche Objektivität*." See Novick, *That Noble Dream*, 24-26. Once again, however, I can point out that, in this context, the meaning and use of the term are determined by the interpretative community, not the author.

put their technical expertise, gained via the objective application of the scientific method, at the disposal of society's leaders. Society needed intelligent guidance, and the knowledge necessary for intelligent social action could only come from science.

* * * * *

The scientific naturalism of early-twentieth-century social science, therefore, fitted quite well with the emerging language of social control. Convinced that the traditional languages of individualism and anti-monopolism were hopelessly inadequate for the problems of twentieth-century American life, social scientists believed that the hopes and aspirations of liberalism had to be completely re-written in the vocabulary of the language of interdependence and social cohesion. Yet, at the end of the Great War, much of that vocabulary still had religious or moral overtones that many social scientists had either rejected or found too subjective for rational justification. "What we need," remarked sociologist Luther Bernard, "is objectively-tested fact to replace our venerable traditions."⁴⁸ Scientific naturalism provided a new vocabulary which promised to move the study of society beyond the subjectivity of moral tradition to the objectivity of science. Scientific objectivity, in turn, was expected to provide the basis for a more intelligent organization and control of society than had previously

⁴⁸Luther L. Bernard, "Sociological Research and the Exceptional Man," *Papers of the American Sociological Society* 27 (1932): 4; quoted in Purcell, *Crisis of Democratic Theory*, 22.

been experienced. In short, the language of social control was developed to provide social scientists with exactly what they had set out to find; namely, the means for the objective description, criticism, and reform of American democracy.

The Language of Social Control and the Crisis of Democratic Authority

The language of social control became the dominant language of social discourse in America during the Twenties, reaching into almost every aspect of social life. Yet, as my discussion of the Chicago Fight at the beginning of the chapter showed, the ascendancy of the language did not occur without debate about the significance of those aspects of American liberalism that were lost in translation from the older languages of individualism and anti-monopolism into the new language.

In the context of this broader debate, most naturalists echoed, in one form or another, the charge that Frank Knight had made in his reply to Adler and Hutchins (quoted earlier); i.e., that appeals to absolute truth undercut the freedom of discussion among rational individuals that was essential to the success of a democratic society. At the same time, however, they believed that the only place where democracy actually worked was within the scientific community, where all ideas were tentative, and subject to criticism and amendment by rational discussion. The analysis of politics by political scientists and social psychologists during the 1920's had convinced many that, outside the boundaries of the scientific community, the democratic process was fundamentally irrational and

therefore, open to control by any who could grasp power.⁴⁹ Democracy, said Harold Lasswell, is a process in which politicians "inform, cajole, bamboozle and seduce in the name of the public good."⁵⁰

In order to protect the public good from the clutches of those who would use it to pursue their own interests, naturalists believed that society needed to accept the technical expertise of the social scientist, whose professional commitment to the objectivity of the scientific method prevented the substitution of personal for public interests, and whose knowledge provided a scientific basis for the evaluation of the consequences of social actions. With Elton Mayo, the renowned social psychologist, naturalists said that, "The world over, we are greatly in need of an administrative elite."⁵¹ The willingness of the Hoover and, especially, the Roosevelt administrations to accept the social scientists' authority to speak on issues concerning the general welfare, and to begin to build an administrative elite (comprised of social scientists and professionals who depended

⁴⁹The most familiar case for the irrationality of the general public can be found in Walter Lippman, *Public Opinion* (New York: Harcourt, Brace & Co., 1922). For an overview of the perspective that Lippman and other scientific naturalists took, see Purcell, *Crisis of Democratic Theory*, 95-114.

⁵⁰Harold Lasswell, *Propaganda Technique in the World War* (New York, 1927), 5; quoted in Purcell, *Crisis of Democratic Theory*, 102.

⁵¹Elton Mayo, *The Human Problems of an Industrial Civilization* (New York, 1933), 177; quoted in Purcell, *Crisis of Democratic Theory*, 103. Lippman spoke of the need for "intelligence bureaus," which would interpose "some form of expertness between the private citizen and the vast environment in which he is entangled." Lippman, *Public Opinion*, 385, and 378.

upon their research), was viewed by the naturalists as a step which pointed America in the right direction.⁵² In the minds of the naturalists, arguments such as those advanced by rationalists, who questioned the social scientist's authority to act as technical experts, threatened to sidetrack the progress of democracy by undermining the only rational source of authority society could find. "Increased knowledge will prove more fruitful than any resort to holy names," remarked the Chicago philosopher T.V. Smith.⁵³ Adler and the others who supported his rationalistic philosophy were, therefore, "medievalists," whose absolutism placed

⁵²The "Brains Trust" which masterminded the institutional changes in America's political mechanism during the first 100 days of Roosevelt's presidency, is often taken as the mark of the political power that social scientists reached during the early Thirties. However, as economist Rexford Tugwell has pointed out, the groundwork for the Trust's actions was laid during the Hoover administration: "The ideas embodied in the New Deal legislation were a compilation of those which had come to maturity under Hoover's aegis. . . . The Hundred Days was the breaking of a dam rather than the conjuring out of nowhere of a river." Rexford G. Tugwell, "The New Deal: The Contributions of Herbert Hoover," TMs, n.d., Tugwell Papers, Franklin D. Roosevelt Presidential Library, 30, and 61; quoted in Barber, *From New Era to New Deal*, 195. Barber's study is an excellent analysis of the role that economists came to play as technical experts during Hoover's years as Secretary of Commerce and President. See also Ellis Hawley, "Herbert Hoover, The Commerce Secretariat, and the Vision of an 'Associative State,' 1921-1928," *J. Amer. Hist.* 61 (1974): 116-40; and J. Joseph Huthmacker and Warren Sussman, eds., *Herbert Hoover and the Crisis of American Capitalism*, American Forum Series (Cambridge, MA: Schenkman, 1973). For more on the role of social scientists during the Roosevelt years, see Barry Karl, "Presidential Planning and Social Scientific Research," *Perspectives in Amer. Hist.* 3 (1969): 347-409; and Gene M. Lyons, *The Uneasy Partnership: Social Science and the Federal Government in the Twentieth Century* (New York: Russell Sage Foundation, 1969).

⁵³T.V. Smith, *The Democratic Way of Life* (Chicago: University of Chicago Press, 1926), 35; quoted in Ricci, *Tragedy of Political Science*, 99.

them in company with the Inquisition, fascism, and communism.⁵⁴ The social sciences, not the rationalistic ethics of a metaphysical absolutism, were "the hope of democracy."⁵⁵

* * * * *

The opponents of scientific naturalism (who were not all Adlerian "medievalists," and included a growing number of social scientists, among which could be counted many of the new *émigrés* from Europe), turned the political argument around on the naturalists. The ethical relativism and empiricism of the naturalists, they charged, called into question the validity of the ideals upon which American democracy was built. Social scientists claimed to offer ethically neutral policy advice on the basis of their knowledge of the "facts" of social organization. But they could not possibly do so, their opponents claimed, for facts require an interpretative framework--including an understanding of what was good for society. Because the empiricist epistemology which informed American social science could provide no grounding for America's ideals other than the obvious fact that Americans held those ideals, the opponents of scientific naturalism

⁵⁴See Purcell, *Crisis of Democratic Theory*, 202-204. It was Frank Knight who identified the rationalists with the Spanish Inquisition, in "God and Professor Adler and Logic," *The Daily Maroon* (University of Chicago), 14 November 1940.

⁵⁵Harry Elmer Barnes, *Social Science: The Hope of Democracy* (Girard, KS: Haldeman-Julius, 1931). This pamphlet is an expanded version of the last chapter of idem, *History and Social Intelligence* (New York: Alfred A. Knopf, 1926), 562-89.

claimed that America lay open to the possibility that control by an administrative elite of social scientists would, in fact, destroy the very ideals the naturalists set out to preserve. As one of the opponents of naturalism said: "The ethics of hard facts, if pursued to its ultimate consequences, is the ethics of dictatorship."⁵⁶

Frank Knight, who, in this regard, as in so many others, seemed to appear on both sides of the debate, put the argument of the opponents of scientific naturalism in language that the naturalists themselves would appreciate, until they recognized that the argument was directed as much at them as at anyone else:

When a man or group asks for "power to do good," my impulse is to say, "Oh yeah, who ever wanted power for any other reason, and what have they done when they got it?" So I instinctively want to cancel out the last three words, leaving simply "I want power"; that is easy to believe. And a further confession: I am reluctant to believe in doing good with power anyhow.⁵⁷

* * * * *

The crisis of authority in democratic society continued until the Second World War, with each side finding new arguments and winning new allies. Scientific naturalism emerged from the debate (and from the crucible of World War II) with its dominant position intact, but also with a number of significant

⁵⁶Paul Kecskemeti, "Ethics and the 'Single Theory,'" *Soc. Research* 2 (May 1935): 221; quoted in Purcell, *Crisis of Democratic Theory*, 183. Purcell discusses the opposition to scientific naturalism in the Thirties in *ibid.*, 139-96.

⁵⁷Frank H. Knight, "The Role of Principles in Economics and Politics," Presidential Address to the American Economic Association, 28 December 1950, *American Economic Review* 41 (March 1951), reprinted in *History & Method*, 281 (page reference is to reprinted version).

modifications and a somewhat more circumspect outlook on its contribution to democratic life. Fortunately, the rest of the story of the debate is not required here, for as the terms of discourse changed, the issues confronting Frank Knight changed as well.⁵⁸ Furthermore, Knight's participation in the debate over scientific naturalism in the Thirties also changed his own perspective on the language of social control. Both of these changes meant that his work after the Thirties focused on somewhat different topics than those that concerned him in the earlier part of his career. Chapter 7 will examine the effect of the crisis of democratic theory on Knight's work, and point toward the direction he took after the mid-Thirties. But in the Twenties and early Thirties, as we will see in the coming chapters, it was re-orientation of American social discourse, brought about by the ascendancy of the language of social control, which occupied his attention and formed the discursive context within which his work must be placed if it is to be understood.

⁵⁸For the rest of the story, see Purcell, *Crisis of Democratic Theory*, 197-266; Ricci, *Tragedy of Political Science*, 99-205; and Raymond Seidelman, with the assistance of Edward J. Harpham, *Disenchanted Realists: Political Science and the American Crisis, 1884-1984*, SUNY Series in Political Theory: Contemporary Issues (Albany: State University of New York Press, 1985), 101-241.

CHAPTER 4
RELIGION, SCIENCE, AND SOCIAL PROGRESS
THE EMERGENCE OF FRANK KNIGHT'S
THERAPEUTIC ORIENTATION

When I took up Economics as a career, I thought of it in terms of doing good in the world. But it seems as if the first step in any direct effort along this line is to choose between any high degree of accuracy and impartiality in dealing with the facts, and the possibility of cooperation with other people who declare themselves interested in socio-economic betterment. It is certainly with reluctance and disappointment that I have felt myself forced to adopt a position of neutral, in most of the great discussion of issues currently going on - knowing that neutrality means being treated as an enemy by both sides, or escaping this fate only by being regarded as utterly insignificant, or being actually unheard of.

Frank H. Knight to Richard H. Tawney, 28 April 1939

Frank Knight was born in McLean County, Illinois on 7 November 1885, the eldest child of a farming family of modest means. The Knight family was affiliated with the theologically-conservative side of the Disciples of Christ denomination,¹ and the earliest stories we have about Knight tell of his

¹Throughout this chapter, I will use the terms "conservative" or "evangelical" to refer to the branches of the various Protestant denominations which sought to uphold the traditional language of American Protestantism against its translation into the languages of social cohesion and scientific objectivity by "liberals" or "modernists." The battle between conservatives and liberals in American Protestantism is sometimes referred to as the modernist controversy. See

opposition to the "hellfire and brimstone brand of piety" he encountered in his family and among their acquaintances.² George Stigler has related an episode, told to him by Frank's brother Bruce, which is characteristic:

Under the suasion of their deeply religious parents, the children signed pledges [one Sunday] to attend church the rest of their lives. Returning home, Frank (then 14 or 15) gathered the children behind the barn, built a fire, and said, "Burn these things because pledges and promises made under duress are not binding."³

Some have suggested that the scepticism that Knight later directed at the naturalistic program in philosophy and the social sciences had its origin in his early experiences with the religion of his family. Alvin Johnson, who taught Knight at Cornell University and was instrumental in bringing Knight into the discipline of economics (see chapter 5), once remarked to Knight that he "came

Hutchison, *The Modernist Impulse*; George M. Marsden, *Fundamentalism and American Culture: The Shaping of American Evangelicalism, 1870-1925* (Oxford: Oxford University Press, 1980); and Martin Marty, *Modern American Religion*, vol. 1, *The Irony of It All, 1893-1919* (Chicago: University of Chicago Press, 1986). The debate within the Disciples of Christ eventually led to a theological schism of sorts (it was actually the U.S. Census which, in 1906, divided the denomination by separating out the more conservative "Churches of Christ"), but the conservative and liberal factions continued to battle each other until the late 1920's, when they established peace by agreeing to operate independently, but within the same denominational structure. For more on the history of the modernist controversy among the Disciples, see David Edwin Harrell, Jr., "Restorationism and the Stone-Campbell Tradition," in *Encyclopedia of the American Religious Experience: Studies of Traditions and Movements*, vol. II, eds. Charles H. Lippy and Peter W. Williams (New York: Scribner's Sons, 1983), 853-56; and Marty, *Modern American Religion*, 156-69.

²Bruce Knight to Milton Friedman and George Stigler, TL, n.d., FHK B47 F3.

³Stigler, "Frank Hyneman Knight," 55; and idem, *Memoirs*, 181.

out of a malodorous [sic] environment where every man with a mind doubts everything."⁴ And James Buchanan suggested that his

reaction against religious orthodoxy [i.e., the dominant tradition of American Protestantism] was, perhaps, an essential ingredient in his intellectual development: having rejected it, the less rigid dogma encountered in the world of scholarship became easy prey for the Midwestern sceptic.⁵

However, although the intensity of Knight's life-long opposition to religious dogma is legendary,⁶ a more careful reading of his relations with religion suggests that his scepticism of religious dogma cannot, by itself, explain his emergence as a therapeutic thinker. His rejection of the absolutism of his family's Protestant theology on the grounds that it was not scientifically defensible led him to identify

⁴Alvin Johnson to Frank H. Knight, AL, 6 December 1967, FHK B60 F19.

⁵Buchanan, "Frank H. Knight," 427.

⁶Theological issues remained an important focus of Knight's attention throughout his life, as the rest of this chapter shows. However, our knowledge of the vehemence of his opposition to dogmatic theology seems to stem more from accounts of his verbal attacks on religion in the classroom and elsewhere, than from his published works. Although his articles certainly express opposition to Christianity, especially in regard to its epistemological and ethical absolutism and its relevance to the solution of social problems, the only place where the intensity of his verbal attacks is carried throughout the entire length of an article is in Frank H. Knight, "Natural Law: Last Resting Place of a Bigot" (reply to "A Note on Knight's Criticism of Maritain," by F.S. Yeager), *Ethics* 59 (January 1949): 127-35. Parts of the oral tradition relating to Knight's opposition to religion in the classroom and in other verbal interchanges are related in Buchanan, "Frank H. Knight," 427; idem, foreword to *Freedom & Reform*, xi; Donald Dewey, "Frank Knight Before Cornell: Some Light on the Dark Years," in *Research in the History of Economic Thought and Methodology*, vol. 8, ed. Warren J. Samuels (Greenwich, CT: JAI Press, forthcoming), 2-3 (page references are to pre-publication draft); Patinkin, "Knight as Teacher," 806-7; and Edward Shils, "Some Academics, Mainly at Chicago." *American Scholar* 50 (Spring 1981): 183.

closely with the scientific naturalists (see below). Yet his discontent with the naturalistic program often led him to ruminate on issues related to the question of what had been *lost* when the language of social control had replaced American Protestantism at the centre of American social discourse. The degree to which he recognized that these ruminations required a "religious" language is reflected in the opening remarks of a paper Knight wrote at some point in the early 1920's:

The controversy over "Fundamentalism," so-called, has helped to bring to a focus the essential problem of liberal religion, the problem of finding some middle ground between the type of religion represented by the orthodox Christian [i.e., American Protestant] creeds on the one hand and a completely irreligious [i.e., scientific naturalistic] view of the world and of life on the other. In the writer's opinion any satisfactory and tenable solution of this problem is much more difficult than it is commonly pictured to be by members of the liberal churches, and liberal members of other denominations. Their danger, we suggest, is in putting all the emphasis on *liberalism*, to the point of getting away from *religion* altogether. This paper is a plea for liberal *religion*, and a protest against the tendency referred to above. It is a plea for "fundamentalism," in a sense, for the view that there are things which cannot be given up without ceasing to be religious; it is a plea for Spirituality.⁷

* * * * *

If we are to understand the emergence of Knight's therapeutic orientation, then, we must look beyond the simple fact of his early rejection of religious dogma. In this chapter, I will argue that his internal, therapeutic criticism of

⁷Frank H. Knight, "The 'Concept' of Spirituality," TMs, n.d. [probably written in the early 1920's], FHK B4 F23, 1 (*italics in original*). Shortly after writing "Spirituality," Knight gave a talk at which he said "Of all the people who profess to believe in 'liberal religion,' it is probable that the majority mean by that the substitution of economics and sociology for religion!" Idem, "The Limits of Liberalism," TMs, n.d. [probably written in the 1920's], FHK B55 F10, 1.

scientific naturalism emerged from two interrelated aspects of his early life. The first aspect is the fact that, despite his naturalistic criticism of "orthodox" religion and consequent rejection of ethical absolutism, Knight actively participated in the religious life of the colleges he attended, and continued to identify himself with his denomination and participate in theological discussions (particularly on the meaning of religion in the modern, plural, and secular society) throughout the 1920's (see below, and chapters 6 and 7). It would not be inappropriate to say that Knight stood with one foot in the world of scientific naturalism and the other in the world of religion, and that his therapeutic orientation emerged, in part, from the tension he tried to sustain between the two worlds.

The second important aspect of Knight's early life emerged from a different tension that he tried to sustain; a tension that was related to his decision to become a social scientist. As I will show later in the chapter, Knight entered the discipline of economics because he believed that the social sciences provided a means for improving the material conditions of human life that was unavailable within religion. Yet his early study of economics, and his introduction to the reform proposals of both the progressive movements and the scientific naturalists, led him to conclude that social progress was harder to achieve than he had first believed. Thus, as the epigraph which heads this chapter indicates, Knight found himself reluctantly placed in the "neutral" position of both defending and criticizing social reform movements, because he saw both the need for social progress and the narrow boundaries within which reform was actually possible.

In order to see how these two tensions emerged in Knight's thought, and how they led him to be an internal critic of scientific naturalism, we need to follow him from the farm in McLean County to the department of economics at the University of Chicago.

Religion, Science, and Philosophy in Knight's Early Education

The route Knight took from the farmhouse to the University was long and rather circuitous, leading him through a number of schools and a variety of different disciplines. At first, Knight attended two church-related schools: American University, a small, rather obscure, and very conservative evangelical college in Tennessee, which during its short existence had some connections with his family's denomination (the Disciples of Christ); and then Milligan College, an equally small and evangelically-oriented school in Tennessee which the Disciples officially endorsed.⁸ American basically gave him the high school education he had failed to receive because of the demands placed upon his earlier education by his father's need for labourers on the farm (according to the school records available in McLean County, Knight may have attended Lexington High School for a year and a half; his formal early schooling appears to have stopped at seventh or eighth grade⁹). At Milligan, however, he did receive the rudiments of

⁸A detailed account of these two schools and of Knight's sojourn through them can be found in Dewey, "Knight Before Cornell." See also Howey, "Knight and Economic Thought," 163-67.

⁹See Dewey, "Knight Before Cornell," 9-11.

an undergraduate education, taking courses in literature, languages, philosophy, biblical studies, theology, and the sciences.¹⁰ He did well in all his courses and at his graduation in 1911 gave the salutatory address--on "Art, Work, and Play."¹¹

Perhaps the most interesting thing about Knight's early education is the juxtapositioning of his growing doubts about Christianity and his willingness to participate in the generally conservative religious life of American and Milligan--a participation attested to by Knight's occasional reports for the *Christian Standard*, representing the conservative branch of the Disciples. Donald Dewey has characterized these reports as conforming "to the style and language employed by most of [the magazine's] college correspondents at that time," which is to say that they appear to be "the work of an evangelical Christian, young, guileless, and maybe gullible."¹² Because we know that he later took almost any public

¹⁰The degree Knight received from Milligan was a Ph.B. (Bachelor of Philosophy), signifying that he lacked the Greek language requirements for the higher-level B.A. Knight's student records from Milligan are in FHK B61 F6.

¹¹No copy of his address has survived, but the words of its title reappear in the title of a book on value theory that Knight intended to write in the late 1920's. The central theme of that book was to be the inadequacy of all moral principles and the necessity of intelligent compromise among conflicting principles. See the annotated outline and early draft for Frank H. Knight, "Play, Art and Work: A Little Book on the Value Problem for Students of the Social Sciences," TMs, n.d. [probably late 1920's], FHK B55 F22: 6 p.

¹²Dewey, "Knight Before Cornell," 34. Dewey describes several of these reports in his article.

opportunity available to castigate conservative religion, this early juxtapositioning of private doubt and public acquiescence requires some further comment.

Although there is little information available regarding the development of Knight's doubts about the Christian faith, it appears that his early scepticism was refined during his college years by his study of science and German philosophy.¹³ Knight's interest in science emerged quite early. A letter of reference written for Knight by the Superintendent of Schools in Lexington, Illinois, where Knight went to high school, described him as "an excellent student in all lines but especially strong in Physics and Mathematics."¹⁴ In the summer of 1906, while still attending American, he enrolled in three courses at the University of Chicago--a trigonometry course and two upper-level physics courses.¹⁵ When he returned to

¹³Frank's early scepticism was fuelled by his reading of Robert G. Ingersoll (see Bruce Knight to Milton Friedman and George Stigler; and Frank H. Knight, "The Case for Communism: From the Standpoint of an Ex-Liberal," in "The Dilemma of Liberalism" (Ann Arbor, MI: Edward Bros., 1933, photolithograph), 54). Ingersoll was a popular speaker during the 1880's who styled himself as America's "god-killer." However, his speeches, and the books he published based upon them, did little more than confirm the existing prejudices on either side of the modernist debate. As Martin Marty said, Ingersoll "belongs more to the world of entertainment than to intellectual history" (Marty, *Righteous Empire*, 170). Nevertheless, the vituperation of Ingersoll's attacks on Christian beliefs appealed to Knight in his youth and provided a direction for his doubts to follow.

¹⁴H.B. Fisher, letter of recommendation for Frank H. Knight, TL, 11 January 1911, FHK B59 F4.

¹⁵Donald Dewey says that Knight went to Chicago for the summer session at the University, but Richard Howey indicates that the courses were taken by correspondence. See Dewey, "Knight Before Cornell," 16-17; and Howey, "Knight and Economic Thought," 182, n. 7. The fact that the FHK Papers contain a letter of recommendation from Professor R.A. Millikan of the University of Chicago

American for the Fall term, he was appointed as a teaching assistant in mathematics and science, and upon his admission to Milligan two years later, he was appointed to teach in the science department.¹⁶ Knight's interest in the sciences was strong enough to lead him into an undergraduate science program at the University of Tennessee after his graduation from Milligan, where he took courses in chemistry, mathematics, and physics.¹⁷ One of the letters of recommendation he carried with him from the college to the University described him as having "exceptional ability along the lines of research work, especially in the department of Science," and judged that he "should achieve marked success in this field"¹⁸

saying that Knight took a course in physics from him would seem to support Dewey's claim (TL, FHK B59 F4).

¹⁶He also taught commerce and German. During his first year at Milligan he operated a one-person commerce department, teaching bookkeeping, secretarial skills, and commercial law. Joseph Dorfman, *The Economic Mind in American Civilization*, vols. 4 & 5, 1918-1933 (New York: Viking Press, 1959), 468. In the second and third years he was joined by his brother Melvin, who was also a student at Milligan. Howey, "Knight and Economic Thought," 165.

¹⁷Howey indicates that the B.Sc. degree that Knight received from the University of Tennessee was more a mark of Knight's inability to meet the Greek language requirement for the B.A. than an indication that he specialized in the sciences. Howey, "Knight and Economic Thought," 182, n. 3. Nevertheless, Knight's student records indicate that he was enrolled in a science program and took 8 courses during his first year at Tennessee in the sciences and mathematics. The lowest term grade he received in these courses was a 90. See the student records for Frank H. Knight from the University of Tennessee, in FHK B62 F13.

¹⁸Frederick D. Kershner, letter of recommendation for Frank H. Knight, TLS, 24 January 1911, FHK B61 F6.

German literature and philosophy also appeared as one of Knight's early interests. He learned German while at American, and became proficient enough to be employed to teach the language at Milligan.¹⁹ When he went on to the

¹⁹Knight retained his proficiency in German throughout his career. His most important professional use of the language was his English translation of one of Max Weber's books: Frank H. Knight, translation of *General Economic History*, by M. Weber, with a translator's preface, Adelphi Economic Series (London: George Allen & Unwin; New York: Greenberg, 1927). I have not been able to ascertain whether Knight wrote "Bemerkungen über Nutzen und Kosten" (*Zeitschrift für Nationalökonomie* (Vienna) Band VI, Heft 1, 3 (1935): 28-32; 318-36) in German himself or had it translated. The English version (somewhat revised from the German) appeared as "Notes on Cost and Utility," in *The Economic Organization: with an Article, "Notes on Cost and Utility"* (New York: A.M. Kelley, 1951). Two earlier essays published in German were translated for him. See "Das Wertproblem in der Wirtschaftstheorie," translated by E. Ephrussi, in *Die Wirtschaftstheorie der Gegenwart*, Vol. II, ed. Hans Mayer with assistance from Frank A. Fetter and Richard Reisch (Vienna: J. Springer, 1932), 52-72; and "Statik und Dynamik--zur Frage der Mechanischen Analogie in den Wirtschaftswissenschaft," *Zeitschrift für Nationalökonomie* 2 (August 1930): 1-26. The English version of the first essay ("The Problem of Value in Economics") has never been published, but a draft is in Knight's Papers (TMs, FHK B55 F16: 38 p.; see also the TMs under the same name, but containing only the first two sections of the paper in B28 F9: 25 p.). The second essay was published in English for the first time in *The Ethics of Competition*, 161-85; and again in *History & Method*, 179-201. One other item should be mentioned, although I am not at all certain about it. Late in life Knight and Alvin Johnson, his first supervisor in economics, corresponded quite often and Johnson took to telling stories about Knight. In one of the letters, Johnson mentions that Knight had, upon Johnson's request, undertaken an English translation of a German text by Josef Grunzel for the "Carnegie Peace Foundation" (actually the Carnegie Endowment for International Peace). According to Johnson's account, the Grunzel book was to be part of an international series of books on the social and economic causes and effects of warfare, under the direction of John Bates Clark. Before the translation was published (and possibly even before it was completed), however, America entered World War I and the "Foundation" decided not to continue with its publication. According to Johnson, the book was left in a bank vault, and might be there still. See Alvin Johnson to Frank H. Knight, ALS, 1 January 1965, and ALS, 2 June 1965, both in FHK B60 F19. There is some truth to Johnson's account, for a Grunzel book was a part of the Carnegie Endowment for International Peace

University of Tennessee, he pursued a Master's degree in German (simultaneously with his B.Sc.), writing his thesis on the novels of Gerhart Hauptmann.²⁰ Two stories told of Knight at Tennessee indicate the significant impact German thought had upon him. The first comes from J.W. Krutch, who recalled the impression Knight made on him while a student at the University in 1911/12 in the following passage:

The bookstore stocked absolutely nothing except textbooks and I can remember only one of my fellows who ever bought a book of any other kind. That fellow, by the way, passed out of my life so completely that I forgot even his name until, forty years later, I met him at the dinner for Queen Mother Elizabeth given in connection with Columbia University's Bicentenary. He was Frank Hyneman Knight, a very distinguished economist at the University of Chicago. The book he owned, by the way, and which I thought a bit pretentious at the time, was Kant's *Critique* in German. He said he did not remember me, as I did not remember him, but when I mentioned the German edition of Kant he admitted somewhat sheepishly that he had indeed owned one.²¹

The other story comes from James Buchanan, who once met Knight's professor of history and political economy at Tennessee, James Hoskins. When asked if he

series to promote a more rational analysis of the causes and effects of warfare, but the book was published in 1916 with no translator mentioned. See Josef Grunzel, *Economic Protectionism*, ed. Eugen von Philippovich, Carnegie Endowment for International Peace, Division of Economics and History (Oxford: Clarendon Press, 1916). I have not been able to find any other mention of this book among Knight's papers, and am inclined to believe that, if Knight had any connection with the translation of the Grunzel text, it was in a very minor capacity.

²⁰Frank H. Knight, "Gerhart Hauptmann as an Idealist," M.A. thesis, University of Tennessee, 1913.

²¹Joseph Wood Krutch, *More Lives Than One* (New York: William Sloane Associates, 1962), 44.

remembered Knight, Hoskins replied that Knight was a brilliant student, "but too pessimistic, too much influenced by Schopenhauer."²²

Knight's interests in science and philosophy provided two foci for his scepticism with regard to religion. The current trend of scientific thought taught Knight that beliefs were only to be accepted on the basis of reasonable proof; a rule that Knight expressed in a comment found scribbled across the margin of his textbook on the Gospels--"We accept historicity where reasonable and critical canons permit and reject them where these considerations do not obtain."²³ Philosophy taught him that it would be immoral to love the God of traditional Christianity, even if one could believe that He existed, because of the problem of evil. Several years later (in the early 1920's), Knight summarized the emerging focus of his doubts when he said, in the paper referred to earlier, that

Science has made it unnecessary and hence impossible to believe in the God of old theology and immoral to love or worship him if he could be believed in. . . . the watchword of religion has been Faith, that of science is scepticism. The irreconcilable character of the opposition calls for no elaboration.²⁴

²²James Buchanan to Donald Dewey, 25 November 1985, cited in Dewey, "Knight Before Cornell," 31.

²³Marginal comment in Knight's copy of *A Harmony of the Gospels for Historical Study*, by W.A. Stevens and Ernest De Witt Burton, which was the text for "New Testament History" at Milligan College in the Spring of 1911. The text is now in the possession of Horace Knight of Houston. The comment is quoted by Dewey in "Knight Before Cornell," 37.

²⁴Knight, "Spirituality," 2-3.

Given the fact that Knight already had serious doubts about the central beliefs of Christianity during his years at American and Milligan, why did he publicly conform to the conservative character of religious life at these colleges? Two reasons can be suggested. On the one hand, creating a theological stir at an institution like Milligan would have had a more adverse effect upon Knight than upon the institution itself; thus, the "reasonable man test" suggests that Knight was doing what any reasonable person would do under the circumstances.²⁵ On the other hand, there was actually little reason for Knight to think that his doubts were sufficient to separate him from his denomination. Despite the fact that the modernist controversy sweeping through the Protestant denominations at the time had created as much theological conflict within the Disciples as it did in any other denomination, the Disciples' tradition of tolerating theological differences and emphasizing personal spirituality and morality meant that Knight could find others within the denomination with whom he could share his doubts without sacrificing his concern for the spiritual and moral aspects of life.

A case in point is his friendship with Frederick Kershner, a young Disciples-of-Christ minister who taught almost every subject except mathematics and science at American. Although identified with the conservative wing of the denomination at the time, Kershner became Knight's mentor, and when Kershner moved to Milligan to become president after American closed its doors in 1908,

²⁵This is the argument Dewey uses in "Knight Before Cornell," 38.

Knight followed. As Donald Dewey has pointed out, one cannot overestimate the importance of the Knight-Kershner friendship on the development of Knight's thought.²⁶ Kershner taught "at least one-third and possibly as much as one-half of Knight's courses"²⁷ at American and Milligan, and the two remained life-long friends and correspondents. Knight's relationship with Kershner provided him with exactly the kind of friend he needed at this time; someone who would accept the challenge of his doubts, but force him to channel the intensity of his scepticism into more positive directions. Their correspondence reveals that Knight continued to struggle throughout his life with the problem of reconciling his naturalistic outlook with his concern for the spiritual and moral life.²⁸ It is little wonder that the inscription in the copy of *Risk* which Knight presented to Kershner said,

To my teacher and friend, To whom far more than to any and all others I own gratitude for ever being in a position to write this book, such as it is, or to do anything creditable in the field of scholarship.²⁹

²⁶See Dewey, "The Uncertain Place of Knight," 3-5.

²⁷Dewey, "Knight Before Cornell," 14.

²⁸Approximately seventy letters from the Knight-Kershner correspondence are preserved in the Frederick D. Kershner Papers, Library of the Christian Theological Seminary, Indianapolis. Only two of the seventeen letters held in the FHK B60 F22 are not also in the Kershner collection.

²⁹Inscription in copy of *Risk* presented to Dr. Frederick D. Kershner, in the Frederick D. Kershner Papers, Library of the Christian Theological Seminary, Indianapolis.

Friendship with individuals such as Kershner played an important role in enabling Knight temporarily to reconcile the critical doubts emerging from his study of science and philosophy with his participation in the conservative religious life of these schools. The flavour of the broad-minded humanism, laced with touches of scepticism and garnished with flourishes of Christian symbolism, that he probably served up during these years can be seen in the two texts of his public addresses that we possess from these years. The first is Knight's junior class oration, entitled "Culture and the Classics."³⁰ In this essay on the nature and purpose of modern liberal education, Knight lamented "the regrettable [sic] superfluity of pedagogues and 'pulpit-spielers'" (which he linked to an education which pinned "young minds to the rewardless and soul-destroying grind of mastering dead languages"), "while the great and crying need of the world is still for *Ministers and Educators*."³¹ Because education should equip the modern individual to order their choices intelligently in order that they might better serve contemporary society, modern higher education should focus on literature, the natural sciences, the social sciences, aesthetics, and philosophy.³² When education became rationally planned to serve the interests of human progress, it would leave behind the cruel "farce of attempting to superpose [sic] 'classical

³⁰Frank H. Knight, "Culture and the Classics," Junior Class Oration, Milligan College, TMs, 1910, FHK B55 F1: 20 p.

³¹Ibid., 2-3 (italics in original).

³²Ibid., 8-16.

scholarship' upon gross ignorance of common things."³³ In this essay we find Knight's scepticism of received traditions and intimations of his eventual entrance into the social sciences--in his comments that they "form the very heart and core of any real Culture," and "a working knowledge" of them "is indispensable to an intelligently ordered life"³⁴--cast in a style which covers the underlying rejection of traditional Protestantism with an appeal to social progress and a number of tossed-off biblical quotations.

A slightly more optimistic style characterizes the other public address, entitled "The Problem."³⁵ After emphasizing that "human life is simply a series of choices," and, hence, that the central problem in life is really, "What shall I, in this next succeeding instant, do?,"³⁶ Knight goes on to ask why our choices do not lead to happiness.

We are placed in a universe capable of satisfying our every natural want. Mind cannot conceive, nor imagination picture, an object of beauty or utility that the earth does not hold the means of supplying in abundance. Why, then, [is there so] much misery and want in the world?³⁷

³³Ibid., 20.

³⁴Ibid., 13.

³⁵Frank H. Knight, "The Problem," Public address, TMs, n.d., FHK B55 F15: 7 p. Although the address is undated, it clearly dates from Knight's college years. The style is similar to "Culture and the Classics," the content could not have been written much later (because it is too optimistic about the existence of a solution to scarcity), and in it Knight addresses his fellow students at a number of points.

³⁶Ibid., 2.

³⁷Ibid., 3.

The answer Knight gives (at this point in his life and to this audience!), is that we have an improper ordering of the relations among human beings, and between humans and their environment. Because we can re-order our relations, and an intelligent re-ordering will restore the natural harmony of our relations, the proper aim of education is to provide us with a "thorough understanding of The Problem, and the conditions of its solution." "To impart this understanding . . . becomes the greatest work in the world."³⁸ At the end of the address, Knight's optimistic humanism is imbedded in the rich symbolism of religious language:

But if[t] is when we turn to the highest phase of life that our interpretation of it as one Problem is seen in its full significance. . . . The relation of the individual to other individuals and to society constitutes the subject matter of morality, the highest sphere of human endeavor, . . . Here as before the condition of happiness is the maintenance of proper relations, by means of the choices which constitute conduct. And this is accomplished, . . . through the medium of intelligence In the light of this truth, morality finds a new meaning, and a new and stronger basis of appeal. The old doctrine of self-sacrifice and self-abasement is seen to be erroneous, the antipathy between virtue and happiness disappears, and goodness becomes simply the natural law of existence. A correct understanding of the conditions of life shows that the interests of humanity are not naturally antagonistic, but that the good of each is inseparably bound up [with] the good of all; . . . and that love and mutual helpfulness alone can lead to happiness or form a worthy guiding principle of life. The sacred ordinances of Holy Writ, and the wondrous 'Golden Rule' of the Master, which includes them all, cease to be mandates of authority, instituted by infinite and awful Power, to be blindly and unquestioningly obeyed or broken at our peril, and become simply laws of life, founded by infinite Wisdom, and revealed by infinite Love, as rules of conduct for the guidance of humanity in the intelligent pursuit of happiness. . . . Not retribution, nor revenge, . . . but Enlightenment, is the power that shall conquer sin, and burst its fetters from a race of slaves. . . .

³⁸Ibid., 4.

Let one and all labor to hasten the day when the rising sun of a perfect understanding shall dispel these barriers, burst in a flood of glory upon the world expectant waiting in the gloom beneath, and with unabated splendor shine down through the ages upon a happier because a better, and a better because a wiser race of beings. Then indeed shall be a dawning of a new and brighter day. Then sorrow, suffering and sin shall disappear forever from the earth, and the good, the beautiful and the true become the eternal heritage of the children of men.³⁹

To ears unaccustomed to such homiletic language, this address must certainly sound far removed from the Frank Knight whose cynicism toward religion was so noticeable in his classes at Chicago in the 1930's. However, because the audience he was addressing was largely inured to this style, the important things to note from this speech are not the flourishes of religious language, but rather Knight's acceptance of the language of social interdependence, his optimistic tone regarding the prospect of social redemption through intelligent action, and the importance he placed on education for the formation of a more intelligent society. These themes are central, and the fact that they were shared by many others who were in similar circumstances allowed him to remain within the Disciples until the early 1920's--although he had gravitated toward its liberal wing in the decade between his graduation from Milligan in 1911 and his acceptance into the membership of the Iowa City Unitarian Church in 1922.⁴⁰

³⁹Ibid., 4-5, 6, 7.

⁴⁰Knight kept a church affiliation throughout his life. Although we do not know what his affiliation was while he attended Cornell, when he went to teach at The University of Chicago in 1917, he attended the Disciples' Hyde Park church

**From Religion and Science
to Interdependence and Social Science**

**Knight's Early Participation in the Language of
Social Scientific Discourse**

Out of the intellectual turmoil created by Knight's reflections on science, philosophy and religion during his college years emerged one central concern which would channel Knight's intense scepticism into more positive directions for many years to come. That theme could be expressed in a number of different ways: as the question of how one might sustain a concern for spiritual and moral growth in an age of science; or whether "love" could replace "force" as the organizing principle of human society; or to what extent science could render

and greatly admired its pastor, Edward Ames, a liberal leader in the denomination. He participated actively in the Iowa City Unitarian Church during the 1920's, as is evident from various items in his papers: he may have preached upon occasion (it is possible, judging from internal evidence, that the essay "Spirituality" was written as a sermon); he led a discussion group (see his notes for a discussion group in Religion, Iowa City Unitarian Church, Iowa City, TMs, 30 September - 2 December 1923, FHK B47 F25: 9 p.--Dewey cites a letter from Knight to Kershner to the effect that during the fall of 1923 Knight spent most of his time preparing for this discussion group, see Dewey, "The Uncertain Place of Knight," 6); gave a talk to the Men's Club ("Science and Human Values," outline of opening remarks, TMs, 9 December 1925, FHK B55 F23: 2 p.); and participated in a group that met at "Parson" Arthur Weatherly's (see "Some Notes on Value. Suggested by discussion in men's group at Parson Weatherly's," TMs, 17 March 1926, FHK B55 F23: 1 p.; Knight continued to correspond with Arthur Weatherly, whom he always referred to as "Parson," until the 1940's, see their correspondence in FHK B62 F18). Upon his return to Chicago, he became a member of the First Unitarian Church of Chicago (although he probably seldom attended), where he apparently remained for the rest of his life. See Frank H. Knight, "Christian Ethics and Social Betterment," Pulpit address at the First Unitarian Church of Chicago, TMs, 18 August 1963, FHK B4 F6, 1. Dewey, "Knight Before Cornell," 38-41 has more on Knight's church affiliations.

intelligible human discourse regarding beauty and goodness.⁴¹ Beneath all of these questions, however, was a concern for the relations among ethics, science, and social progress. As Knight moved out of the intellectual confines of conservative Protestantism, he began to search for a way to hold together his scientific outlook and his desire to serve humanity, of which he had spoken so eloquently in the two addresses mentioned earlier. Out of this search emerged Knight's decision to pursue a career in the social sciences, rather than the natural sciences.

The decision to devote his career to social inquiry appears to have been made either just before or during Knight's final year at the University of Tennessee (1912-1913). At the end of his first year, during which he had completed almost all the upper-level science requirements for a B.Sc., Knight had apparently inquired into the prospects for graduate work in the sciences at Tennessee and was informed that, upon completion of the necessary courses, he "might be considered a candidate for the degree of Master of Science in 1914."⁴² However, that program of study was never completed because Knight switched majors during his second year of study, taking four courses each in German (his

⁴¹For Knight's discussion of these types of questions, see Knight, "Spirituality"; idem, "Love and Force," TMs, n.d. [probably 1920's], FHK B21 F16-18 and B55 F10-11: 33 p.; and idem, "Beauty," paper presented to the Bureau of Personnel Administration, Conference on Fundamental Objectives of Business Management, TMs, 28 March 1929, FHK B1 F6-7: 30 p.

⁴²R.M. Ogden to Frank H. Knight, TLS, 16 April 1912, FHK B62 F13.

major field for the M.A.), French, and history (his minor fields), and two courses each in philosophy and economics.⁴³ Although he graduated with a B.Sc. and an M.A. in German in the spring of 1913, he had decided to pursue a Ph.D. in political economy, perhaps at a European--presumably German-- university.⁴⁴

* * * * *

As we saw in chapter 3, interdependence, social redemption and the scientific study of society were common themes among thinkers emerging from Protestant backgrounds at this time, and Knight's decision to move into the social sciences seems to have been motivated by concerns similar to many of his socially progressive contemporaries.⁴⁵ In one of his earliest essays on economics, he

⁴³These were not Knight's first courses in economics. He had taken a senior philosophy course at Milligan which included a series of lectures on economics. Howey, "Knight and Economic Thought," 165; and Dewey, "Knight Before Cornell," 21.

⁴⁴In a letter of recommendation, James Hoskins wrote that Knight "desires to take a post-graduate course in political science and economics", and in a subsequent letter of introduction, Hoskins said that "we are glad to know that he is going to Europe to pursue his studies further." James Hoskins, letter of recommendation for Frank H. Knight, TLS, 8 January 1913; and idem, letter of introduction for Frank H. Knight, TLS, 7 June 1913, both in FHK B62 F13.

⁴⁵Despite the similarities between the concerns lying behind Knight's movement into the social sciences and the concerns of the Social Gospel, he was never identified with that movement, and eventually came to reject it as a moralistic approach to social problems. His reaction to the Social Gospel is summed up in a remark in the paper on "Spirituality" cited earlier: ". . . it is safe to predict that whenever the Church gives up its unique mission of providing a medium for the culture of the *spiritual life*, and turns its attention solely to any sort of 'welfare activities,' its doom will be sealed." Frank H. Knight, "Spirituality," 9 (*italics in original*). See also Frank H. Knight, "Ethics and

expressed the concerns that led him into economics in terms that were familiar to many of his contemporaries:

The dominant motive for the study of the economic order of society is the desire to improve that order, to make it yield a more adequate provision for the needs and wants of the race, to relieve poverty and the fear of poverty and economic oppression and the dread of it. With all our marvels of productive efficiency the world is still pitifully poor and the product we know how to get is used to altogether too great an extent for the support of luxury and crass display instead of the elimination of acute want. For a long time in the future the need for action must dominate the thirst for knowledge.⁴⁶

Knight's decision to enter the social sciences was affected by several things. For one thing, he believed that the competitive system of social organization contributed to the social fragmentation of American society. Knight desired a society in which things were arranged

so that people will find their lives interesting and will grow into such personalities that they can respect themselves, admire others and enjoy their society, appreciate thought and beauty, and in general look upon creation and call it good.⁴⁷

Economic Reform," Parts I and II, *Economica* (August, November 1939): 296-321, 398-422, reprinted in *Freedom & Reform*, 122-53; idem, "The Rights of Man and Natural Law" (review article on *The Rights of Man and Natural Law*, by Jacques Maritain), *Ethics* 54 (January 1944): 124-45, reprinted in *Freedom & Reform*, 312-57; idem and Thornton W. Merriam, *The Economic Order and Religion* (New York: Harper & Bros., 1945; reprint, Westport, CT: Greenwood Press, 1979), 11-126; and idem, "Christian Ethics and Social Betterment."

⁴⁶Frank H. Knight, "The Science of Economics, or Political Economy," TMs, n.d. [probably early 1920's], FHK B55 F17, 7-8.

⁴⁷Frank H. Knight, review of *Cooperation and the Future of Industry*, by L.S. Woolf, *J. Polit. Econ.* 27 (November 1919): 806.

However, in the society around him, the exact opposite was often the case.

Knight placed part, if not all, of the blame upon the market itself.

In the existing system, the serpent's tail is always in his mouth; all the inequities of the system aggravate themselves cumulatively around an unbreakable vicious circle. It is supposed to give us a social value scale made of up of individual desires, but in reality the purchasing-power factor in demand ever more overtops the desire or need factor; in the agitator's phrase, the money is placed ahead of the man. In addition, . . . the system places a high premium on the corruption of tastes; and this also works cumulatively. And at the same time that the progress of civilization is throwing men closer together and calling ever more insistently for an enlightened social consciousness and conscience, competitive business breeds individualism, narrowness, and selfishness of outlook. . . .

The highest wants, and in rightly developed men the strongest, are not individual at all, and do not directly depend on material means for their satisfaction. They are the wants for ideal human relations for their own sake. And it is from this point of view that the existing social system makes its worst showing of all. It turns every man's hand against his brother, compels him to think in the hard, lifeless terms of material means and ends, makes him value things because others cannot have them instead of things which can only be enjoyed in common, gaudy, vulgar, despicable things which waste the precious resources of life instead of the costless treasures of the inner soul, and in general turn his vision and his life downward instead of upward.⁴⁸

Secondly, Knight shared with his contemporaries the hope of progress toward a more integrated social order through reform of the basic structures of society, based on the scientific knowledge of the discipline of economics. "The political control of property and exchange relations," he said in an early essay, "is the art or practice of which it is the purpose of political economy to supply the

⁴⁸Frank H. Knight, "Social Organization: A Survey of its Problems and Forms from the Standpoint of the Present Crisis," TMs, 1920, FHK B31 F6-7, 32 and 35. A similar remark can be found in idem, *Risk*, 180-81.

scientific purpose."⁴⁹ At the beginning of his career, at least, the hope of progress appears to have been particularly strong. When he wrote about the graphic depictions of human misery found in the novels of Gerhart Hauptmann, Knight described them in language which indicates his disagreement with Hauptmann's despair:

If there is one thing unmistakable as the soul of [Hauptmann's] work it is his deep sympathy with social wrongs. . . . Not less apparent than his sympathy for suffering is his hopelessness of his view of the conditions which bring it about. He not only advocates no remedy for any of the evils he so movingly portrays, but he never shows a gleam of faith in the probability or possibility of any ultimate escape by any means. Rather the reverse. He seems to revel in orgies of despair, and never lets pass an opportunity to add any little touch that contributes to the elimination of any bright side to the picture.⁵⁰

And when he came himself to write about the possibility of changing the conditions which bring about poverty, misery and suffering, he was not so hopeless as Hauptmann, nor did he doubt the direction that such changes would take society. In the 1920 essay on social organization, from which I quoted above, Knight said:

From the falsity of the atomistic-individualistic view of human nature and human desires it is an easy inference that any mechanical theory of social organization is subject to very narrow limitations. The most potent agency of social control, even today, in spite of all the obstacles thrown in its way by an antiquated and wooden system of association, is the moral control of the individual's sense of decency and the pressure of the opinions of his fellows. We must therefore assume, as well as hope, that when the shackles of competition are finally broken, and industry based

⁴⁹Knight, "Science of Economics, or Political Economy," 12.

⁵⁰Knight, "Hauptmann as an Idealist," 61.

upon the general principles of conscious co-operation in some form, the now seemingly insuperable problems of administrative control will progressively solve themselves through the common recognition of the common good as the only worthy or profitable object of endeavor. The difficulties in the way of realizing a large part of the dream of a moral world so eloquently pictured by saintly idealists like Kropotkin and Tolstoy are, like those which confront a democratic system of industry, more imaginary than real. The first step in any progress toward this grand consummation is to replace our present so-called system, which directs a large part of its energies to the corruption of mankind with some sort of more truly social order under which attention can be directed toward the improvement instead of the degradation of tastes and ideals.⁵¹

Several years later in his comments on a paper by J.M. Clark in 1923, Knight indicated that it was his belief "that any provisions which promise to deal adequately" with "the disharmony between individual and social interests," which resulted from the "disastrous" conditions of modern industrial life, "must carry us no inconsiderable way in the direction of socialism."⁵²

* * * * *

Despite Knight's desire for a social order which would promote social cohesion and support the quest of individuals for better values, his belief that such a world was possible was gradually offset during the first part of his economics career by three related things. The first was his growing awareness of the uncompromising reality of scarcity. In his college address "The Problem," which I

⁵¹Knight, "Social Organization," 35-36.

⁵²Frank H. Knight, "Economic Theory and Practice--Discussion" (comment on "Some Social Aspects of Overhead Costs," by J.M. Clark), *American Economic Review* (Supplement) 13 (March 1923): 107.

cited earlier, Knight had said that "we are placed in a universe capable of satisfying our every natural want," and had gone on to relate poverty and misery to defects in the present social system for ordering choices.⁵³ As he studied economics, however, he began to revise the assumption of plenty underlying his concern for social reform. In a letter to his first wife Minerva, written from Chicago in the summer of 1919, his comment on the social unrest in that city was brief and to the point:

And back of the kind of folks people are is the kind of world it is. The individual naturally thinks it important for him to live, and in a way which he considers tolerable, and appropriate to his always exceptional desserts, and the fact remains that for some to live others must die and for any to live decently most must live very indecently.⁵⁴

Secondly, Knight's desire for social reform was modified by his study of various proposals for reform. Although we do not know exactly when he began to read the writings of radical reformers such as the Fabians, syndicalists, anarchists, and Marxists, we do know that in the summer of 1913, between his years at Tennessee and his appearance at Cornell, he purchased a series of reformist pamphlets while on a journey which took him through London,⁵⁵ and that he

⁵³Knight, "The Problem," 3.

⁵⁴Frank H. Knight to Minerva Knight, 29 July 1919, Knight-Shelburne Family Papers, held by Laura Safir, Kensington, California; quoted in Dewey, "Uncertain Place of Knight," 9.

⁵⁵Stigler, "Frank Hyneman Knight," 56. We know very little about this summer trip to Europe, except that Knight's father provided a fare for him, but not for his wife, Minerva, who apparently had to remain behind. See Dewey, "Knight Before Cornell," 26. Knight's itinerary remains a mystery, as does the

continued to read and review this literature throughout the 1920's. Knight's scepticism was still as strong as ever, of course, and it comes as no surprise to find him presenting a rather scathing criticism of this literature not six months after arriving at Cornell.⁵⁶ In general, he thought that "the dreamer of better things must be hard-headed as well as soft-hearted,"⁵⁷ and thus he found reformers:

over-sanguine in [their] estimate of the amount of authority which it will be necessary to exercise over individual human nature and of the intrinsic difficulties of the unescapable [sic] problems of social organization, the amount and complexity of the machinery probably requisite for securing any fairly effective direction and co-ordination of human activities under the conditions of modern life.⁵⁸

But the fact that he could not agree with either the optimism or the prescriptions of the reformers does not mean that he did not share some of their hopes, as I suggested above.

Finally, I suspect that Knight's desire for social progress was also tempered by his first experience of naturalistic social science at the University of Chicago, during the years 1917 to 1919. The University of Chicago at the time was fast becoming the centre of practical and reform-oriented social science in America,

answer as to whether the trip had anything to do with his hope of studying there.

⁵⁶Frank H. Knight, "The Ethical Basis of Socialism," TMs (outline), presentation to the Cornell Philosophy Club, Cornell University, January 1914, FHK B55 F27: 11 p.

⁵⁷Frank H. Knight, review of *Plain Talk on Economics*, by F. Franklin, *J. Soc. Forces* 3 (January 1925): 354.

⁵⁸Frank H. Knight, review of *Proposed Roads to Freedom: Socialism, Anarchism, and Syndicalism*, by Bertrand Russell, *Amer. J. Soc.* 25 (September 1919): 228.

and Knight was actively involved in discussions with individuals and groups from across the social sciences.⁵⁹ While at Cornell, Knight had locked horns with neo-Hegelian idealists such as philosophers James Creighton and Ernest Albee, while being trained in economics by economists such as Alvin Johnson, Allyn Young, and Herbert Davenport--none of whom were particularly wedded to the naturalistic program. He had also gained a healthy dose of scepticism regarding the prospects for statistical method in social science from Walter Wilcox.⁶⁰

What Knight found at Chicago were social scientists firmly committed to scientific naturalism, and intent on applying their new-found knowledge to the task of providing a more intelligent and responsible society. Because this was also the problem that occupied the centre of Knight's attention, there was a certain affinity between his goals and those of Chicago social science. However, as he began to explore the naturalistic program with its foremost proponents, he became increasingly concerned with the ethical implications of its method. Was not the naturalistic program simply another "mechanistic theory of social organization" subject to all of the same objections as the economic theory of pure competition? What room was there for human freedom in the naturalistic program? What room was there for "the true, the good, and the beautiful" (Knight's catch-all for

⁵⁹See chapters 5 and 6 for details about Knight's involvement.

⁶⁰See Frank H. Knight, "The Use of the Quantitative Method in the Study of Economic Theory--Discussion," *Amer. Econ. Rev.* (Supplement) 17 (March 1927): 19.

the realm of value) in the scientific view of the world? What room, for that matter, was there for spirituality? The eventual result of Knight's ruminations on these questions, of course, was the significant series of essays he wrote in the early 1920's on various aspects of the relation between science and value (which are to be the focus of our attention in chapter 6).

The social sciences, therefore, were to become the crucible within which Knight struggled throughout his life to find a therapeutic mix of "hardheaded" thinking fostered by an intense scepticism and a "softhearted" concern for human good and social progress. The boundaries of the natural sciences were too narrow to contain Knight's developing commitment to use his scientific knowledge for the improvement of the material conditions of society. Economics, on the other hand, held out the promise of being a scientific discipline through which he could contribute to social progress. As he said to R.H. Tawney later in his career, "When I took up economics, I thought of it in terms of doing good in the world."⁶¹

A Brief Interlude: Philosophy at Cornell

There was one major obstacle that stood in the way of Knight's desire to study political economy in Europe--money. Married students then, as now, found it hard to get the funds necessary for such a major undertaking. Thus, when he was offered a Susan Linn Sage Fellowship in Philosophy at Cornell University,

⁶¹Frank H. Knight to R.H. Tawney, TL, 28 April 1939, FHK B62 F9.

Knight decided to take it. Despite the fact that it was not a European school and that he had to select his two major fields from within philosophy, Cornell was probably an acceptable option because it allowed him to minor in economics.⁶² When he began the academic year of 1913-14, therefore, he enrolled as a graduate student in philosophy, with concentrations in ethics, logic and metaphysics, and economics.⁶³

What happened next has become something of a legend. According to Alvin Johnson, who was teaching at the time in Cornell's economics department and had been impressed with Knight's performance as a student,⁶⁴ Knight came to him one day in the spring of 1914 with a rather sad face and reported that James Creighton and Frank Thilly, his supervisors in philosophy, had declared him "totally unfit to study or teach philosophy" and had advised him to leave the department.⁶⁵ Johnson, who was able to give Knight some scholarship monies in

⁶²His decision to attend Cornell may also have been affected by the fact that his philosophy professor at the University of Tennessee, Robert Ogden, was a Cornell man. Dewey, "Knight Before Cornell," 42; Howey, "Knight and Economic Thought," 167.

⁶³Ibid.

⁶⁴To fulfil the requirements of his economics minor, Knight took Johnson's classes on "The History of Economic Thought" and "Value and Distribution." Ibid., 167-68. Johnson's impressions of Knight as a student can be found in his *Pioneer's Progress: An Autobiography* (New York: Viking Press, 1952), 227.

⁶⁵Ibid.; see also Alvin Johnson to Frank H. Knight, TLS, 12 July 1969, FHK B60 F19.

order that he might switch to the full-time study of economics, eventually pursued the matter with Creighton, who replied,

It isn't that [Knight] is devoid of ability. But with his ingrained scepticism he repudiates all the values of philosophy. As a teacher or writer he will not just be the blind leading the blind into pitfalls. He will destroy the true philosophic spirit wherever he touches it.⁶⁶

Despite a couple of minor inaccuracies,⁶⁷ Johnson's story maintains its legendary quality because it perfectly captures the cynical side of Knight's scepticism, which anyone who knew him personally or read his work has seen at some point or another. In order to see how this incident relates to Knight's development into an edifying thinker, however, we will need to dig a little deeper into the circumstances surrounding it.⁶⁸

⁶⁶Johnson, *Pioneer's Progress*, 227.

⁶⁷There are two problems with Johnson's account. First, the philosophers were probably not quite as upset at Knight as Johnson makes them out to be, for Frank Thilly remained on his committee as the outside member. Secondly, it cannot be the case that the philosophers really did forbid economic majors from minoring in philosophy and vice versa, as Johnson claims at the end of his story, because Knight himself kept ethics as one of his minors. Howey, "Knight and Economic Thought," 183, n. 15; and Dewey, "Knight Before Cornell," 58-59, n. 29.

⁶⁸One interpretation of the incident that I will ignore is provided by Julian Ellison. He suggests that Creighton and Thilly forced Knight out because they became enraged when they heard the first part of his talk on "The Ethical Basis of Socialism" at the Cornell Philosophy Club in January 1914. According to Ellison (who presents no evidence to support any of these claims): Knight's lecture was based on his participation in Johnson's course on "Socialism" (there is no evidence Knight took the course, although, given his interests at the time, it is possible that he did); Creighton and Thilly were at the talk; they were ardent anti-socialists; they left the room in rage after hearing only Knight's unbiased analysis of socialist literature and not his critical evaluation of it; and Johnson took Knight in because he felt partly responsible for the calamity. Julian Ellison, "Abram L. Harris,

* * * * *

We can begin by noting the uncharacteristic ferocity of Creighton's reported reaction to Knight. Other reports of Creighton's relations with his students tell us that, despite the fact that he could be somewhat temperamental and was convinced of the intellectual supremacy of his version of "speculative idealism" (a variation of the English Neo-Hegelianism of Bernard Bosanquet), he was generally quite generous to his students, even when they disagreed with him.⁶⁹ In order to have elicited such a strong response from Creighton, therefore, there must have been something *qualitatively* unique about Knight's disagreement with him.

In fact, there was a quality about Knight's disagreement with Neo-Hegelian idealism which could have irritated Creighton, even if it was not unique to Knight. That quality, which Knight shared with other therapeutic thinkers, was his stubborn metaphysical agnosticism and consequent refusal to accept any monistic

Frank H. Knight and the Development of the Idea for the Mont Pelerin Society, 1932-1947," paper presented to the Association for Social Economics, Chicago, 28 December 1987, 25-26. There are simply too many unsupported, yet interdependent, assumptions in this interpretation for it to be seriously considered.

⁶⁹See G. Watts Cunningham, "In Memoriam: James Edwin Creighton," *Int. J. Ethics* 35 (January 1925): 214-16; W.A. Hammond, "James Edwin Creighton," *J. Phil.* 22 (7 May 1925): 253-56; George H. Sabine, "The Philosophy of James Edwin Creighton," *Phil. Rev.* 34 (May 1925): 230-61; and Frank Thilly, "The Philosophy of James Edwin Creighton," *Phil. Rev.* 34 (May 1925): 211-29. What Creighton could not tolerate, apparently, was laziness and incompetence in his students, but there is no indication of this in Johnson's story and it is highly unlikely in any case that he could have called Knight down on such charges.

account of human experience. If Knight had consistently espoused the view that material objects were external to us and, therefore, existed independently of our sense experience (in other words, if Knight had been a realist), Creighton would at least have known on what grounds he disagreed with him. But what Creighton had to contend with in the case of Knight was a student who shared his criticisms of the realists' efforts to define human experience in completely objective terms, willingly accepting much of what Creighton said about the creative role of human volition and consciousness in experience, but who would then stubbornly deny the idealist conclusion, saying instead that:

The proof of a definite limitation of the mechanical system of explanation may be regarded as leaving room for some sort of teleological view. Much farther than this, perhaps any farther, it is doubtful whether intelligence can go. There is certainly nothing to be gained by attempting [t]o speak or think of anything like a "principle of intelligence" or of purpose in things.⁷⁰

It was the fact that Knight refused to restrict human experience to its objective aspects, and also identified himself as "an agnostic on all questions beyond the fairly immediate facts of experience,"⁷¹ that upset Creighton's monistic

⁷⁰Frank H. Knight, "Causality and Substance," TMs, paper presented to Professor Edward Albee, Philosophy 30, Empiricism and Rationalism, Cornell University, Fall 1913, FHK B55 F2-3, 46.

⁷¹Knight, *Risk*, 201, n. Just prior to this remark, Knight identified his epistemological position as "pragmatic, with some reservations. . . . The writer is . . . a radical empiricist in logic." The remark quoted here is Knight's definition of what he meant by calling himself a radical empiricist.

tendencies; you can have it one way or the other, I can hear him telling Knight, but not both.

* * * * *

Although Creighton interpreted Knight's refusal to commit himself to any one monistic tradition as a purely reactionary scepticism, Knight's writing at the time indicated that he was not simply a reactionary, but rather was struggling to find a route in between the monistic traditions of realism and idealism by which he could find his way to a more encompassing viewpoint from which to begin his inquiry into human experience. The struggle was clearest in his paper "Causality and Substance," which he wrote for the "Empiricism and Rationalism" course he took with Professor Edward Albee in the Fall of 1913 at Cornell. This paper exhibits exactly the kind of metaphysical agnosticism which must have irritated Creighton, but with little trace of pessimism. What one does find in the paper is a careful attempt to steer a course between idealism and realism in order to remain open to the possibility of perceiving the intelligibility of human experience. Because the paper laid the groundwork for much of Knight's analysis in *Risk*, it would be beneficial to consider his argument there in greater detail.

"Causality and Substance" apparently originated in a class assignment to write a critical essay on the empiricism of John Locke and David Hume. But in a manner similar to many of Knight's essays in the Twenties, Locke and Hume seldom appeared, and the treatment of their ideas simply provided the occasion

for Knight to engage in an extended exploration of the relation of subject and object in human experience, and the relevance of their relation to the problems of causal explanation and the relation of the material world to human consciousness.⁷² What Knight set out to show was that human experience cannot be made intelligible by attempts to define it either in completely objective or completely subjective terms. Experience, he said,

has the form of interest in an object; that is what it *is*. There is no experience conceivable which does not contain these two elements, or, better, present these two phases. There is no interest without an object of interest and no object except for an interest in it, in a conceivable experience.⁷³

After arguing that the subjective and objective are both necessary elements of human experience, Knight then went on to examine the relevance of that claim to the philosophical problem of explaining experience.⁷⁴ The fact that both elements are present in human experience implies, he suggested, that experience can be viewed from the perspective of either element. Yet neither perspective provides a complete explanation of human experience, because its point of view is

⁷²Although this paper is based on a study of Locke and Hume, it has been found impracticable to make it a criticism pure and simple of the work of either or both. Rather it has seemed advisable to take up the problem directly from a particular point of view, with the object of getting at its merits, . . . Hence such criticism as the discussion embodies will appear as implicit . . . [in] the presentation of its thesis." Knight, "Causality and Substance," 1.

⁷³Ibid., 2.

⁷⁴"The problem of philosophy, Knight says, "is that of making experience intelligible. . . . Knowing is in and of and for experience." Ibid., 1.

limited by the existence of the other element: ". . . neither principle of explanation can be neglected or resolved into the other in any consistent formulation of reality, any more than we can have consciousness without this subject-object distinction."⁷⁵ Thus, in order to render experience intelligible, Knight argued, one must preserve a tension between subject and object; recognizing their differences, one must also realize that they are inextricably intertwined in our experience. Twisting one of Creighton's favourite expressions to fit his own purposes, Knight described the preservation of this tension as the process of finding "unity in the complexity of experience, or identity in its difference."⁷⁶

In addition to claiming that the tension between subject and object must be preserved if we are to understand human experience, Knight also argued in "Causality and Substance" that experience requires the maintenance of a tension between a static view of experience, which focuses on the world as it exists at a moment in time, and a sequential or dynamic view, which focuses on the presence of change. The former view, Knight suggested, is the beginning point for an examination of human experience, but, because "the world as existing does not offer great difficulties of conception,"⁷⁷ the latter view is the one that presents the real intellectual challenge.

⁷⁵Ibid., 9.

⁷⁶Ibid., 4. For Creighton's use of the second expression, see Thilly, "Philosophy of Creighton," 214.

⁷⁷Knight, "Causality and Substance," 5.

It is not until we think of [the world] as the product of change, . . . and of our knowledge of it also as a product of change, that explanation is demanded. . . . That which seems permanent when superficially viewed is seen as the result or product of indefinite transformations; the world of existence is lost in the world of change. . . . The reason is not obscure; the essential qualities of existence reduce to a fathomable number of uniformities of coexistence which are obvious, and with which we cannot help becoming familiar long before we begin to ponder as a problem the mystery of existence. But the uniformities of sequence are not thus obvious; they have to be discovered by search.

So it is primarily the world of change which furnishes us our intellectual problem.⁷⁸

In order to provide a context within which to describe the problem that change presented, and its relation to his claim that the explanation of experience requires the preservation of the distinction between subject and object, Knight turned to classical mechanics. Focusing on the philosophical interpretation of the relation among the three "fundamental measurable quantities" with which classical mechanics sought to explain change in the physical world--space, force, and time⁷⁹--Knight argued that the preservation of the tension between the subjective and objective phases of human experience was paralleled in classical mechanics by the tension between the subjective and objective aspects implicit in the definition of matter. In classical mechanics, matter was defined in terms of space (an objective notion) but measured in terms of force (a subjective notion).⁸⁰ Because it was necessary to refer to both space and force in defining and

⁷⁸Ibid., 6.

⁷⁹Ibid., 10.

⁸⁰Ibid., 10-12, 17, and 25.

measuring matter, both were also necessary to any explanation of changes in matter over time.⁸¹

A similar argument, Knight claimed, could be mounted for the relation of the subjective and objective elements of changes in human experience. Because experience could not be defined without reference to both human interest (value) and the object of that interest (located in the world around us), change within human experience also required reference to both elements. Philosophical attempts to explain change by reference to only the objective element of human experience, or, conversely, to only the subjective element, must fail because the two are not separable, but are instead two phases of the same thing--i.e., experience. Therefore, "we must assuredly give up the attempt to formulate experience, . . . in a purely monistic way."⁸²

⁸¹In his discussion of the philosophy of science, Knight focused most of his attention on rebutting a position commonly associated with late-nineteenth-century positivists such as Karl Pearson, Ernst Mach, and Henri Poincaré; i.e., the claim that matter could be defined in completely objective terms, without reference to the subjective notion of force. Although, in his usual fashion, Knight did not identify which philosophers of science he was criticizing, he had probably read Pearson's work (see Knight, *Risk*, 212, n. 1).

⁸²Knight, "Causality and Substance," 20.

* * * * *

In order to understand what Knight was saying in "Causality and Substance," and how it relates to the therapeutic character of his later work, we must recognize that he did not affirm the inseparability of subject and object in order to advocate a dualistic philosophy. Instead, he adopted a dualistic position in order to avoid what he viewed to be the excesses that monistic philosophers slipped into when they tried to follow their (one) basic principle to its logical conclusion. The difference between these two perspectives is subtle, yet important. It is highlighted in a remark that appears at several points throughout the paper, to the effect that it is precisely the presence of both subject and object in every aspect of human experience that enables us to explain so much of experience solely in terms of one element or the other. Subject and object, he says,

are not related as two things which might exist separately, but as two sides or aspects of the same thing, i.e., experience itself. This view and this view alone will account for the fact that we can come so near to reducing either into or comprehending it under the other; . . . It becomes in this view quite comprehensible that we can look at either side of the thing we choose, *nearly* disregarding the other side, or even *almost* forgetting its presence, but that twist it as we will, the other side is still *there*.⁸³

⁸³Ibid., 31-32.

Thus, Knight's dualism was not a denial of the truth of idealism or realism, but rather, an affirmation of the (partial) truth of each, and, hence, of the necessity of both for the understanding of human experience.

Unfortunately for Knight's career as a philosopher (or fortunately for his career as an economist, depending upon your point of view), Creighton interpreted Knight's dualism as a denial of the truth of both idealism and realism, and was only too happy to see him foisted off onto the economics faculty. There he extended his reflections on human experience and change into the realm of economic theory, and produced, in very short order, a therapeutic masterpiece.

CHAPTER FIVE

KNOWLEDGE, UNCERTAINTY, AND ORGANIZATION

**THE THERAPEUTIC QUALITY OF
*RISK, UNCERTAINTY, AND PROFIT***

We live in a world full of contradiction and paradox, a fact of which perhaps the most fundamental illustration is this: that the existence of a problem of knowledge depends upon the future being different from the past, while the possibility of the solution of the problem depends on the future being like the past.

*Frank H. Knight, *Risk, Uncertainty, and Profit* [1921]*

When Alvin Johnson suggested that Frank Knight take up the theory of profit as his dissertation topic in the spring of 1914, shortly after Knight's departmental switch, he undoubtedly expected that "the keenest student of theory" he had ever taught¹ would be able to clear away the intellectual stubble and chaff which surrounded the existence of profit in competitive markets and provide it with a theoretical basis consistent with marginal productivity theory. Knight certainly did not disappoint Johnson's expectations, for when the thesis, entitled "A Theory of Business Profit,"² was completed two years later in 1916 (under the

¹Johnson, *Pioneer's Progress*, 227.

²Frank H. Knight, "A Theory of Business Profit," Ph.D. diss., Cornell University, 1916.

supervision of Allyn A. Young, to whom Johnson had handed over responsibility for Knight before his departure to help found *The New Republic*³), it revealed a depth of knowledge of economic theory that one commentator years later referred to as "simply incredible."⁴ But Knight did bend Johnson's expectations to fit his own purposes, for he used the thesis as a setting for the continuation of his ruminations on the problem of rendering human experience intelligible, especially in the face of change.

After completing the requirements for his doctorate at Cornell, Knight remained there for one academic year as an instructor (1916-1917). During that year, he entered the thesis in the Hart, Schaffner, and Marx competition for essays in economics, under the title "Cost, Value, and Profit."⁵ When his essay won second prize in the competition, Knight set to the task of revising it for publication (the terms of his prize provided for the manuscript's publication).⁶ In

³See Knight, *Risk*, xiii.

⁴"In Memoriam: Frank H. Knight," 1048.

⁵See *ibid.*; and the newspaper clippings in FHK B59 F11.

⁶First prize went to E.E. Lincoln for his study of "The Study of Municipal Electric Lighting in Massachusetts." I might add that Knight's prize may provide part of the answer to a question that (according to legend) appeared for a number of years on the London School of Economics theory examination. The question was: Who understands capitalism better--Marx or Hart, Schaffner, and Marx? One answer, among several I can think of, is: Hart, Schaffner, and Marx, because they provided us with *Risk, Uncertainty, and Profit* (in order to recognize this as a possible answer, one must know that *Risk* was required reading for the LSE theory course). The answer, of course, is double-sided, because Knight's analysis of the competitive economy emphasizes its limitations as much as its strengths, as we will see in this chapter.

the process, he made a number of additions which helped to clarify the therapeutic purpose underlying the book, especially in regard to the role of economic theory and the prospects for social control in the organization of economic life (as we will see in the second section of this chapter).

By the time Knight began these revisions, however, he had switched university appointments. In the fall of 1917, he returned to the state of his birth, where he became an instructor at the University of Chicago. Because Knight was too far away for Allyn Young (now in Washington to direct the Bureau of Statistical Research for the War Trade Board, and shortly to move on to Harvard⁷) to provide editorial direction to the process of revision, J.M. Clark agreed to perform the task for him.⁸ Association with Clark, and a number of other economists connected with the naturalistic program in the social sciences, had a profound effect on the direction of Knight's work during the Twenties, because it established his dominant concern during that decade--which he later described as a concern for

the 'present situation' in economics, the near pre-emption of the field by people who take a point of view which seems to me untenable, and in fact shallow, namely, the transfer into the human sciences of the concepts and procedures of the sciences of nature.⁹

⁷Charles P. Blicht, "Allyn A. Young: A Curious Case of Professional Neglect," *Hist. Polit. Econ.* 15 (1983): 6, 12.

⁸Knight, *Risk*, xiii.

⁹Frank H. Knight to Jacob Viner, TLS, 9 September 1925, Jacob Viner Papers, Statecraft Collection, Princeton University Library, Princeton, NJ.

The opportunity to revise his dissertation provided Knight with his first significant chance to attempt to deal with his growing concern about scientific naturalism, at a time when he was still sympathetic to its purposes. The result, which appeared in 1921 under the now famous title, was a therapeutic masterpiece.

The Therapeutic Purpose of *Risk*

Although Johnson had assigned Knight the task of writing a systematic treatment of profit, the book Knight eventually produced was neither a completely systematic work, nor primarily an essay on profit. Rather, it was a mixture of systematic economic analysis, and anti-systematic ruminations on the limitations of systematic analysis in human thought, which used the economic theory of profit as the field on which the tug-of-war between these two sides of Knight's thought could be played out. However, the theory of profit did not play an entirely passive or inactive role, for it is in his development of the notion of uncertainty, which is the "ground and cause of profit,"¹⁰ that Knight found a way to ensure that the tug-of-war would have no winner, and that the tension between the two sides of his thought would be sustained throughout the book.

Uncertainty occupies such an important place in *Risk* because Knight assigned it two interrelated roles. In the context of economic theory, uncertainty became, for Knight, the fundamental difference between the prerequisites of economic theory and the conditions of actual economic life. The presence or

¹⁰Knight, "Profit," 9.

absence of uncertainty, he said, "will appear as the most important underlying difference between the conditions which theory is compelled to assume and those which exist in fact."¹¹ But in the context of his discussion of human reasoning, uncertainty also becomes the limiting factor for human reason. The knowledge we have of the future is dependent, Knight claimed, upon our ability to analyze the past. However, the future is not always like the past, and if it is truly uncertain (we will see what Knight meant by this later in the chapter) our reasoning faculties become impotent, and we must guess or judge as best we can. In the presence of true uncertainty,

the ordinary decisions of life are made on the basis of "estimates" of a crude and superficial character. . . . when we try to decide what to expect in a certain situation, and how to behave ourselves accordingly, we are likely to do a lot of irrelevant mental rambling, and the first thing we know we find that we have made up our minds, that our course of action is settled. There seems to be very little meaning in what has gone on in our minds, and certainly little kinship with the formal processes of logic which the scientist uses in an investigation. We contrast the two processes by recognizing that the former is not reasoned knowledge, but "judgment," "common sense," or "intuition."¹²

As we will see later in the chapter, the two roles that uncertainty plays are interrelated in *Risk* because Knight describes the process of reasoning by which individuals in the economy formulate the expectations upon which they act as being identical to the process of scientific analysis. Thus, under conditions of certain knowledge, individuals form perfect expectations, the market works

¹¹Knight, *Risk*, 51.

¹²*Ibid.*, 211.

perfectly, and economics explains real conditions accurately. But under the conditions of uncertainty, when the process of "judgement," which science cannot explain, must be used to form expectations, economic theory is limited in its application. And when individuals work with less than perfect expectations, the efficiency of the market is also limited.

Because of the dual role that uncertainty played for Knight, the underlying tension in *Risk* can be expressed in either of two ways. First, one can say that Knight set out to convince economists that economic theory was a necessary component of the development of a scientific form of social inquiry relevant to social reform, and, at the same time, to show them that economic theory was limited in its applicability to the problems of social action by its self-imposed boundaries. As he said in the first chapter of the dissertation: "The present essay may . . . be called a study in pure economic theory with a special view to its theoretical limitations."¹³

Secondly, one can say that Knight set out to convince economists that any consideration of the reform of society's form of organization required a prior appreciation of the benefits of the market, and, at the same time, to show them that, as a form of social organization, the market suffered from limitations which led people to seek more "conscious" forms of organization. Knight's concern to "isolate and define the essential characteristics of free enterprise as a system or

¹³Knight, "Profit," 6. See *idem*, *Risk*, 11 for a similar remark.

method of securing and directing coöperative [sic] effort in a social group," then, is counter-balanced by his belief that the "system of perfect competition . . . is inherently self-defeating and could not exist in the real world."¹⁴ The tension Knight tried to sustain between these two ideas is seen in the preface, where, after emphasizing the need for "a sharp and clear conception" of economic principles for addressing the question of what could be expected of the market as a form of social organization, he went on to say that:

The net result of the inquiry is by no means a defense of the existing order. On the contrary, it is probably to emphasize the inherent defects of free enterprise. But it must be admitted that careful analysis also emphasizes the fundamental difficulties of the problem and the fatuousness of over-sanguine expectations from mere changes in social machinery.¹⁵

In order to understand this second tension, we will need to examine his theory of uncertainty, its connection to the theory of profit, and Knight's conception of its role in the organization of economic and social life. That examination will be the central task of the last two sections of the chapter.

Before turning to an examination of Knight's first tension (that between economic theory and its limitations), however, it would be helpful to pause briefly and see how he revised his dissertation in light of his growing awareness of the tensions he wanted to sustain.

¹⁴Ibid., xii, 193.

¹⁵Ibid., xii.

"A Theory of Business Profit" and *Risk*

Because my purpose in this chapter is primarily to reconstruct why Knight said what he said in *Risk*, I will not provide a detailed examination of the textual differences between the dissertation and the published book. However, some mention should be made of the organizational changes that were introduced, because they are directly related to the therapeutic purpose Knight wove into his systematic treatment of the theory of profit.¹⁶ Table 1 (see next page) provides a comparison of the table of contents of "A Theory of Business Profit" and *Risk*, arranged to show how the chapters in *Risk* correspond to the material in the dissertation.

The organizational changes Knight made were designed to heighten the tension between economic theory and economic practice which lay at the heart of

¹⁶Knight did not change the rather self-assertive style of his dissertation during the process of revision, despite repeated pleas from Allyn Young to "avoid the *appearance* of bumptiousness." (see Young's notes of Knight's thesis, FHK B54 F14, italics in original). There were, however, several important additions in the treatment of the theory of perfect competition. The analysis of the principle of diminishing returns was enhanced by the addition of the now-famous total product curve, which today forms the backbone of any first-year textbook's presentation of production theory (see Knight, *Risk*, 100). Another important theoretical addition appeared in the very last footnote of his analysis of perfect competition, where he summarized the central insight of what was to become the theory of the dominant firm: "In many cases it might be profitable for the owner of a considerable block, though not the whole supply of an important productive service, to restrict its use, and so increase the value of the product. Whether the owner of a part of a supply can gain by withholding some of that part from use will depend upon the fraction of the supply which he holds and on the flexibility of the supply obtainable from competing sources and the elasticity of demand for the product." Ibid., 193, n. 1.

Table 1.--A Comparative List of the Contents of "Profit" and *Risk*

<u>"A Theory of Business Profit"</u>	<u><i>Risk, Uncertainty, and Profit</i></u>
1. Introduction	I. The Place of Profit and Uncertainty in Economic Theory
Economic Method	
Historical Survey	II. Theories of Profit; Change and Risk in Relation to Profit
2. The Dynamic and the Risk Theories of Profit	
3. Cost and Value Under the Simplest Conditions	III. The Theory of Choice and of Exchange
4. The Principles of Imputation	IV. Joint Production and Capitalization
5. Limitations of the Imputation Process	V. Change and Progress with Uncertainty Absent
	VI. Minor Prerequisites for Perfect Competition
6. The Nature of Uncertainty	VII. The Meaning of Risk and Uncertainty
7. Economic Consequences of Uncertainty: Enterprise and Profit	VIII. Structures and Methods for Meeting Uncertainty
	IX. Enterprise and Profit
8. The Relations of Rent and Profit: Wages	X. Enterprise and Profit: The Salaried Manager
9. The Relations of Rent and Profit: Pure Rent and Time Value	XI. Uncertainty and Social Progress
10. The Relations of Rent and Profit: Quasi-Rent and Interest	XII. Social Aspects of Uncertainty and Profit

his therapeutic purpose. The first change was the addition of a preface. The dissertation had no preface, beginning instead with the discussion of economic method that appears in expanded form in the first chapter of *Risk*. Knight used the preface in *Risk* to alert readers to the way in which he would use his systematic treatment of the economic theory as an illustration of the difficulties involved in developing a form of social inquiry which would enable social scientists to address the practical problems of social action and control. The object of the book, Knight said, was the refinement of "the essential principles of the conventional economic doctrine" in order to state them "more accurately, and to show their implications more clearly, than has previously been done."¹⁷ The implicit assumption behind such a study of pure theory was the conviction that social programs for human betterment would best be served by careful, rigorous studies of the system of social organization which the programs intended to modify or replace. A clear understanding of the basic nature of the present system and of the underlying character of the problem of economic organization, Knight believed, would enable those interested in the reform of the present system to know:

what is reasonably to be expected of a method of organization, and hence of whether the system as such is to be blamed for the failure to achieve ideal results, or where if at all it is at fault, and the sort of change or

¹⁷Ibid., xi.

substitution which offers sufficient chance for improvement to justify experimentation.¹⁸

The second change was the division of the chapters in the book into three parts. The first two chapters comprise the "Introductory" section, chapters three through six deal with "Perfect Competition," and the last six chapters treat "Imperfect Competition Through Risk and Uncertainty." Although this division may appear to superimpose a organizational structure on an unchanged content, in fact, the division represents an important alteration of focus in the text. In "Profit," Knight's treatment of the role of uncertainty in economic (and social) life is largely relegated to chapters 6 and 7, while the final three chapters conclude his treatment of the distribution of income, with references to uncertainty scattered throughout. The organization structure provided in *Risk*, therefore, heightens the contrast between the "theoretical" world of pure competition and the "real" world of modern industrial life that Knight wished to emphasize, and brings uncertainty to a place of prominence in the text that it did not have in "Profit."

The change of emphasis which led Knight to organize the chapters into parts also led to several organizational changes within the chapters of the book. Most of these changes were relatively minor: material from one chapter placed in a different chapter, the discussion in one chapter expanded into two chapters, etc. However, three changes are worthy of mention because they illustrate the way he sought to strengthen his therapeutic purpose. The first of these changes is the

¹⁸Ibid., xii.

expanded discussion of economic method that appears in the first chapter. In the dissertation, Knight presented a short statement of the method he identifies as the "process of analysis, or the isolation of different elementary sequences for separate study,"¹⁹ with a minimum of footnotes and a matter-of-fact tone which simply assumed that the reader agreed with him. In *Risk*, however, Knight found room for an expanded defense of his philosophical justification for theoretical analysis, shaped by his initial dialogues with scientific naturalists at Chicago (see the next section of this chapter). Because his treatment of uncertainty is built upon the same theory of knowledge as his defense of economic theory, this extended discussion of method provides an introduction to the third part of the book (on imperfect competition and uncertainty) as well as its second part (on economic theory proper).

The second change in the organization of material within chapters was the expansion of the material in chapter 5 of the dissertation ("Limitations of the Imputation Process") into chapters V and VI in *Risk* ("Change and Progress with Uncertainty Absent"; and "Minor Prerequisites for Perfect Competition," respectively). The extra space that an additional chapter provided allowed Knight to place even greater emphasis on the limitations of both economic theory and the market (i.e., the larger the number of "prerequisites," the greater the limitations).

¹⁹Knight, "Profit," 1.

The other important changes occurred at the end of the book, where Knight reduced the final three chapters of the dissertation into two chapters, renamed and reoriented the latter of these two chapters in order to bring the notion of uncertainty to the foreground, and added an extra chapter not included in "Profit." All of these changes were made in order to keep the notion of uncertainty at the centre of the reader's attention throughout the entire second half of the book (the third part), thereby preventing the reader from losing sight of Knight's therapeutic purpose.

The last three chapters of the dissertation comprised an extended examination of "The Relations of Rent and Profit," which was only indirectly with his treatment of uncertainty in the sixth and seventh chapters. The chapters' sub-headings indicated the different aspects of that relation they treated: chapter 8 treated "Wages"; chapter 9 dealt with "Pure Rent and Time Value"; and chapter 10 examined "Quasi-Rent and Interest." In *Risk*, the material from chapter 8 of the dissertation is included in chapter X, which is the continuation of Knight's consideration of the relation of "Enterprise and Profit" in chapter IX, focusing on the role of management and its relation to labour (chapter X is subtitled: "The Salaried Manager"). The material from chapters 9 and 10 of the dissertation are combined into one chapter in *Risk*, entitled "Uncertainty and Social Progress." As the title of the chapter indicates, Knight cast his net somewhat wider in this chapter than he had in the dissertation, where he had dealt only with the relation of interest and rent.

The changes Knight made to the material that had been in the last three chapters of "Profit" occurred because, even though these chapters provided an extension of his treatment of profit, they were somewhat removed from the central purpose of the book, once uncertainty was moved to occupy the place of prominence Knight gave it in the second half of *Risk*. Because he had already published some of the material on the theory of interest which was only tangentially connected with the theory of uncertainty, it did not need to be included directly in the book.²⁰ Also, the merger of his discussion of wages with his treatment of salaried management enabled him to identify more clearly than he had in "Profit" the similarities and differences between management and labour. Finally, by providing a new title for the chapter dealing with interest and rent, and by shifting its emphasis, Knight was able to use it to form a bridge between his discussion of uncertainty in economic organization in earlier chapters and the final chapter's consideration of uncertainty's social implications.

The final chapter of *Risk*, on the "Social Aspects of Uncertainty and Profit," had not appeared in the dissertation. As I show in the last section of the next chapter, Knight's concern in his final chapter was to examine how the presence of uncertainty in social and economic life affected the prospect for the

²⁰See Frank H. Knight, "Neglected Factors in the Problem of Normal Interest," *Quart. J. Econ.* 30 (February 1916): 279-310; and idem, "The Concept of Normal Price in Value and Distribution," *Quart. J. Econ.* 32 (November 1917): 66-100. The latter article also included an expanded version of material from earlier chapters of the dissertation, in particular, a revision of his criticism of Alfred Marshall's notion of normal price.

reorganization, and improved control, of society. The content of this final chapter, and the fact that it was introduced in the process of revision, suggests that it also emerged from the dialogues with naturalists that Knight had begun during his first years at the University of Chicago.

Thus, all of the organizational changes Knight introduced in revising his dissertation for publication were designed to focus the reader's attention on the contrast between the theory of perfect competition and the actual conditions of economic life in a way that he felt "Profit" did not. Some of these changes were occasioned by his discussions with scientific naturalists, while others emerged from his attempt to integrate the two central tensions that uncertainty presented into a whole. In either case, the reorganization heightened the tension between theory and practice and strengthened the book's therapeutic quality.²¹

Finally, I cannot pass on without make some comment on the change in the title of Knight's study, for here, too, we see his therapeutic purpose at work. Both of the earlier titles ("A Theory of Business Profit," and "Cost, Value, and Profit") had emphasized theory; one had to know that profit resulted from the

²¹Because the organization of the book reflects Knight's effort to keep the two tensions intertwined, I disagree with George Stigler's suggestion that Knight should have completely separated his systematic explication of economic value and distribution theory (the second part of *Risk*) from his examination of the role of uncertainty in economic life (the third part of the book), by publishing the two parts independently of each other. The two parts were, for Knight, inextricably bound together, and he viewed *Risk* as a single whole. See George J. Stigler, foreword to reprint edition of *Risk, Uncertainty, and Profit*, by Frank H. Knight (Chicago:University of Chicago Press, 1971; Midway Reprint, 1985), ix-x.

divergence of the conditions of actual economic life from the idealized conditions of perfect competition (under which value--i.e., price--would equal cost) in order to see in the second title an opposition established between theory and practice. The new title, however, made this opposition abundantly clear. For intellectuals in the early 1920's, the term "uncertainty" was associated with a number of issues related to the relation of theory and practice; problems of knowledge, the relation of individual to social responsibility, and the prospects for the reform of society's mode of organization.²² By placing "uncertainty" at the centre of his title, Knight called all these problems to mind, and issued a challenge--what did uncertainty, with all its rich connotations in epistemology and social theory, have to do with, of all things, the existence of profit in capitalism?

Before answering that question directly, however, we need examine the other side of the central tension in *Risk*, which I identified earlier as the tension between the need for economic theory, and its inherent limitations.

²²See Kloppenber, *Uncertain Victory*, 410-15.

Economic Theory and Its Limitations

In the introduction to this chapter, I indicated that Knight's move to the University of Chicago in 1917 brought with it an association with John Maurice Clark and a number of other economists sympathetic to the naturalistic program in the social sciences. This association coalesced around a series of round table discussions on the scientific status of economics that took place between 1919 and 1922.²³ Among the others who participated were: Morris Copeland, Rexford

²³See Robin Neill, *A New Theory of Value: The Canadian Economics of H.A. Innis* (Toronto: University of Toronto Press, 1972), 28. During this time Knight also participated in a small group of philosophers and social scientists (including J.W. Angell, Morris Copeland, W.B. Smith, Carter Goodrich, and H.A. Innis), who met informally to discuss the importance of Thorstein Veblen's work. *Ibid.*, 12. Out of his participation in this group emerged Knight's review of *The Place of Science in Modern Civilization*, by T. Veblen (*J. Polit. Econ.* 28 (June 1920): 518-20). It was during this time that Knight became friends and disputants with Clarence Ayres, who was a graduate student in philosophy (working on the relation of economics and ethics). See the discussion of the Ayres-Knight friendship in William Breit and William P. Culbertson, Jr., "Clarence Edwin Ayres: An Intellectual's Portrait," in *Science and Ceremony: The Institutional Economics of C.E. Ayres*, ed. William Breit and William P. Culbertson, Jr. (Austin: University of Texas Press, 1976), 4-5. The two men continued to argue throughout their lives, both in print and in correspondence. See C.E. Ayres, "Moral Confusion in Economics," *Int. J. Ethics* 45 (January 1935): 170-99, which attacked the view of the relation between economic and ethics that Knight had articulated in his own essays on the subject, although Knight himself was only mentioned once in the essay, and that in a footnote. Knight's response (published in the same issue as Ayres' article), and Ayres' rejoinder are: Frank H. Knight, "Intellectual Confusion on Morals and Economics" (reply to "Moral Confusion in Economics," by C.E. Ayres), *Int. J. Ethics* 45 (January 1935): 200-20; and C.E. Ayres, "Confusion Thrice Confounded" (rejoinder to "Intellectual Confusion on Morals and Economics," by Frank H. Knight), *Ethics* 45 (April 1935): 356-58. Most of the correspondence between the two men is published in Warren J. Samuels, "The Knight-Ayres Correspondence: The Grounds of Knowledge and Social Action," *J. Econ. Issues* 11 (September 1977): 485-525.

Tugwell, Carl Parry, and Arthur Benedict Wolfe.²⁴ The round-table discussions eventually led to the publication of *The Trend of Economics*, a collection of essays edited by Tugwell, in 1924.²⁵ Knight's contribution to the volume was the essay "The Limitations of Scientific Method in Economics,"²⁶ but his revisions of the dissertation were also affected by his conversations with the group of economists who contributed to the volume. In fact, although "Limitations" provided a new twist upon the argument, which Knight developed after the publication of *Risk* (and which we will explore in chapter 6), the core section of his contribution to the Tugwell volume is an only-slightly-expanded version of the first 15 pages of *Risk*.²⁷ In order to understand what Knight was saying about economic theory in *Risk* (and in his later essays on method), therefore, we need to connect what he said to the arguments advanced by Tugwell and Wolfe.

²⁴One of these discussion sessions was held at the meeting of the American Economic Association in 1920. Papers by J.M. Clark and Carl Parry were presented, and Knight was one of the official discussants. See Frank H. Knight, "Traditional Economic Theory--Discussion" (comment on "A Revaluation of Traditional Economic Theory," by C.E. Parry and "Soundings in Non-Euclidean Economics, by J.M. Clark), *Amer. Econ. Rev.* (Supplement) 11 (March 1921): 143-46.

²⁵Rexford Guy Tugwell, ed., *The Trend of Economics* (New York: F.S. Crofts & Co., 1924).

²⁶Frank H. Knight, "The Limitations of Scientific Method in Economics," in *The Trend of Economics*, ed. R.G. Tugwell (New York: F.S. Crofts & Co., 1924), 229-67, reprinted in *The Ethics of Competition*, 105-47.

²⁷Cf., Knight, *Risk*, 3-18 and idem, "Limitations," 110-18 (page references are to reprinted version).

* * * * *

Summarizing the "experimental attitude" (the expression is Tugwell's) which scientific naturalists adopted in the Twenties, University of Chicago sociologist Leonard White declared that, "The social sciences have now reached the point where it is open to them to use laboratory methods."²⁸ Rexford Tugwell and A.B. Wolfe could not have agreed more. Tugwell titled his contribution to the aforementioned volume on current trends in economics "Experimental Economics," and said that, "here it is desired to discuss the place of induction, of laboratory and statistical work; and it ought to be said at once that its place seems to be a vital one . . ."²⁹ In keeping with the developing language of social control, Tugwell (and Wolfe in his contribution to the same volume³⁰) argued that the deductive and static equilibrium approaches of traditional economic theory were inappropriate to the problems of contemporary society because they assumed that the world remained unchanged, when the one fact of life is that the world is always changing. Economic theorists, Tugwell said,

²⁸Leonard D. White, "The Local Community Research Committee and the Social Science Research Building," in *Chicago: An Experiment in Social Science Research*, ed. T.V. Smith and Leonard D. White (Chicago: University of Chicago Press, 1929), 25; quoted in Farcell, *Crisis of Democratic Theory*, 31.

²⁹Rexford Guy Tugwell, "Experimental Economics," in *The Trend of Economics*, 403.

³⁰Arthur Benedict Wolfe, "Functional Economics," in *The Trend of Economics*, 445-481.

neglected the one obvious fact that "gives away the whole show." Man need not press upon his food supply if he wills not and so can genuinely raise the levels of living; diminishing returns will never set in so long as man continues to exercise his intelligence. These economic generalizations turn out not to be natural laws at all but merely a statement of the conditions of life in an undeveloped society. As time goes on the fallacy of assuming the universal validity of *economic law* becomes more and more plain; and especially when the concept *economic law* is taken to mean some inescapable trend of development. The most useful result of eighteenth and nineteenth century economic thinking seems to us now to have been the formulation of "laws" which men immediately set to work to circumvent--and did! One only has to consider Malthusianism for an illustration.³¹

In a world of change, Tugwell argued, economists needed to begin with the actual circumstances of social life at the moment, and by "induction" (the term he used for the empirical testing of hypotheses) verify any principle postulated by theorists. Only then would economists be in the position to predict where society was to go in the future and, hence, be able advisors to governments interested in controlling the future direction of social life for the improvement of the general welfare.

Economics incontestably has got a bad metaphysical odor that only a renaissance of rebuilding from the ground up can dissipate. But until school-room economics becomes a body of relevant principles, until economists undertake the appeal to experiment for the demonstration of their generalizations as truth, other problems . . . will have to wait for solutions. . . . This obligation of the economists is a pressing one. . . . Never has the world been more obviously in need of expert leadership and never has the obligation of leadership more obviously devolved upon a single group. It is the clear duty of American economists to say what

³¹Tugwell, "Experimental Economics," 391.

the economic system of America can and should do and to point the true path toward new goals.³²

Thus, Tugwell claimed that the call for a scientific economics was inextricably related to the quest for social betterment, and that economists were essential to that quest because of their specialized knowledge and technical expertise. The social world that he and the other scientific naturalists envisaged was one of cooperation and improved standards of living, brought about through rational control, exercised by a board of directors composed of economists.

³²Ibid., 384.

* * * * *

Before examining the way in which Knight criticized Tugwell's argument in *Risk* and his later articles on method, it is important to remind ourselves of the degree to which Knight actually agreed with the naturalists. With the naturalists, Knight condemned the market system as uncooperative and demeaning (see the comments quoted at the end of chapter 4 and the discussion in chapter 6), and believed that a more intelligent system of social organization was needed. Furthermore, he also believed, as we will see shortly, that those who claimed for the basic postulates of economics the status of universal laws were wrong, and that such principles were extremely limited in their scope of application, requiring (as Tugwell suggested in the quotation above) careful testing against the actual conditions of economic life before one could venture policy conclusions based upon them.

Yet, despite his agreement on what he described as the "positive side" of the argument put forward by naturalists such as Tugwell, Wolfe, and others, "the embarrassing fact" for Knight was "that I still see significance in our inheritance from the past hundred and fifty years."³³ In *Risk*, and then in his articles on economic method written later in the Twenties, Knight tried to articulate what "significance" he saw. In doing so, he sought to affirm the deductive reasoning of traditional economics, while accepting the naturalists' criticisms of such reasoning.

³³Knight, "Traditional Economic Theory--Discussion," 144.

The *via media* he tried to walk, therefore, emphasized both the necessity, and limitations, of theoretical reasoning.

Knight began, quite appropriately, with the same pragmatic outlook that he had adopted in "Causality and Substance." In that essay, he had begun by stating that "The problem of philosophy is that of making experience intelligible, or as intelligible as possible. Knowledge is in and of and for experience."³⁴ In *Risk*, he began at the same point, saying that "The aim of science is to predict the future for the purpose of making our conduct intelligent."³⁵ The key questions he posed were: how does science make our conduct intelligent, and to what extent can it be successful?

For Knight, the "complex mass of interrelated changes" we encounter in our experience cannot be rendered intelligible without the aid of theoretical "analysis"; by which he means the process of "isolating the different forces or tendencies in a situation and studying the character and effect of each separately."³⁶ The "analytic method" is most fully developed in the physical sciences, but it is important to Knight that this method is not only the method of science, but the basis for all rational inquiry:

³⁴Knight, "Causality and Substance," 1.

³⁵Knight, *Risk*, 16. In a footnote attached to this sentence, Knight refers the reader to John Dewey's "definition of reason as the method of social diagnosis and prognosis." I should point out that this comment by Knight does not appear in idem, "Profit."

³⁶Knight, *Risk*, 3, 16.

This is the way our minds work; we must divide to conquer. Where a complex situation can be dealt with as whole--if that ever happens--there is no occasion for "thought." *Thought* in the scientific sense, and *analysis*, are the *same thing*.³⁷

Because economic theory uses the process of analysis to uncover the dominant forces at work in economic life, it is a necessary part of any rational study of the organization of society. Yet the principles of economics must be *applied* with caution, because the analytic method of theoretical economics involves a process of abstraction from the complexities of actual experience which ignores other, lesser, yet still important, forces at work within economic life.

The theoretical method in its pure form consists, . . . in the complete and separate study of general principles, with the rigid exclusion of all fluctuations, modifications, and accidents of all sorts due to the influence of factors less general than those under investigation at any particular stage of the inquiry.³⁸

The application of the analytic method in any class of problems is always very incomplete. It is never possible to deal in this way with a very large proportion, . . . of the vast complexity of factors entering into a normal real situation such as we must cope with in practical life. The value of the method depends on the fact that in large groups of problem situations certain elements are common and are not merely present in each single case, but in addition are few in number and important enough largely to dominate the situations. The laws of these few elements, therefore, enable us to reach an approximation to the law of the situation as a whole. They give us statements of what "tends" to be true or "would" hold true under "ideal" conditions, meaning merely in a situation where the

³⁷Ibid., 17 (italics in original). For Knight's discussion of the use of the analytic method in economics and the physical sciences, see *ibid.*, 3-5, 11-18; *idem*, "Profit," 1-7; and, in an expanded form, in *idem*, "Limitations," 110-18. On the relation of scientific analysis and rational inquiry ("thought") in Knight's work, see the third section of this chapter.

³⁸Knight, *Risk*, 9.

numerous and variable but less important "other things" which our laws do not take into account were entirely absent.³⁹

Thus, for Knight, the principles of economic theory could only be described as "tendencies"; i.e., statements about "what 'would' happen under simplified conditions never realized, but always more or less closely approached in practice."⁴⁰

According to Knight, the limited nature of the truth of the "tendencies" discovered by economic theory implied that one of the most important tasks that economic theorists *qua* scientists could undertake was the isolation, coordination, and definition of the conditions under which the tendencies would hold true.⁴¹ Such a task, Knight claimed, was necessary in order for economists to be able to recognize the extent to which their principles would hold true under the actual conditions of economic life. But it was here that economics, Knight believed, had not lived up to its scientific aspirations, for

. . . theoretical economics has been much less successful than theoretical physics in making the [analytic] procedure useful, largely because it has failed to make its nature and limitations explicit and clear. It studies what would happen under "perfect competition," noting betimes respects in which competition is not perfect; but much remains to be done to establish a systematic and coherent view of what is necessary to perfect competition, just how far and in what ways its conditions deviate from

³⁹Ibid., 4. See idem, "Profit," 1-2.

⁴⁰Knight, *Risk*, 5.

⁴¹Knight, "Profit," 4.

those of real life and what "corrections" have accordingly to be made in applying its conclusions to actual conditions.⁴²

In establishing a tension between the need for theoretical reasoning and the need to recognize its inherent limitations, Knight was seeking to avoid two responses to the "vague and unsettled" state of affairs in economics which had resulted from the failure to specify clearly the idealizing conditions of economic theory. The first response was that of the group of theoretical and mathematical economists "to whom little if anything outside of a closed system of deductions from a very small number of premises assumed as universal laws is to be regarded as scientific economics at all." The second response was the "strong and perhaps growing tendency to repudiate abstraction and deduction altogether, and insist upon a purely objective, descriptive science."⁴³

Knight viewed both responses as unfortunate cases of extremism, brought on by the "sweeping and wholly unwarranted conclusions" that had been drawn by practically-minded economists and others from economic principles whose idealizing conditions they did not fully recognize.⁴⁴ The "evil results"⁴⁵ of practical programs of economic reform which did not attend to the limitations of

⁴²Knight, *Risk*, 5; a similar remark is found in idem, "Profit," 2-3.

⁴³Knight, *Risk*, 5-6. I should note the fact that no remarks like these appear in idem, "Profit."

⁴⁴Knight, *Risk*, 11; and idem, "Profit," 5. Knight does not specify to whom he is referring when he speaks of those who apply economic principles incorrectly.

⁴⁵Knight, *Risk*, 10; and idem, "Profit," 5.

economic theory had led theorists, on the one side, to retreat into the abstract world of economic theory, treating it as if it were the real world we live in, and scientific naturalists such as Tugwell, on the other side, to reject economic theory because it seemed irrelevant to the world we live in. Knight strove for a "middle way," by which the economic theory would be recognized as necessary for the "practical comprehension of the social system," yet only as a "first step."⁴⁶ Beyond it lay the hard empirical work of comparing the conditions of actual life with those of economic theory in order to see to what extent economic principles were relevant to practical problems of economic reform.

* * * * *

Knight's desire to find a middle way between the theorists and the naturalists reflected the concern, which he shared with the naturalists, for bringing the intelligence of science to bear on the practical problems of social action. "The 'practical' justification for the study of general economics," he said in the preface to *Risk*, "is a belief in the possibility of improving the quality of human life through changes in the form of organization of want-satisfying activity."⁴⁷ But the naturalists' opposition to classical economic theory, and the *laissez-faire* policy conclusions they believed were drawn from it, Knight argued, had blinded them to the scientific necessity of theoretical reasoning for intelligent social choices: we

⁴⁶Knight, *Risk*, 6.

⁴⁷*Ibid.*, xi.

will not be able to judge which changes will actually improve the quality of life without the help of theoretical analysis. At the same time, however, Knight's understanding of the analytic method implied that economic theory was inherently limited in its application to the actual problems of economic life.

Thus, at the centre of *Risk* stood what Knight perceived to be the fundamental tension of the science of economics (and, by extension, of human thought, as we will see in the discussion of uncertainty in the next chapter). On the one side, human action, if it is to be in any sense rational or intelligent, requires knowledge of the consequences of various possible actions. Because analysis is the only method by which such knowledge can be gained, the analytic method is essential to human action. However, because it involves a process of abstraction which simplifies the complexities of actual experience into a simple, manageable set of elementary constituents, analysis provides statements of general tendencies that are only conditionally or approximately true.⁴⁸ Uncertainty, in particular, renders the future unknowable and, hence, unpredictable.

The facts of life in this regard are in a superficial sense obtrusively obvious and are a matter of common observation. It is a world of change in which we live, and a world of uncertainty. We live only by knowing *something* about the future; while the problems of life, or of conduct at least, arise from the fact that we know so little.⁴⁹

⁴⁸Ibid., 14.

⁴⁹Ibid., 199. See idem, "Limitations," 110, for Knight's statement that real change renders the world unpredictable.

Recognition of this fundamental tension or paradox, Knight believed, would lead economists to an appreciation of both the necessity of theoretical reasoning in the process of social action, and its inherent limitations. The failure to sustain this tension would only lead to much "mischief and misunderstanding."⁵⁰

Uncertainty and the Therapeutic Purpose of *Risk*

In order to understand the other side of the dominant tension in *Risk*--i.e., the tension between the need to recognize both the benefits of the market and its necessary limitations--we need to turn to the central theoretical topic of the book, profit, and the notion of uncertainty he introduced to explain its presence in the economy. In the process, we will see how Knight used the notion of uncertainty to strengthen the general therapeutic purpose of the book.

* * * * *

"The problem of profit," Knight said in the first chapter of his dissertation, "is in fact this very problem of the divergence of actual business conditions from the theoretical assumptions of perfect competition."⁵¹ Later in the dissertation (and in the book), he spelled out in detail the assumptions of competitive theory under which the value of a good would exactly equal its cost and no profit would exist, and from which the actual conditions of economic life were said to diverge.

⁵⁰Ibid.

⁵¹Knight, "Profit," 7 (*italics in original*).

In chapter III, where the list of essential "characteristics of our imaginary society" appears, the assumptions were delineated in such a way as to eliminate all change and, hence, to enable Knight to focus on short-run equilibrium and the theory of normal price.⁵² In chapter VI, however, he relaxed the assumptions somewhat in order to examine secular change in normal price, with uncertainty absent--i.e., under conditions where the factors effecting normal price were allowed to change, but only according to known laws, so that all changes could be fully anticipated.⁵³ The conclusion Knight drew was that fully anticipated changes have no effect upon "the distribution of the product of industry among the agencies causally concerned in creating it." Hence,

Where the results of the employment of resources can be foreseen, competition will force every user of any productive resource to pay all that he can afford to pay, which is its net specific contribution to the total product of industry. No sort of change interferes with the no-profit adjustment if the law of the change is known.⁵⁴

⁵²See especially, Knight *Risk*, 76-81. Essentially, Knight argued that economic theory assumes freely operating individuals, who can control their own activities, are completely mobile, have no coercive power over each other, and communicate freely and without cost. With regard to other productive resources, the assumptions entail perfect mobility of all resources, the incentive to divide labour and specialize, and the absence of change in the given factors and in technology.

⁵³As a part of his examination of secular change in the absence of uncertainty, Knight also tries to clarify the ambiguities in Alfred Marshall's treatment of the short- and long-run. The treatment of Marshall's distinction in *Risk*, 141-73 is a precursor to Knight's longer treatment in idem, "Cost of Production and Price."

⁵⁴Knight, *Risk*, 172-73.

The fact that changes in tastes and preferences, population and other productive resources, and the state of technology would not bring about a departure of value from cost if fully anticipated implied for Knight that the central assumption that produced the conditions of perfect competition was that of perfect knowledge. Because the absence of perfect knowledge was the essential condition of actual business life, and the existence of profit was the major effect of unknown changes in initial conditions, the uncertainty which arose from the imperfection of human knowledge was "the ground and cause of profit."⁵⁵

The general nature of the conclusion may be stated at the [outset] . . . It is that perfect competition depends on perfect knowledge. All the essential elements of current industrial society may be present without destroying the ideal no-profit resultant of competitive forces. The one fatal element is *uncertainty*, the imperfection of the knowledge upon which economic conduct is based.⁵⁶

* * * * *

The suggestion that uncertainty meant simply the imperfection of human knowledge runs into an immediate problem, however, because Knight devoted a considerable amount of space to investigations of probability theory and of the available means by which individuals and businesses could protect themselves

⁵⁵Knight, "Profit," 9.

⁵⁶Ibid., 9 (italics in original).

against some of the consequences of their imperfect knowledge.⁵⁷ The assimilation of these "risks" into the market framework through the development of insurance markets and the organizational structure of firms implied that competition could still work perfectly, even in environments characterized by imperfect knowledge, if the consequences of that imperfect knowledge could be translated in some fashion into the cost structure of a firm.

. . . it is unnecessary to perfect, profitless imputation that particular occurrences be foreseeable, if only all the alternative possibilities are known and the probability of the occurrence of each can be accurately ascertained. Even though the business man could not know in advance the results of individual ventures, he could operate and base his competitive offers upon accurate foreknowledge of the future if quantitative knowledge of the probability of every possible outcome can be had. For by figuring on the basis of a large number of ventures (whether in his own business alone or in that of business in general) the losses could be converted into fixed costs. Such special costs would, of course, have to be given full weight, but they would be costs merely, like any other necessary outlays, and would not give rise to profit, which is the difference between cost and selling price. Such situations in more or less pure form are also common in everyday life, and various devices for dealing with them form an important phase of contemporary business organization.⁵⁸

But there remained for Knight those uncertainties which could not be assimilated into the market framework. These "true" uncertainties, as Knight often referred to them, gave rise to profit because they could not be accounted for in an enterprise's cost structure and, hence, called forth entrepreneurial activity.⁵⁹

⁵⁷See *ibid.*, chapters 6 and 8; and *idem*, *Risk*, chapters VII-IX.

⁵⁸*Ibid.*, 198-99.

⁵⁹Knight, "Profit," chapters 6 and 7; *idem Risk*, chapters VII and IX.

But what did Knight believe prevented true uncertainties from being assimilated into the market? The key to answering that question lies in Knight's recognition of the effect that imperfect knowledge has on people's expectations.

In business as in other departments of life, men *act on what they think*; and here as elsewhere it is necessary constantly and carefully to take account of the undisputed but frequently overlooked truth that men *do not know everything*.⁶⁰

Perfect knowledge is directly related to perfect competition for Knight, because he believed the market could only allocate resources efficiently when the expectations of individuals were based upon certain knowledge of the outcomes of all their possible plans. "For perfectly rational behavior it is necessary for each individual to know that he does possess perfect knowledge and that all other individuals are similarly equipped."⁶¹ Uncertainty upset the ideal efficiency of the market because it rendered the expectations of individuals less than perfect. The market's inability to assimilate uncertainties, therefore, had something to do with the individual's ability to form perfect expectations.

It is at this point that Knight made one of his most important moves, because he linked his description of the limitations of the individual's ability to form probabilistic expectations (with some degree of certainty) to his theory of the

⁶⁰Knight, "Profit," 175 (italics in original). In *Risk*, the sentence reads: "We live only by knowing *something* about the future; while the problems of life, or of conduct at least, arise from the fact that we know so little." Idem, *Risk*, 199 (italics in original).

⁶¹Knight, "Profit," 175.

limitations of theoretical reasoning in general.⁶² Intelligent action, either on the part of the individual seeking the maximum benefit from his or her choices, or the social inquirer seeking to provide guidance to social choices, requires knowledge of all the potential outcomes of the range of possible actions. In either case, Knight argued, knowledge emerges from the analysis of previous experience through the processes of measurement and classification. Knowledge fails to function as an instrument for intelligent action, however, when there are aspects of our experience which cannot be adequately measured or classified. True uncertainties were to be distinguished, Knight claimed, by the fact that "there is *no valid basis of any kind* for classifying them."⁶³ The presence of these uncertainties significantly reduces the prospects of success for rational action at either the individual or social level. Yet, paradoxically, they open the door for entrepreneurial action at the same time.

Knight's argument that the efficiency of market outcomes depended, at least in part, on the certainty of knowledge available to the economic agents in the market system, implied for him that a systemic analysis of the market could never be entirely divorced from a characterization of the processes by which individual agents reason and form expectations. Knight, therefore, could not accept the "givenness" of expectations commonly assumed in neoclassical theory.

⁶²Compare chapters I and VII in Knight, *Risk*.

⁶³*Ibid.*, 225 (italics in original).

Rather, he consistently wove his discussion of the nature of "human knowledge and conduct and the like"⁶⁴ into his discussion of the market as if they were one and the same--which, for him, they were. Many economists today would consider this interdependence of Knight's analysis of market and individual behavior to be methodologically ambiguous.⁶⁵ However, it is important to realize that out of this ambiguous mixture appeared what was arguably the book's most important theoretical question; i.e., what are the systemic effects of the actions of individuals operating within an environment characterized by uncertainty?

Another way of identifying the importance of Knight's identification of expectation-formation with theoretical reasoning is to note that its acceptance would have required economists to recognize the *creativity* of an individual's estimates or subjective judgements. True uncertainty does not leave individuals impotent; rather, it provides the occasion for them to draw upon their past experience in a creative fashion in order to form the best and wisest judgements they can. The best way to examine the importance that Knight attached to the treatment of individuals as a creative, purposeful subjects is within in the context of his use of probability theory.

* * * * *

⁶⁴LeRoy and Singell, "Knight on Risk and Uncertainty," 402.

⁶⁵E.g., *ibid.*

Most contemporary interpreters of Knight's theory of uncertainty approach it either from the perspective of someone who accepts modern subjective probability theory and wants to consider how Knight's use of probability theory can be assimilated into it, or from the perspective of someone who rejects modern subjective probability theory (probably on Shacklean grounds) and wants to consider how Knight's use of probability theory differs from it.⁶⁶ Neither of these perspectives, however, take adequate notice of Knight's own interests in connection with probability theory. The need to take Knight's own interests into account takes on even more force when one realizes that he gave it a full and careful treatment at a time when most other social scientists either avoided it or were antagonistic to it.⁶⁷ It would not be for at least another decade, and in the case of subjective probability theory, at least another three decades, that probability theory would again play as prominent a role in economic analysis as Knight assigned it in *Risk*.

In order to show why Knight made such extensive use of probability theory, I need to connect the comments he made in *Risk* on the relation between

⁶⁶See *ibid.*, and Langlois and Cosgel, "Knight on Risk, Uncertainty, and the Firm" for examples of the contrast between these perspectives.

⁶⁷See Claude Ménard, "Why Was There No Probabilistic Revolution in Economic Thought?," in *The Probabilistic Revolution*, vol. 2: *Ideas in the Sciences*, ed. Lorenz Krüger, Gerd Gigerenzer, and Mary S. Morgan (Cambridge: MIT Press, 1987), 139-46; Mary S. Morgan, *The History of Econometric Ideas* (Cambridge: Cambridge University Press, 1990; and *idem*, "Statistics Without Probability and Haavelmo's Revolution in Econometrics," in *The Probabilistic Revolution*, 171-97.

knowledge and experience with those he had made on the same topic several years earlier. In "Causality and Substance," Knight had described the central problem of human thought as "that of making experience intelligible, or as intelligible as possible." "Knowledge," he had said, "is in and of and for human experience."⁶⁸ To the extent that the data of experience are unchanging, Knight had argued, in a manner similar to that found in *Risk*, experience is capable of being completely knowable. It is change that renders the sequence of, or causal relations among, instances in our experience complex and mysterious. Thus, "it is primarily the world of change which furnishes us our intellectual problem."⁶⁹

"Causality and Substance" was written in the midst of Knight's battles with the neo-Hegelian idealists who dominated the Cornell philosophy department, and it reflected the nature of that particular debate. Chapter VII of *Risk* preserved much of the essay's argument, but recast it in terms of the broader social debate by extending the essay's instrumentalist theme and clarifying more carefully the nature of the intellectual problem change presented. The key problem, Knight argued, is whether the sequential relations of instances in our experience are sufficiently stable to allow representation within the context of a deterministic model.⁷⁰ Accepting the fact that change rendered much of our experience

⁶⁸Knight, "Causality and Substance," 1.

⁶⁹Ibid., 6.

⁷⁰Knight, *Risk*, 197-211.

unstable, and, hence, unknowable within the confines of a strictly deterministic model, Knight then asked if our experience was sufficiently random to allow representation within the context of a probabilistic model.⁷¹ If it was, then the risk of various possible outcomes could still be measured, classified, and known, even though the actual outcome was not known. From the standpoint of intelligent action, there was no real difference between a world of complete determination and a world of complete randomness. In either case, future outcomes are knowable, in the sense that they can be measured and classified. Hence, they can be translated into costs today.

If in a certain class of cases a given outcome is not certain, . . . but if the numerical probability of its occurrence is known, conduct in relation to the situation in question may be ordered intelligently. Business operations, . . . illustrate the point perfectly. Thus, in the example given by von Mangoldt, the bursting of bottles does not introduce an uncertainty or hazard into the business of producing champagne; since in the operations of any producer a practically constant and known proportion of the bottles burst, it does not especially matter even whether the proportion is large or small. The loss becomes a fixed cost in the industry and is passed on to the consumer, like the outlays for labor or materials or any other. And even if a single producer does not deal with a sufficiently large number of cases of the contingency in question (in a sufficiently short period of time) to secure constancy in its effects, the same result may easily be realized, through an organization taking in a large number of producers. This, of course, is the principle of insurance, as familiarly illustrated by the chance of fire loss. No one can say whether a particular building will burn, and most building owners do not operate on a sufficient scale to reduce the loss to constancy (though some do). But as is well known, the effect of insurance is to extend this base to cover the operations of a large number of persons and convert the contingency into a fixed cost. It makes no difference in the principles whether the grouping of cases is effected through a mutual organization

⁷¹*Ibid.*, 212-225.

of the persons directly affected or through an outside commercial agency.⁷²

The real problem for critical intelligence, therefore, lay with those aspects of change which were not random; in particular, with changes that were determined by immeasurable things like human intentionality.

If there is real indeterminateness, and if the ultimate seat of it is in the activities of the human (or perhaps organic) machine, there is in a sense an opening of the door to a conception of freedom in conduct. And when we consider the mystery of the role of consciousness in behavior and the repugnance which is felt by common sense to the epiphenomenal theory, we feel justified in further contending for at least the possibility that "mind" may in some inscrutable way originate action.⁷³

Thus, Knight's claim that one could not ignore the subjective judgements of individuals in the explanation of human action ultimately led him to explain uncertainty in terms of the dynamic indeterminacy those judgements created.

* * * * *

The claim that *Risk* was not intended as an attack on the entire scope of the naturalistic program in social science, and the claim that Knight saw the ultimate source of uncertainty in human experience to lie in the creative power of subjective judgements, appear to be incompatible. In fact, they are--but that does not necessarily mean that Knight's book is incoherent. Rather, it simply points back to the therapeutic purpose which lay behind it. Knight set out to convince

⁷²Ibid., 212-213.

⁷³Ibid., 221.

his fellow social scientists that traditional economic theory was useful and should have a place in the analysis of the workings of the present system; but that its usefulness was limited, like all theoretical reasoning, by its idealizing conditions. At the heart of those conditions lay a problem Knight had already encountered; namely the tension between the need for stability in human experience required for analysis and prediction, and the necessity of recognizing human freedom. From the tension between the two emerged the therapeutic richness of *Risk*.

The Social Aspects of Uncertainty

The tension between Knight's general support for the naturalists' reformulation of the languages of American social discourse and the subjectivism inherent in his theory of uncertainty was reflected in another tension that emerged from his reflections on uncertainty. This second tension involved the relation between uncertainty and the prospects for social reform which Knight developed in the last chapter of *Risk*, entitled "Social Aspects of Uncertainty and Profit." The addition of this often-overlooked chapter during the process of revision reflected Knight's concern to show more explicitly the connection between his theory of profit and the larger social debate over society's organization and control.

In the last chapter of *Risk*, Knight attempted to assess the significance of his investigations of human conduct in the presence of uncertainty for the reconstruction of society, especially in relation to the prospects for the substitution

of public control for the private ownership of industry. Two themes were emphasized. First, Knight argued that the substitution of public for private control would be possible *if* society could overcome the difficulties which he had earlier described as inherent in the relation between owner and manager (in chapter X, on "The Salaried Manager"). Social progress would be furthered if public control could be organized in such a way as to lead managers to "*feel*" that they were working for themselves and were being judged solely on the basis of their capacity to perform the job well; it would be arrested if managers felt like bureaucrats, "doing things for other people." The key to succeeding at this, Knight argued, lay in convincing managers that they were already social functionaries.

The manager, Knight said,

is really a social functionary now. Private property is a social institution; society has the unquestionable right to change or abolish it at will, and will maintain the institution only so long as property-owners serve the social interest better than some other form of social agency promises to do. Of course there is a lot of moral flub-dub about natural rights, sacred institutions of the past, etc., and it has some power to hold back social change. But in the end, and a not very distant end either, the question will be decided on the basis of what the majority of the people think, in a more or less cold-blooded way, about the issues. . . .

The suggestion which inevitably comes to mind is that a democratic economic order might conceivably appeal as effectively to the same fundamental motives [as those to which private enterprise appeals]. What is necessary is a development of political machinery and of political intelligence in the democracy itself to a point where men in responsible positions would actually feel their tenure secure and dependent only on their success in filling the position well. . . . The essential problem is wisely to select such responsible officials and promote them strictly on a basis of what they accomplish, to give them a "free hand" to make or mar their own careers. This is the lesson that must be learned before the democratization of industry will become a practical possibility. If we substitute for business competition, bad as it is, the game of political

demagoguery as conventionally played, with rotation in office and "to the victors belong the spoils" as its main principles, the consequences can only be disastrous.⁷⁴

The other side of this chapter, however, fits less well with Knight's reformist concerns. Throughout the chapter, he emphasized the ongoing nature of social organization and the resulting adaptation of the existing structures of society to the uncertainties of human experience. Most reform proposals fail, Knight argued, because they do not adequately examine the nature of the present system, and hence do not see where changes would be progressive, and where they would not. The chapter concludes along this cautious line with these words:

The ultimate difficulties of any arbitrary, artificial, moral, or rational reconstruction of society centre around the problem of social continuity The existing order, with the institutions of the private family and private property (in self as well as goods), inheritance and bequest and parental responsibility, affords one way for securing more or less tolerable results in grappling with this problem. They are not ideal, nor even good; but candid consideration of the difficulties of radical transformation, especially in view of our ignorance and disagreement as to what we want, suggests caution and humility in dealing with reconstruction proposals.⁷⁵

* * * * *

The tension that Knight sustains in the final chapter between his desire for social reconstruction and his growing appreciation for the manner in which organizations respond to reconstructive "experiments" in ways that undermine the experiments' goals provides a good conclusion to his book because it brings

⁷⁴Ibid., 359-61, italics in original.

⁷⁵Ibid., 374-75.

together the paradoxes that *Risk* contains. Knight intended the book as a contribution to reform-oriented social science; his conclusion was a warning against expecting too much from mere changes in the structure of social organization. He wanted to defend the role of theoretical reasoning in social science; most of his book was concerned to show its limitations. He saw himself participating with the scientific naturalists in the reformulation of American social discourse through the development of a language of social efficiency and control; his uncertainty theory emphasized the subjectivity of human experience and the necessity of wise (as opposed to rational) judgements. He was concerned about the social fragmentation that occurred from the market mode of social organization; his analysis emphasized the way in which rational agents will respond to uncertainty by introducing non-market forms of organization into the market if they are given the freedom to choose. A confused book? Perhaps. A paradoxical book? Certainly. But in its paradoxes lie its therapeutic strength.

CHAPTER SIX

SCIENCE AND VALUE

FRANK KNIGHT AND AMERICAN SOCIAL SCIENCE IN THE TWENTIES

. . . the scientific view of life is a limited and partial view; life is at bottom an exploration in the field of values . . .

Frank H. Knight, "The Limitations of Scientific Method in Economics" [1924]

Frank Knight spent most of the 1920's at the (then State) University of Iowa in Iowa City (1919-1928). While he was there, the publication of *Risk* in 1921, along with his regular participation in discussions on the scientific status of economics and the significant essays on these matters that he published (more on these below), established his reputation as an important theorist and critic of scientific naturalism, and he was sought out by several leading universities.¹ However, he chose to decline appointments elsewhere, only leaving Iowa City when the University of Chicago invited him to replace John Maurice Clark, who

¹We know that the University of Michigan approached him to replace F.M. Taylor while he was at Iowa (Knight wrote a review of Taylor's work a decade later, after Taylor's death--see Knight, "Fred Manville Taylor," in *The Encyclopedia of the Social Sciences*, vol. 14 (New York: Macmillan, 1934), 541-42), and later in the decade Cornell and Harvard also made overtures to him. See Dewey, "Uncertain Place of Knight," 6; and Stigler, "Frank Hyneman Knight," 56.

moved to Columbia University in the fall of 1926 (Knight began his appointment at Chicago in the fall of 1927, but returned to the University of Iowa for the Spring term of 1928, presumably to settle several matters pertaining to his pending divorce).² The move back to Chicago was appropriate, because the University represented, in a way no other institution of higher learning in America did at the time, the tradition of social science that formed the discursive context of Knight's work--scientific naturalism. He was to remain there until he retired in 1958.

Little is known about Knight's time in Iowa City, apart from the rather straightforward facts of his academic appointment and his writing. What we do know can be summarized briefly.³ He was appointed in 1919 to replace the late Professor Isaac Altheus Loos (an historian of economic thought) at the rank of associate professor, and was promoted to professor in 1922. According to the bulletins for the University between 1919 and 1927, Knight taught a wide range of

²The move to Chicago may not have been motivated by entirely professional reasons, because Knight and his wife Minerva separated in the summer of 1926 and were divorced in 1928. His return to Iowa City in the spring of 1928 is confirmed by the records of the University of Iowa (Gerald Nordquist to author, TLS, 5 April 1988), although the *Annual Register of the University of Chicago* indicates that Knight taught in Chicago during the Spring term (the *Annual Register* only lists courses that were planned for the coming semester, and, hence, a sudden change might not have been recorded. Andrew Bergerson to author, TLS, 15 September 1988).

³See Howey, "Knight and Economic Thought," 170; and Gerald Nordquist to Sharon Scheib, TL, 9 September 1985, personal copy (this memorandum details all the courses Knight taught and confirms his date of appointment and resignation).

theory and history of economic thought courses: Principles of Economics, Introduction to Economic Theory, Economic Theory, Advanced Economics, History of Economic Thought, History of Economic Thought to '70, Recent Economic Thought, Current Movements in Economic Thought, Economics and Welfare, Business and Economics, Psychology Applied to Industry, and Seminars in Modern Economics, Economic Theory, and the History of Economic Thought. He may have served as acting dean of the University's school of commerce (in which the economics department was located) at some point, although it is more probable that he served only as the acting head of the economics department during a summer term.⁴ Knight spent the summer of 1926 at Northwestern University in Evanston, Illinois (a move which facilitated his separation from his wife Minerva), where he finished his translation of Max Weber's *General Economic History*.⁵

His writing while at the University of Iowa established the standards for volume and quality that were to distinguish his work throughout his life. Donald Dewey has suggested that Knight's appointment in Iowa City provided him with "the liberty (and license) that goes with tenure," and implied that he spent most of

⁴The first suggestion comes from Dorfman, *The Economic Mind*, 469; the second from Gerald Nordquist to author, TLS, 4 August 1988.

⁵In regards to his stay at Northwestern, see Jacob Viner to Frank H. Knight, TL, 2 June 1926, and Frank H. Knight to Jacob Viner, TLS, 26 June 1926, both in the Jacob Viner Papers, Statecraft Collection, Princeton University Library, Princeton, NJ.

his time there reading "religion and philosophy," and preparing for "Sunday School" classes; by implication, Knight spent very little time writing, and even less teaching.⁶ Dewey, however, is somewhat unkind to Knight.

Certainly Knight read, and read widely, during this period: there are approximately 25 published reviews that date from Knight's time at Iowa--on everything from major treatises on economic theory such as Pigou's *The Economics of Welfare* or Cassel's *Theoretische Sozialökonomie*, to popular studies of economic and social issues such as Foster and Catchings' *Profits* and William McDougall's *Ethics and Some Modern World Problems*, and even a sympathetic review of a collection of sermons by the English economist William J. Ashley--and these surely represent only a portion of his reading.⁷ But the volume of work he

⁶Dewey, "Uncertain Place of Frank Knight," 6.

⁷Knight's major review of Pigou's book (Frank H. Knight, "Economics at Its Best" (review article on *The Economics of Welfare*, by A.C. Pigou), *Amer. Econ. Rev.* 16 (March 1926): 51-58) makes only passing reference to the devastating criticism of Pigou's claim that government intervention was necessary to restore the balance between private and social cost, which Knight made first in a review of "Some Books on Fundamentals" (review article on *Supply and Demand*, by H.D. Henderson, *The Economics of Welfare*, by A.C. Pigou, *Principles of the New Economics*, by L.D. Edie, and *Introduction to Economics*, by A.S. Johnson), *J. Polit. Econ.* 31 (June 1923): 353, and then developed at length in idem, "Some Fallacies in Social Cost." For the other book reviews mentioned here, see idem, "Cassel's *Theoretische Sozialökonomie*"; idem, review of *Profits*, by W.T. Foster and W. Catchings, *Polit. Sci. Quart.* 41 (September 1926): 468-71; idem, review of *Ethics and Some Modern World Problems*, by W. McDougall, *Polit. Sci. Quart.* 40 (March 1925): 138-40; and idem, review of *The Christian Outlook: Being the Sermons of an Economist*, by W.J. Ashley, *Polit. Sci. Quart.* 40 (December 1925): 624-26. Section A.II.d (Frank H. Knight -- Published Work -- Review Articles and Book Reviews) of the list of sources consulted contains a complete list of all Knight's book reviews up until 1935.

wrote during his tenure at Iowa does not betray any slackening of his usual level of hard work. Beside his published essays on theory and method during his tenure at Iowa,⁸ one can place quite a few unpublished essays, lectures, and discussant comments on the same topics, his first effort at a textbook on economics (out of which he abstracted the set of readings that became *The Economic Organization*), and a couple of articles on the scientific status of management.⁹ And finally, if, as Dewey claims, undergraduate students at Iowa

⁸All of his essays on economic philosophy and method will be mentioned later in the chapter. His most important theory articles were Knight, "Cost of Production and Price"; and idem, "Some Fallacies of Social Cost" (in regards to the latter, see also, idem, "On Decreasing Cost and Comparative Cost: A Rejoinder" (to "Some Fallacies in the Interpretation of Social Cost: A Reply," by F.D. Graham), *Quart. J. Econ.* 39 (February 1925): 331-33). His other theory articles from the 1920's are: idem, "A Note on Professor Clark's Illustration of Marginal Productivity" (comment on "The Economics of Overhead Costs," by J.M. Clark), *J. Polit. Econ.* 33 (October 1925): 550-53 (see also, idem, "Rejoinder" (to "Reply to Professor Knight's Remarks," by J.M. Clark), *J. Polit. Econ.* 33 (October 1925): 555-61); and idem, "A Suggestion for Simplifying the Statement of the General Theory of Price," *J. Polit. Econ.* 36 (June 1928): 353-70.

⁹The bibliographic essay contains a complete list of Knight's unpublished essays and lectures from the 1920's, and information about the textbook material and its relation to Knight's *The Economic Organization*. For accounts of the formal discussions on economic method and theory that he participated in during the early 1920's see idem, "Traditional Economic Theory--Discussion"; idem, "The Relation between Economics and Ethics--Discussion," *Amer. Econ. Rev.* (Supplement) 12 (March 1922): 192-93; idem, "Economic Theory and Practice--Discussion" (comment on "Some Social Aspects of Overhead Costs," by J.M. Clark), *Amer. Econ. Rev.* (Supplement) 13 (March 1923): 105-7; idem, "The Use of Quantitative Methods in the Study of Economic Theory--Round Table Discussion," *Amer. Econ. Rev.* (Supplement) 17 (March 1927): 19-20; and idem, "Interest Theory and Price Movements--Discussion" (comment on "Interest Theory and Price Movements," by F.A. Fetter), *Amer. Econ. Rev.* (Supplement) 17 (March 1927): 120-21. The articles on science and management are: idem, "Economics and Business," *J. Bus.* (State University of Iowa) 2 (February 1922): 7-

tried to avoid Knight's classes, it was probably less from any unpreparedness on Knight's part, than from his rather high expectations regarding what students were expected to have already learned, his frequent digressions on matters ranging from current events to the problems of religion and philosophy, and the amount of reading that was expected of them during the course (all attributes of his teaching that either attracted students to him or repelled them, as accounts of his teaching at the University of Chicago indicate).¹⁰

* * * * *

Although the volume, and critical tendencies, of Knight's work while at the University of Iowa does not mark these years as an exceptional period in his life professionally, there is one aspect of the range of interests found in this work that

10, 36; and idem, "Business Management: Science or Art?" *J. Bus.* (State University of Iowa) 4 (March 1923): 508-24.

¹⁰Dewey recounts a story which was still circulating at the University of Iowa when he was a student there after the Second World War: "in Knight's day undergraduate enrollment so declined that it was necessary to arrange things so that a student could major in economics without taking a course from him" (Dewey, "Uncertain Place of Frank Knight," 6). Dewey seems to think that this had something to do with Knight's dallying in non-economic matters. However, according to Gerald Nordquist, who has done most of the investigation of Knight's time in Iowa City, most of the students and faculty with whom he was acquainted stood in awe of his abilities as an economist (Gerald Nordquist to author, TLS, 5 April 1988), an impression reinforced by the extremely laudatory article written about him in the commerce school's journal upon the announcement of his return to Chicago. See "Frank Hyneman Knight," *J. Bus.* (State University of Iowa) 7 (November 1926): 12. Evidence of the demands that his style of lecturing placed on students, and student reactions to it, can be found in Patinkin, "Knight as Teacher," 24-25; and George J. Stigler, "Frank Knight as Teacher," *J. Polit. Econ.* 81 (May-June 1973): 518.

does stand out, for his time in Iowa City was the only period in his life when he was actively engaged in (written) commentary on contemporary economic policy. He was particularly concerned with matters of farm policy. The 1920's were a period of intense political discussion about the farm problem,¹¹ and, as an economics professor at a university in Iowa interested in the reform of society's mode of organization, it was perhaps inevitable that he was called upon to respond to the issues surrounding the economic policies that farmers felt were the source of their woes. What is interesting about his response, therefore, is not the fact that he did engage himself in matters of contemporary policy, but the way in which he used his understanding of the divergence of the actual conditions of economic life from the presuppositions of theory to approach policy questions. (The myth of Knight as a "near-saint of scholarship" who remained aloof from the passing fancies of political and economic controversy is one that Knight himself may have sought to perpetuate in later years, and which George Stigler, among others, has accepted almost without question, but it is one that is based more on his advocacy of a "priesthood" of intellectuals, who, "renouncing interest in individual prominence and power," would be "consecrated" to the common task of

¹¹On the complexities of the farm problem in the 1920's, see Gilbert C. Fite, "The Farmer's Dilemma, 1919-1929," in *Change and Continuity in Twentieth-Century America: The 1920's*, ed. John Braeman, Robert H. Bremner, and David Brody, *Modern America*, no. 2 (Columbus: Ohio State University Press, 1968), 67-102.

determining the correct solutions for current problems, than on his practices as a teacher and writer, especially during the early part of his career.¹²)

Knight's remarks on farm policy were occasioned by the intense political debate surrounding the McNary-Haugen bill. This bill, which was never enacted, although it passed Congress twice, would have established an agricultural product export commodity board in order to control the price of wheat and other agricultural products internally by dumping surplus product on the world market. The loss on foreign sales would be made up by the imposition of a small tax on the farmer, but, according to the supporters of the measure, the farmers' net proceeds would still exceed the value of their product at world prices. Hence, the real incomes of farmers would rise, and parity would be restored to an industry hurt by falling world prices and rising input costs (largely a result of high tariff protection on manufactured goods).¹³

Knight was initially opposed to such a measure, on the grounds that domestic grain prices would not actually rise substantially, and that the real problem was the tariff on imports of manufactured goods, which artificially

¹²See George J. Stigler, "Do Economists Matter?", in *The Economist as Preacher and Other Essays* (Chicago: University of Chicago Press, 1982), 66; and Knight, "Economic Theory and Nationalism," 358. Chapter 7 discusses Knight's notion of an intellectual elite further.

¹³Fite, "Farmer's Dilemma," 86-88.

increased the farmers' costs.¹⁴ Many classically-minded economists would have agreed with him. But he soon changed his mind. In 1924, in the middle of the most intense period of political lobbying for McNary-Haugenism, he contributed a defense of the measure to a debate published in the *Journal of Business*, a publication of the University of Iowa's School of Commerce.¹⁵ In his defense of the McNary-Haugen bill, Knight argued that, under ideal conditions (i.e., those of perfect competition), no such measure would be needed. But the ideal conditions did not exist, for the manufacturing interests had succeeded in their quest to have protection from foreign competition. If farmers knew what was really best for them, they would push for the elimination of all tariff protection, in order to encourage competition. But protectionism had "become so much a sacred tradition in American politics that apparently we cannot hope to get rid of it by a direct attack."¹⁶ Under these conditions, Knight argued, agricultural relief, along the lines proposed in the McNary-Haugen bill, provided an indirect attack on protectionism, counter-balancing the effect of industrial protection, and thereby

¹⁴Frank H. Knight, "The Tariff," *J. Bus.* (State University of Iowa) 4 (March 1923): 23.

¹⁵Frank H. Knight, "In Defense of Agricultural Relief on the General Plan of the McNary-Haugen Measure," *J. Bus.* (State University of Iowa) 7 (December 1926): 4, 20-22. See also idem, "The Professor and Farm Relief" (letter to the editor of *Wallace's Farmer*, Des Moines, Iowa), TMs, 23 July [1928], FHK B62 F16: 2. (I have not been able to confirm if this letter was actually published). In this letter, Knight refers to his participation in an "Iowa City Conference" on the McNary-Haugen bill.

¹⁶Knight, "In Defense of Agricultural Relief," 21.

restoring to that extent the condition contended for in the general argument for laissez-faire, the condition which would result from the free working of economic competitive forces over the whole field, which condition has been *distorted* by the protective policy of the country.¹⁷

* * * * *

Knight's dominant interest in the Twenties, however, continued to be the same issue that had captured his attention while he was revising *Risk*; namely, the growing significance of the language of social control in American social scientific discourse. Writing to Jacob Viner in 1925, he expressed the therapeutic role he had assumed in discussions on economics and the social sciences:

My personal job, my one slim chance of making any sort of contribution to the development of economic science, seems to be that of the critic and philosopher. I simply haven't the capacity for hard work to be a scholar in the literary sense, and as for inductive studies I lack, besides the above the special talent and special taste. Now besides being naturally a bit self-conscious and timid, I come to see more and more clearly, in a purely objective way, the boundless conceit and effrontery involved in presuming to do this job, of trying to [dig] a little 'deeper' in the way of analysis and definition of concepts. Consequently, though I also love to argue, my dominant impulse comes to be that of avoiding polemic and simply trying to get my ideas where the men who are making economic science can find them and put myself forward as little as possible. All this comes the more natural in the face of the 'present situation' in economics, the near pre-emption of the field by people who take a point of view which seems to me untenable, and in fact shallow, namely, the transfer into the human sciences of the concepts and procedures of the sciences of nature.¹⁸

¹⁷Ibid., 20 (italics in original).

¹⁸Knight to Viner, 9 September 1925. (The last sentence was quoted earlier in chapter 5).

We have seen already how his concern for "the transfer into the human sciences of the concepts and procedures of the science of nature" was woven into some of his earliest essays (e.g., "Causality and Substance") and into his reorganization and revision of *Risk*, but those works formed only the beginning of his therapeutic probing of the naturalists' adoption of the natural sciences as the model for social inquiry and control. During the rest of the 1920's, Knight expanded his examination of the themes (perhaps it is better to say, the lines of tension) he had introduced in his earliest work as he became more embroiled in debate with advocates of the naturalistic program. Two themes--those of science and value--became the focus of his attention. In a manner similar to that found in *Risk*, the therapeutic quality of Knight's work in the 1920's emerged from the way in which he used these two themes, whose central claims pulled in opposite directions, to sustain tensions that the scientific naturalists believed could be easily resolved (or avoided).

The theme of *science* was an expansion and modification of the argument he had advanced in *Risk* regarding the scientific status of economic theory. In the context of his further debates with the scientific naturalists, Knight continued to argue that economic theory was a necessary part of social inquiry because it used the "method of analysis," but he now also argued that economics *was* the science of social life, when social life was viewed as a scientific problem.

The theme of *value* was also an expansion of material from *Risk*, building on the notion of creative human agency which had been the basis for his theory of

uncertainty. Knight rarely used the term "uncertainty" again after the publication of *Risk*, but the idea of action being creatively determined by human consciousness appeared again and again. However, his use of the notion changed as his conversations with scientific naturalists led him to reflect further on the relation between social science and social action. In particular, his concerns about the naturalistic program began to coalesce around the relation between human agency and the problem of value. At one point in chapter III of *Risk*, Knight had said that "What men want is not so much to get things that they want as it is to have interesting experiences."¹⁹ Now he clarified what he meant. Choices, he said, are never merely decisions about what means would most efficiently satisfy a given desire. Rather, they were also decisions about what wants are best to desire, or about what interests one ought to attend to. Thus, although the economic problem was the scientific problem of life; the economic problem (and, hence, any other problem of social action) was more than a scientific problem. It was also a moral, if not spiritual, problem. Moreover, the market itself, that efficient arbiter of values, presented a problem of value.

In order to understand how Knight sustained the tension between science and value, we will need to examine two different ways in which he articulated the tension. The first of these emerged from his further development of the argument about the need for, and limitations of economic theory. In the Twenties, Knight

¹⁹Knight, *Risk*, 53-54.

expanded the argument he had first presented in *Risk*, in the process exploring more fully the relations among different methods of inquiry, and considering the problem of economic dynamics. The second way he expressed the tension between science and value came as he tried to relate his concern about the role of economics in the explanation of human conduct to ethical considerations. How did the "economic interpretation" of life relate to the quest for the Good? Could human choice be seen as more than an economic (i.e., means-end) problem? Was choice merely economic, or was it also a decision about what ends to pursue? Was there no disputing over tastes, or values? And what relevance, if any, did these questions have to the operation of the competitive enterprise system? All these questions (and more) emerged from Knight's reflections on ethics and economics.

Before we can consider these questions, however, we must return to the first way he expressed the tension between science and value, and examine his second round of reflections on economic theory and its inherent limitations.

Economic Theory and Its Limitations (The Second Time Around)

In *Risk*, Knight had defended economic theory on the grounds that it was scientific--i.e., that it employed the same method of "analysis" that the physical sciences did. Because he believed that the analytic method was the only method by which human intelligence could order what he later called the "big, buzzing,

booming confusion,' which is experience in its raw state,"²⁰ economic theory was a necessary part of any rational inquiry into social organization. Of course, as we saw in chapter 5, Knight also believed the process of analysis had its limitations, and economic theory could therefore provide only a general indication of the direction intelligent action should take.

Knight returned to the tension between the need for theoretical reasoning and its inherent limitations time and time again in his dialogues with scientific naturalists and others throughout the Twenties (and beyond). Because this was the central theme of *Risk*, it is not surprising that his work is an elaboration of the arguments presented in his book. However, it would be a mistake to assume that Knight constructed a systematic treatment of economic method in this subsequent work. Most of his book reviews and discussant comments simply reiterated the fundamental tension, and suggested that the author of whatever book or article Knight was responding to had failed to see the other side of the tension.²¹ Because most of the works he reviewed were written by naturalists, many of his

²⁰Knight, "Limitations," 111; and idem, "Economic Psychology and the Value Problem," *Quart. J. Econ.* 39 (May 1925), reprinted in *The Ethics of Competition*, 96 (page references are to reprint).

²¹The only book review in which Knight dealt at length (beyond the one or two sentences on the subject that appear in almost every review he wrote) with matters of methodology before his famous "What is Truth" review essay in 1940 was idem, "The Nature of Economic Science in Some Recent Discussion" (review article on *Prolegomena to Relativity Economics: An Elementary Study in the Mechanics and Organics of an Expanding Economic Universe*, by Ralph William Souter), *Amer. Econ. Rev.* 24 (June 1934): 225-38.

reviews and discussant comments emphasized the need for theory. But there is usually some hint of the other side of the tension as well. A remark made at the beginning of his discussion of a paper by Frederick C. Mills is representative:

Professor Mills' paper is typical of a trend prominent today, a trend away from the abstract and theoretical and toward concrete fact and practical application. In its place, there can be no quarrel with this emphasis, but there is much room for discussion as to just what its place is.²²

Knight's tendency to emphasize one side of his fundamental paradox or the other, may account for a fact which must be the supreme irony of Knight's influence upon the discipline of economics. On the one hand, his specification of the limitations of economic theory in *Risk* was in no small measure responsible for the reaction against the model of perfect competition and the search for alternative theories of competition which avoided the traditional dichotomy between perfect competition and monopoly. On the other hand, he was also the progenitor (somewhat later in the 1930's) of the revival of competitive market theory at the University of Chicago. At different points in his life, and before different audiences, he placed greater emphasis upon one side of the tension or

²²Frank H. Knight, "The Theory of Economic Dynamics--Discussion" (comment on "The Theory of Economic Dynamics as Related to Industrial Instability," by F.C. Mills), *Amer. Econ. Rev.* (Supplement) 20 (March 1930): 35. Later in his life Knight characterized the way he emphasized one side of his tension or the other depending upon his audience by saying, "when I am talking with an orthodox economist who expounds all these economic principles as gospel, I am a rip-roaring institutionalist, and when I am talking to an institutionalist who claims the principles don't make any sense at all, I defend the system, the 'orthodoxy' that is treated with so much contempt by followers of Veblen and others who wear the institutionalist label." Idem, *Intelligence and Democratic Action*, 82.

the other. It was none other than Frank Knight who taught both Edward Chamberlin (in 1919-20) and George Stigler (from 1933-36).²³

* * * * *

Knight's longer essays on method, in which one might think that he did try to construct a methodological system, evince the same tension. In fact, one would come closer to the truth about these articles if, instead of attempting to fit them together like a jigsaw puzzle, one recognized them as a set of experiments, in which Knight sought to find new ways to strengthen the tension between theory and practice. Another way to say the same thing, perhaps, would be to say that in these essays Knight tried to dress up his epistemological paradox in a variety of

²³Chamberlin was Knight's student during Knight's first year at the University of Iowa. His debt to Knight's account of the limitations of perfect competition is obvious from the introduction to *The Theory of Monopolistic Competition*, 8th ed. (Cambridge: Harvard University Press, 1962 [originally published in 1933]), 5 where he quotes Knight's remark that "In view of the fact that practically every business is a partial monopoly, it is remarkable that the theoretical treatment of economics has related so exclusively to complete monopoly and perfect competition" (the quote is from Knight, *Risk*, 193, n. 1). Chamberlin goes on to indicate that his book is an attempt to explore "the middle ground between competition and monopoly." Chamberlin, *Monopolistic Competition*, 5. By the time Chamberlin published his book, however, Knight had spent a decade defending economic theory (by which he always meant the theory of perfect competition), and had begun to shape the distinctive curriculum of the University of Chicago economics department, where a thorough grounding in competitive theory was required of every student (much as it is elsewhere today), and, therefore, was no longer supportive of the kind of work Chamberlin produced (as we will see later in the chapter, he thought there were other ways to show the limitations of competitive theory). I might point out one other interesting connection between Chamberlin and Knight; they both had Allyn Young as the supervisors of their doctoral dissertations (Young had moved from Cornell to Harvard by the time Chamberlin arrived there in 1922).

different clothes, in order to see what would attract attention to it. In either case, it is the tension or paradox that remains at the core of his work, rather than a system. Two examples will illustrate this point.

The first example is Knight's increasing use of a tri-partite division of the discipline of economics. In *Risk*, he had divided the discipline quite simply into theory and the practical application of theory, a division which he thought fit his emphasis on theory, and its limitations, well. During the Twenties, however, as he sought to retain the fundamental paradox he wanted to emphasize and also allow for the legitimacy of a variety of forms of economic inquiry, he began to experiment with different divisions of economic inquiry. The division he seems to have settled on was a three-fold one: economic theory, applied economics, and institutional (or historical) economics. The first place he articulated this division was at the end of "Limitations," where he said that the difficulty we encounter in rendering our the economic aspects of our experience intelligible,

. . . seems to call for a combination of three methods of treatment which must logically be sharply differentiated. The first is economic theory in the recognized sense, a study, largely deductive in character, of the more general aspects of economic cause and effect, those tendencies of a price system which are independent of the specific wants, technology, and resources. The second division, or applied economics, should attempt a statistical and inductive study of the actual data at the particular time and place, and of the manner in which general laws are modified by special and accidental circumstances of all sorts. That is, on the one hand it should get the facts as to wants, resources, and technology in the situation to which the study is intended to apply, and the precise form of such functional relations as the general theory cannot describe more accurately than to say for example that they are "decreasing"; and in the second place it should ascertain and take account of facts and principles too

special in character for the general theory, or which are not matters of general agreement. . . .

The third division of economics is the philosophy of history in the economic field, or what some of its votaries have chosen to call "historical" and others "institutional" economics, studying "the cumulative changes of institutions." In so far as it aspires to practical utility it will endeavour to predict long-period changes in the factors which applied economics accepts as data and attempts to observe and use as basis for inference.²⁴

At first glance, this expansion of the realm of economics might appear as an accommodation, on Knight's part, to the naturalists' arguments regarding the need for a statistical economics, and for an institutional approach. In some ways, this is true, because the tri-partite division certainly provided room for the approaches that naturalists preferred. A naturalist impatient with the "armchair speculation" of theoretical economics could also take some comfort in Knight's claims that theory was extremely limited in its scope of application, and that,

²⁴Knight, "Limitations," 143. The same tri-partite division appears in idem, "Fact and Interpretation in Economics," 8-11, and eventually formed the framework within which Knight revised Allyn Young's entry on "Economics" for the *Encyclopedia Britannica* (Frank H. Knight, "Economics," in *Encyclopedia Britannica*, 1951, reprinted in *History & Method*, 3-33). Knight also provided a somewhat similar division for the social sciences in general. Thus, in idem, "Social Science," *Ethics* 51 (January 1941): 127-43 (reprinted in *History & Method*, 121-134), he developed a five-fold division of the study of humans, which moved from the study of humans as physical mechanisms and biological organisms to the individual human as a rational problem-solver and a social being who associates with other humans (an early form of this division appeared in idem, "Social Study and the Social Movement in the Post-War World," TMs, 1928, FHK B34 F25: 19 p.). The divisions here do not exactly correspond to his tri-partite division of economics, but the same methodological idea is at work; namely, that human behaviour and its social consequences can be studied from a variety of different perspectives, and each perspective has its own unique, and appropriate, method, which is not violated by the methods (and, hence, findings) of the other methods.

hence, a great deal of work remained to be done in the second and third divisions. Yet the real import of Knight's division did not lie in his appreciation for the second and third divisions, but rather in the fact that he separated them from the first division--theory. The entire exercise was constructed, as was the argument in *Risk*, to *preserve* the legitimacy of economic theory as an intellectual enterprise. By arguing that the three divisions utilized methods appropriate to their subject matter, Knight was also, by implication, arguing that the methods and findings of the second and third divisions in no way violated the truth of the principles isolated by theoretical analysis. Once again, then, as in *Risk*, Knight was trying to convince naturalists that economic theory had a necessary role in any rational social inquiry. Thus, he could say, in a tone similar to that adopted in *Risk*, that

there is a science of economics, a true, and even exact, science, which reaches laws as universal as those of mathematics and mechanics. The greatest need for the development of economics as a growing body of thought and practice is an adequate appreciation of the meaning, and the limitations, of this body of accurate premises and rigorously established conclusions. . . .

These principles are only less abstract than those of mathematics. It is never true in reality that two and two make four; for we cannot add unlike things and there are no two real things in the universe which are exactly alike. It is only to completely abstract units, entirely without content, that the most familiar laws of number and quantity apply. Yet no one questions the practical utility of such laws. They are infinitely more useful than they could be if they ever did fit exactly any single concrete base, since all that they lose in literal accuracy they gain in

generality of application. By not being strictly true in any case they are significantly true in all.²⁵

The second example of how Knight experimented with different ways of expressing his fundamental tension comes from his re-examination of "the mechanical analogy in economics."²⁶ Knight had made use of this analogy extensively in *Risk*--where he had spoken of the method of economic theory and statics as "coextensive"²⁷--and in "Limitations" (as in the quotation above). However, the naturalists' claim that the dynamic character of modern life rendered the conclusions of theory invalid, and his own realization that an examination of the conditions of static equilibrium had to be supplemented by an investigation of: (a) the process of equilibration, and (b) the movement of equilibrium over time in response to changes in the given conditions, led him to return to his use of the analogy in order to re-examine its usefulness in social inquiry.²⁸

²⁵Knight, "Limitations," 135-36. In *Risk*, Knight had said that the principles of economics "are necessary, not because literally true--that in the strict sense they are useful *because not* literally true--but only if they bear a certain relation to literal truth and if all who work with them constantly bear in mind what that relation is." Idem, *Risk*, 15 (italics in original).

²⁶From the English sub-title of Knight, "Statik und Dynamik."

²⁷Knight, *Risk*, 16.

²⁸Thus, in "Limitations," he said: "The problem of conditions of equilibrium among given forces--'statics' in the proper sense--is often important in economics, but it is after all subsidiary The larger question is that of whether the forces acting under given conditions tend to produce an equilibrium, and if so how, and if not, what is their tendency; that is, it is a problem in dynamics." Knight, "Limitations," 141. And in a later essay, he remarked: "In economics we are

The central question that occupied his attention was this: given the fact that the analysis of the conditions of equilibrium used the static method of analysis ("we must *first* discuss one change at time, assuming the others suspended while that one is working itself out to its final results, and *then* attempt to combine the tendencies at work . . ." ²⁹), could one find an equivalent role for the analysis of dynamic forces in classical mechanics within economics? The answer, in typical Knightian fashion, was: possibly yes, but probably no.

On the positive side, Knight argued that economics had largely overlooked the problem of explaining the forces at work behind the conditions that static economic theory accepted as given (e.g., population, technology, resources, etc.). Because failure to attend to this problem created a "fatal gap" in economics, "The crying need of economic theory to-day [sic] is for a study of the 'laws of motion,' the *kinetics* of economic changes."³⁰

On the negative side, Knight argued that the "laws of motion" in the economy bear little relation to the "treatment of the relations of measured force, resistance, and movement" in classical mechanics and, hence, "no science of

chiefly concerned with equilibrium not as a state of rest but as a *process* in equilibrium. . . " Idem, "Statics and Dynamics," 169 (italics in original). All page references to "Statics and Dynamics" come from the English version of "Statik und Dynamik," published in *The Ethics of Competition*.

²⁹Knight, *Risk*, 16 (italics in original).

³⁰Knight, "Limitations," 141 (italics in original).

economic dynamics exists."³¹ Change in economics is treated within the context of static equilibrium analysis, by varying the time period in which the various conditions of equilibrium are allowed to change, and examining their changes in isolation from each other.³² This "static" procedure works, but only up to a point. At every stage of analysis, theory explains that which was "given" at an earlier stage of analysis. But can there be an explanation for the ultimate givens of economic theory--population, wants and preferences, resources, and technology? And can we assume that changes in these ultimate givens will necessarily lead toward equilibrium?

Here Knight is more equivocal. Certainly, there are some aspects of these givens which can be explained--e.g., there are biological and other natural limits to population growth--but, on the whole, these "given conditions" form "an interconnected system," which it is impossible to sub-divide for the purposes of analysis:

For very small changes it is admissible to assume that while any element or condition changes, the others in the same group remain fixed. But in discussing trends over any considerable period of time this must not be done. The greatest caution needs to be exercised in determining and specifying the systems of constants or long-period processes, and of

³¹Knight, "Statics and Dynamics," 167, 166.

³²In *Ibid.*, 170-76, Knight re-iterates his argument about the shortcomings of Marshall's analysis of short-run and long-run changes; an argument which first appeared in *idem*, *Risk* and, most fully, in *idem*, "Cost of Production and Price."

variables adjusting to them (and to each other), if the notion of tendency toward equilibrium is to yield sound results.³³

The study of long-period changes in the givens of economic theory, therefore, was, for Knight, not one which could utilize the scientific method of analysis available to static equilibrium theory. Such a study required the examination of the evolution of the economic system as an institution: what economists called dynamics "should be called evolutionary or historical economics."³⁴

Thus, in his analysis of the uses of the mechanical analogy in economics, as in his tri-partite division of economics, Knight was trying to find new means of expressing the tension between the need for theoretical analysis and the limitations of such analysis. How far could one push the method of analysis in studying economic organization? Quite far, it seemed. As changes in the initial conditions of the equilibrium process were introduced stage by stage, the analytic method enabled one to treat the changes separately and then examine their joint effect. But ultimately, there was a limit to the method's applicability. Eventually, the system had to be treated as a whole, and as an historical entity. In the context of such a study, it would be inappropriate to assume that changes would necessarily tend toward equilibrium (cumulative perhaps, equilibrating no), and hence, "we must . . . reject entirely the use of the mechanical analogy . . . in

³³Knight, "Statics and Dynamics," 183-84.

³⁴Ibid., 184, 167.

discussing basic historical changes."³⁵ But the impossibility of explaining historical change *via* the analytic method did not preclude the possibility that the method would bear fruit in social inquiry. Economic theory was limited in its applicability to the problems of social inquiry, but it was still necessary.

The Economic Problem as a Value Problem

In 1922, one year after the publication of *Risk*, Knight was invited to present two lectures at Harvard University.³⁶ The invitation was propitious because it gave him the opportunity to reflect more fully on a question that he had recently posed to himself (and other economic theorists) in his review of Gustav Cassel's *Theoretische Sozialökonomie*. After agreeing with Cassel that "a correct understanding of the mere mechanics of the price system," expressed "in terms which beg no questions as to approval or condemnation but merely show how the system works" required the repudiation of any connection between economic theory and utilitarianism (a similar comment, you will remember, appeared at the beginning of *Risk*), Knight went on to ask: "but should it not be kept in mind also that the ultimate goal of economic theorizing is a criticism in

³⁵Ibid., 185.

³⁶For confirmation that these were lectures originally delivered at Harvard, see Knight, *Intelligence and Democratic Action*, 122.

ethical and human terms of the working of the economic machine, and that a theory of value as well as price is indispensable?"³⁷

The title for the lecture series was "The Ethics of Competition"; the individual lectures were entitled "Ethics and the Economic Interpretation," and "Ethical Critique of Competition."³⁸ Both lectures were published within a year, and have remained among Knight's most famous articles. The second lecture, in particular, under its published title of "The Ethics of Competition," has often been cited and discussed because it combined Knight's depth of insight into the working of the market with a scathing ethical criticism of market society.³⁹

The essays "Ethics and the Economic Interpretation" and "The Ethics of Competition" are important because they mark the beginning of a different

³⁷Knight, "Cassel's *Theoretische Sozialökonomie*," 146.

³⁸For outlines of the lectures, see idem, "Ethics and the Economic Interpretation," TMs, [1922], FHK B55 F23: 4 p.; and idem, "Ethical Critique of Competition," TMs, [1922], FHK B44 F2: 6 p. (See also the annotated outline entitled "Limitations of Competitive Individualism. I: Mechanical Limitations, and II: Ethical Limitations," TMs, n.d. [probably 1920's], FHK B44 F8: 3 p., which is an expansion of the outline for the lecture series, apparently for the purpose of inclusion in a possible book).

³⁹For commentary on "Ethics of Competition," see C.E. Ayres, review of *The Ethics of Competition*, by Frank H. Knight, *Int. J. Ethics* 46 (April 1936): 364-70; Buchanan, "Economizing Element in Knight's Critique"; William S. Kern, "On the Market as a Game: Hayek vs. Knight," in *Research in the History of Economic Thought and Methodology*, vol. 3, ed. Warren J. Samuels (Greenwich, CT: JAI Press, 1985), 51-59; Eugene V. Rostow, "The Ethics of Competition Revisited," *California Mgt. Rev.* 5 (Spring 1963): 13-24; and George J. Stigler, "The Ethics of Competition: The Friendly Economists," Tanner Lectures on Human Values, in *The Economist as Preacher and Other Essays* (Chicago: University of Chicago Press, 1982), 14-26.

expression of the tension between the need for economic theory and its inherent limitations in Knight's work; an expression that was to become as important in his work during the Twenties as the various recasting of the tensions that we examined in the last section. Furthermore, although these essays picked up ideas that were present in *Risk*, the themes were developed and employed in new ways--ways that enabled Knight to focus on the underlying problem of the relation between science and value.

* * * * *

In order to understand the tension between science and value that Knight explored in these essays, and several subsequent ones, we need to begin by examining a new twist that Knight introduced into his argument about the need for economic theory. In *Risk*, and in the articles on method which came after it (those examined in the last section), Knight left room for the possibility that there could be other principles of social life, discoverable by the same method of analysis as that used by economists, which would be equally as necessary as the principles of economics, even though they appeared to contradict the "truth" of the economic principles. As he said in response to a paper on "Non-Euclidean Economics," by J.M. Clark,

The principles of the established economics are partial statements, but sound as far as they go, and they go about as far as general principles can be carried. . . . General theory is a *first* step, but never a very long step toward the solution of practical problems.

So I see nothing antagonistic to the spirit of "Euclidian" [sic] economics in Professor Clark's proposal of reversing certain of its

assumptions. Opposite tendencies may be and often are real and effective in different situations, and even in the same situation. . . . Some of the inverted postulates which he [i.e., Clark] suggests are important and neglected.⁴⁰

Yet, during the same period of time, Knight also argued in several other essays that economic theory was, in point of fact, the *only* science of society, if human action was viewed as a scientific problem. This second argument has presented some confusion in the literature on Knight's economic philosophy because it is easily misread or misunderstood.⁴¹ In order to understand what Knight meant by saying that the economic problem is the scientific problem, *and why*, we need to examine the relation between his remarks and the views of the scientific naturalists with whom he was in conversation.

In the discursive context of the developing language of social control, the central social concern (as we saw in chapter 3) was the creation of a scientific language for social inquiry that would provide society with the means to realize what naturalists considered to be the traditional values of American democracy. In practice, this implied that the social sciences were primarily concerned with the relation between a set of possible means (various alternative forms of social organization, as well as consideration of potential modifications to the existing

⁴⁰Knight, "Traditional Economic Theory--Discussion," 145 (italics in original).

⁴¹For examples of those who confuse it, see Hirsch, "Heterodox Methodology"; and Raines, "Knight on Religion, Ethics and Public Policy."

social arrangements) and a given set of ends (the set of traditional American liberal values).

A.B. Wolfe, in fact, had placed this means-end relation at the centre of his argument for an economics modelled after the natural sciences. In "Functional Economics," his contribution to the Tugwell volume mentioned in chapter 5, he argued that, because the economic system was a set of means organized around given ends, scientific analysis of the available means was only possible within the context of social agreement on what ends the system would seek to achieve. Of course, as a naturalist, Wolfe had to reject any appeal to an absolute system of ethics as the foundation upon which agreement on social values could be built. Instead, he argued that the socially determined nature of human conduct implied that scientific analysis could uncover human values in the same way that it could discover the correct means by which to fulfill those values.⁴²

Knight took up the argument about the means-end relation that Wolfe and other scientific naturalists used to defend their attack on economic theory and turned it around on them. If the scientific point of view assumes that the central problem of life is the accommodation of available means to given ends, Knight argued, then economics is the science of life, because economics is the study of the social consequences of the effort, on the part of the members of society, to satisfy their given preferences efficiently (this is Knight's version of the "economic

⁴²Wolfe, "Functional Economics," 473-82.

interpretation"). The realm of economics, therefore, covered every aspect of human activity; from individuals economizing within the constraints of their budget, to the organizing activities of firms (which Knight explored in *Risk*) or the institutions of liberal democracy.⁴³

In so far as the means are viewed as given, as data, then all activity is economic. The question of the effectiveness of the adaptation of means is the only question to be asked regarding conduct, and economics is the one and all-inclusive science of conduct. . . . The assumption that wants or ends are data reduces life to economics . . .⁴⁴

Despite the imperialistic tone of this first theme, Knight did not argue that economics was the science of society in order to assert the supremacy of the economic discipline over the other social sciences. Rather, in keeping with the tension between the need for, and limitations of, economic theory that he had developed in *Risk*, his argument in the Twenties was designed to emphasize the tension between the need for the science of society (i.e., economics) and its inherent limitations. The scientific view makes choice an economic problem. True enough, admitted Knight. But *human* choices, he argued, are more than economic problems. They are also moral, and possibly even spiritual, problems.⁴⁵

⁴³Knight recognized that the market and democracy were both coordinating mechanisms quite early in his career, as chapter 7 shows.

⁴⁴Knight, "Ethics and the Economic Interpretation," 34.

⁴⁵Knight never clarifies how a moral problem is different from a spiritual problem, although he seems to suggest that there is some useful distinction between the two in Knight, "Spirituality"; and idem, "Non-economistic Value," TMs, n.d. [probably 1920's], FHK B55 F13: 29 p.

This is the great paradox which is the greatest truth of life and of thought, . . . namely: On the one hand the rationale of every problem which is the subject of deliberation takes the economic form. It is a question of putting given means to the use of which yields the largest return in the form of the end in view But on the other hand, it is absurd and even disastrous to regard any problem (which is a problem and not an artificially limited and simplified detail of a problem) as purely or entirely a matter of economy and correct manipulation.⁴⁶

Hence, the reduction of life to economics was, for Knight, merely a prelude to the question: "Is life all economics or does this view require supplementing by an ethical view of value?"⁴⁷ The answer he gave was an emphatic yes to the need for an ethical theory of value.

* * * * *

Knight developed his argument regarding ethics and the economic interpretation of life in three stages. The first was an exploration in the relation between the means-end relation in human action assumed by economic theory (and by ethics), and a variety of other psychological theories. Here Knight drew upon his understanding of the relation between human consciousness and the creative dynamism of human action, which he had first articulated in "Causality and Substance," and then in *Risk*. In those places, his explanation of human action had been expressed in psychological and epistemological terms appropriate to the problem of uncertainty. Our lack of certain knowledge about the future

⁴⁶Knight, "Price Theory and Social Function," 9-10.

⁴⁷Knight, "Ethics and the Economic Interpretation," 35.

requires us to act on the basis of our capacity to judge; a capacity which can be captured in neither deterministic nor probabilistic models of science. Hence, in some inscrutable fashion, Knight argued, human consciousness is only imperfectly captured by scientific reasoning.

In "Ethics and the Economic Interpretation," and several subsequent essays during the 1920's and early 1930's, Knight developed his argument further, drawing out more fully the implications of his connection between epistemology and psychology.⁴⁸ For this task, he employed both what we may call a "negative" and a "positive" strategy.

The negative strategy was fairly straightforward: it involved a detailed criticism of every theory of psychology which attempted to bypass intentionality in the explanation of human behaviour. A reading of Knight's essays from "Ethics and the Economic Interpretation" (in 1922) to, say, "Social Science" (in 1941) provides a virtual catalogue of the mistakes of naturalistic theories of human action. Perhaps his strongest criticisms were reserved for behaviourism, the rising

⁴⁸Especially, in Knight, "Economic Psychology and the Value Problem"; idem, "Fact and Metaphysics"; and idem, "Das Wertproblem in der Wirtschaftstheorie," translated by E. Ephrussi, in *Die Wirtschaftstheorie der Gegenwart*, Vol. II, ed. H. Mayer with assistance from F.A. Fetter and R. Reisch (Vienna: J. Springer, 1932), 52-72 (English version: "The Problem of Value in Economics," TMs, n.d., FHK B55 F16: 38 p.). At the beginning of the first of these essays, Knight made the connection between epistemology and psychology explicit. "One who aspires to explain or understand human behaviour," he said, "must be, not finally, but first of all, an epistemologist. These general questions of scope and method [in the sciences] all come to a focus in the central question of the relation between motive and conduct, which is one of the meanings of . . . the term psychology." Idem, "Economic Psychology and the Value Problem," 77.

theory of the time. Behaviourists, he said, violate their own understanding of human conduct every time they publish a paper, because by doing so they *appeal* to a human interest, and try to *persuade* others to accept their argument.⁴⁹ And *pace* behaviourism's definition of control, Knight said:

Furthermore, just as it is impossible to avoid recognizing that human beings are observers in a sense ultimately separate from and opposed to perceived data, it is equally impossible to treat them as subjects to be "controlled" without recognizing them at the same time as controllers. Control in society is a mutual relation. Failure to take account of this obtrusive fact reduces most of the voluminous extant discussion of "social control" to the level of wordchurning. The wish and the effort to control are present in all the other social units as well as in the "scientist: who discusses them with lofty detachment; and he is subject to any "laws of behavior" which apply to them. Besides, there is always to be reckoned with a very special effort not to be controlled. In practice . . . the effort to "control" people takes the form in large measure of an effort to deceive, to "fool" them; the prime requisite is to keep them from *knowing* the character of the relation actually aimed at. There is more real psychology in Mark Twain's story of how Tom Sawyer got the boys to whitewash the fence for him than there is in many learned treatises. The behaviorist would have to begin his discussion of such a situation by eliminating all the facts of deception and illusion, as well as aim, intention, and effort--or by defining them in a manner equivalent to annihilation because leaving them without meaning. But these are the main data in the case, and a treatment which disregards them is sterilized from the outset.⁵⁰

The underlying purpose of Knight's litany of criticisms against behaviourism and other naturalistic theories of psychology, however, was not

⁴⁹Knight, "Fact and Metaphysics," 250-52. This essay is Knight's chief attack on behaviourism.

⁵⁰Ibid., 260 (italics in original). Knight's remark about Mark Twain is reminiscent of a remark to the effect that great writers of literature are better psychologists than the "psychologists so-called," in idem, "Ethics and the Economic Interpretation," 31.

simply to criticize. Rather, he wanted to clear space for his positive strategy for the explanation of human action. The theme of that positive strategy is summarized in "Economic Psychology and the Value Problem":

. . . a human being cannot live in the realm of science alone; he cannot really treat or regard himself as an organism automatically expressing its nature in responses to situations. *To live, on the human plane, is to choose.*⁵¹

If we are to explain the actions of humans *qua* humans, Knight said, we must accept the reality of human choice, where conduct is guided by motives.⁵²

Knight's positive program, of course, brings us back to the means-end relation with which we began this section on ethics and economics. Having argued that human conduct can only be explained in terms of action directed at certain interests, Knight then goes on, as I suggested earlier, to argue that even that is insufficient. Scientifically, human beings may be rational economic agents, knowing what they want and how to get it, but in actual human practice, there is no such person.⁵³ Imperfect knowledge prevents us from acting intelligently in

⁵¹Knight, "Economic Psychology and the Value Problem," 88 (italics in original).

⁵²It is important to point out that Knight believed that there could be explanations of human action which did bypass human motivation, but these would not deal with humans *qua* humans, but rather with humans *qua* physical beings, or biological organisms, etc. This point appears implicitly in *ibid.*, and Knight, "Fact and Metaphysics," but did not find its fullest statement until *idem*, "Social Science," published in 1941.

⁵³Knight, "Ethics and the Economic Interpretation," 35.

the pursuit of our goals (the point made in *Risk*). But, far more importantly, *we do not know exactly what it is that we want.*

Of the various sorts of data dealt with in economics no group is more fundamental or more universally and unquestioningly recognized as such than human wants. Yet one main purpose of the present discussion is to raise serious question as to the sense in which these wants can be treated as data, or whether they are properly scientific data at all. We propose to suggest that these wants which are the common starting-point of economic reasoning are from a more critical point of view the most obstinately unknown of all the unknowns in the whole system of variables with which economic science deals. . . .

. . . Wants, it is suggested, not only *are* unstable, changeable in response to all sorts of influences, but it is their essential nature to change and grow; it is an inherent inner necessity in them. The chief thing which the common-sense individual actually wants is not satisfactions for the wants which he has, but more, and *better*, wants.⁵⁴

It was the recognition of the intentionality imbedded in the act of choosing (we not only chose how to get what we want, but also what we want to want) that, for Knight, made it possible for a form of ethics which is more than the economic rationale for life, to exist. Thus, the third stage of his examination of ethics and the economic interpretation of life began with the question of whether we can rationally criticize wants and preferences, or whether we must simply accept them as given and find a mechanism that can coordinate them.

The price system at the center of the economic aspect of human conduct *coordinates* human interests. The coordination mechanism compares tastes and preferences and assigns them magnitudes on the basis of the economic calculus--maximizing the amount of want-satisfaction within the constraints of the resources

⁵⁴*Ibid.*, 20, 22 (italics in original).

available. In so far as interests can be taken as given, their coordination by means of the price mechanism is the only evaluation possible: in this context, *de gustibus non est disputandum* and economics is ethics. The fact (for Knight, that is) that wants and interests were not necessarily given, however, opened the door for an evaluation which moved beyond coordination to critical appraisal.

If we are to establish a place for ethics really distinct from economics and independent of it, it must be done by finding ends or standards which are something more than scientific data.⁵⁵

Neither economics nor any other serious attempt at applied psychology can in practice ignore this "fact" that value is more than desire, as desire is more than behavior. It is "true" that some wants are better than others as well as that some things are more intensely wanted than others; better means more than bigger. Logically, there is no such thing as unselfishness, or sacrifice, but in fact we can and do treat the other person as an end, and not as a means merely. To "make" a person (by any means) do what I want him to do does not mean the same thing as getting him to see more clearly what is worth wanting. In spite of the havoc that it plays with the simplicity of metaphysical systems, there is a difference, between "compulsion," (including most persuasion, which is a kind of psychological compulsion) and changing a person's ideals. The difference cannot be stated in scientific terms, but it is none the less real. It is not the same thing to act from principle, respecting the interests of others and the larger whole, and to "know what one wants and go after it." There is such a thing as ethics, which is more than psychology, as psychology is more than physics.⁵⁶

Criticism and appraisal, of course, are things that we do by means of speech, and it is perhaps not surprising that Knight turned at this point to speech

⁵⁵Knight, "Ethics and the Economic Interpretation," 37.

⁵⁶Knight, "Fact and Metaphysics," 263. For another example of Knight's treatment of the distinction between coordination and critical appraisal in the evaluation of values, see idem, comment on "The Arbitrary as Basis for Rational Morality," by Charner M. Perry, *Int. J. Ethics* 43 (January 1933): 148-51.

for a metaphor by which to explain why the evaluation of interests was more than a coordination problem. "Implications of a decisive character are bound up in the very fact of *discussion*," he said in an essay written shortly after "Ethics and the Economic Interpretation."⁵⁷ And what we discuss are our judgements of value. At this point, Knight reverses the assumption that *de gustibus non est disputandum*; in order to achieve better wants, we have to talk about our wants, compare them with the wants of others, and come to some agreement about what we should want.⁵⁸

Of course, in order for our discussion of better wants and values to be something more than the expression of competing opinions, society needs standards of comparison and evaluation. In order to emphasize the degree to which the search for better values cannot be reduced to the scientific problem of utilizing means to satisfy ends (remember Wolfe's suggestion that it could be), Knight described these value standards as transcending the boundaries of human discourse. The evaluation of values cannot be reduced into a set of rules, he said,

⁵⁷Ibid., 250 (italics added).

⁵⁸Knight, "Ethics and the Economic Interpretation," 22-23. Knight's reversal of *de gustibus non est disputandum* was a constant theme throughout the Twenties and early Thirties. In a letter to Lionel Robbins in 1934, he calls the expression "the basic error in the theory of nineteenth century liberalism," and goes on to say that "only judgements of value can be discussed, facts as such not at all. That is, when we disagree about a fact it seems to me we disagree about the *validity* of observation or evidence, and that every disagreement is essentially a difference in evaluation." Frank H. Knight to Lionel Robbins, TL, 17 February 1934, FHK B61 F17.

because one side of the comparison being made referred to that which is only approximated in actual human experience--the ideal. The ambiguity which arises from the interplay of the facts that (1) we talk about our values, and (2) the standards to guide that conversation transcend our language, is the theme of the closing paragraphs of "Ethics and the Economic Interpretation":

The scientific mind can rest only in one of two extreme positions, that there are absolute values, or that [e]very individual desire is an absolute and one as "good" as another. But neither of these is true; we must learn to think in terms of "value-standards" which have validity of a more subtle kind. It is the higher goal of conduct to test and try these values, to define and improve them, rather than to accept and "satisfy" them. There are no rules for judging values, and it is the worst of errors to attempt to make rules--beyond the rule to "use good judgment"; but it is also most false to assert that one opinion is as good as another, that *de gustibus non disputandum est*. Professor Tufts has put the question in a neatly epigrammatic way which emphasizes its unsatisfactoriness from a rational, scientific standpoint: "The only test for goodness is that good persons on reflection approve and choose it--just as the test for good persons is that they choose and do the good."⁵⁹

The Ethics of Competition

Having argued that there was an independent realm of value, distinct from and equally valid as, the realm of science, Knight went on in the second half of his lecture series at Harvard--i.e., in "The Ethics of Competition"--to apply the value standards of Christianity to the actual conditions economic life. Before

⁵⁹Knight, "Ethics and Economic Interpretation," 39-40. In the footnote in which he directs the reader to Tufts' article in *Creative Intelligence*, by John Dewey and others, Knight goes on to quote R.B. Perry's comment on Tufts' statement. Perry, remarks Knight, "beautifully illustrates the inevitable scientific-economic reaction to this viewpoint," when he says, ". . . it cannot appear to its author as it appears to me. I can only record my blank amazement." Ibid., 40, n.

examining his ethical appraisal of competition, however, we need to stop and ask an obvious question: why Christianity? After all, we know that by 1922, Knight had clearly rejected Christian dogma and was attending the Iowa City Unitarian Church (see chapter 4). And a few short years later, he said of Christian ethics that, although we must certainly reject a completely naturalistic point of view, we should not accept entirely a point of view which regards the "pure will of goodness" entirely.⁶⁰ Why then would he appeal in "The Ethics of Competition" to Christian ethics?

The reason Knight referred primarily to the Christian ethical tradition actually had little to do with his own debate with Christian dogma.⁶¹ Rather, he took up the Christian tradition in "The Ethics of Competition" for two reasons. First, he recognized that, despite the ascendancy of naturalism and its attendant language of social control, most Americans in the early 1920's--even intellectuals--still operated within a Christian discursive context (see chapter 3). Thus, even though he personally saw Christian ethics as fraught with difficulties, reference to it could evoke a richness and depth of meaning that he could not hope to tap by trying to construct an alternative (he did not wish to provoke argument, but evoke meaning). "In what follows," he said at the beginning of the essay, "we shall

⁶⁰Knight, "Non-Economistic Value," 18-19. This essay is an extended discussion of the tension between the Christian tradition in ethics and the consequentialist traditions of the Enlightenment.

⁶¹He also referred to the classical Greek tradition, which he described as one of "true ethical hedonism, or eudemonism." Knight, "Ethics of Competition," 71.

appeal to what we submit to be the common-sense ideals of absolute ethics in modern Christendom. No pretence will be made of drawing up a code of such principles; they are frequently not of a character to fall readily into proposition."⁶²

The second reason Knight chose to use Christian ethics as the basis for his ethical evaluation of competitive society is somewhat harder to express. For Knight, Christianity (and also the Aristotelianism to which he refers at another point in the essay) represented an appeal to a form of human relations based upon *personal association* rather than *impersonal coordination*. Such an appeal was attractive to Knight, despite his belief that the modern world had no room for personal forms of association, because it preserved something that he recognized had been lost in the move to impersonal forms of association (markets and governments) within the modern world. Although he could never formulate in a satisfactory way what it was that had been lost (remember that he was an internal critic of one major expression of modernity), and believed that, in any case, its loss was inevitable, he nevertheless felt its loss acutely and at times lamented its absence. That lament appeared in his call for a *discussion* of value standards as opposed to their mere coordination (see the previous section), in his insistence that we recognize the *conversational* nature of democracy alongside its service as a

⁶²Ibid., 44.

coordination mechanism (to be described in chapter 7), and in his evaluation of the market as a *game* in "The Ethics of Competition."

* * * * *

Knight's examination of the ethics of competitive society was conducted at three different levels in "The Ethics of Competition." At the first level, he attempted to show how the actual conditions of economic life brought about results from the competitive system that were quite different than those predicted by the advocates of *laissez-faire*.

. . . in the conditions of real life no possible social order based upon a *laissez-faire* policy can justify the familiar ethical conclusions of apologetic economics.⁶³

The analysis he conducted at the first level simply repeated many of the claims he had articulated in *Risk* regarding the limitations of the market (i.e., the list of prerequisites for perfect competition in chapters III and VI of *Risk*). However, these claims were now summarized more concisely, and were written in such a way as to emphasize their ethical aspects. Thus, for example, in "The Ethics of Competition" he claimed not only that perfect knowledge was required for the perfect operation of the competitive system, but also that the wants of individuals must be "true values" if the system is to be "ethically ideal."

⁶³Ibid., 49. Knight is quick to point out that it is only "fair to remark that many of these problems are exceedingly difficult and that many of the evils and causes of trouble are inherent in all large-scale organization as such, irrespective of its form." Ibid., 58.

Under individualism this means that the wants of individuals must be ideal, as well as their knowledge perfect. We have commented enough on the fact that the social order largely forms as well as gratifies the wants of its members, and the natural consequence that it must be judged ethically rather by the wants which it generates, the type of character which it forms in its people, than by its efficiency in satisfying wants as they exist at any given time.⁶⁴

Even the problem of externalities, commonly recognized as an impediment to the efficient operation of the completely free market, was given a new twist in Knight's study. The problem of externalities was very much on Knight's mind at this time, because he was in the process of formulating a response to Pigou's claims about the need for government intervention in the presence of externalities. Despite the fact that his formulation of the way in which the market will internalize all externalities through the proper allocation of property rights became one of his most famous arguments,⁶⁵ in "The Ethics of Competition" he placed the problem of externalities in a different context. Externalities, Knight

⁶⁴Ibid., 51. In the footnote attached to this statement, Knight goes on to say: "Whether it is good or bad to create wants depends altogether on the character of the wants created. One cannot condemn advertising and salesmanship out of hand, unless one is prepared to repudiate most of education, and of civilization in general; for most of the desires which distinguish man from the brutes are artificially created. Ethically, the creation of the right wants is more important than want-satisfaction. With regard to the facts in the case, we may observe that business is interested in the fact of change in wants more than in the character of the change, and presumably effects chiefly those changes which can be brought about most easily and cheaply. Our general moral teaching would indicate that it is easier to corrupt human nature than to improve it, and observation of the taste-forming tendencies of modern marketing methods tends perhaps to confirm the view and to substantiate a negative verdict on individualistic activity of this sort." Ibid., 51-52, n.

⁶⁵See Knight, "Some Fallacies in Social Cost."

argued, can either assist or obstruct the creation and maintenance of human relations that transcend the boundaries of contractual arrangement.

The individualistic competitive organization of want-satisfying activity presupposes that wants and the means of satisfying them are individual, that is, that wants attach to things and services which gratify the wants of the person consuming them without affecting other persons. As a matter of fact, what is desired is more largely a matter of human relations than goods and services as such; we want things because other people have them, or cannot have them, as the case may be. Then, too, the appurtenances of civilized life can be furnished to an individual only by providing them for the community, and we want to live in a civilized community as well as to live in a civilized way ourselves. With rare exceptions exchanges or contra[c]ts between individuals affect for good and for ill persons not represented in the bargain itself, and for these the bargain is not "free." Social action is necessary to promote the exchanges which diffuse benefits on others for which the parties cannot collect payment in the market, and to suppress those which diffuse evils for which the contracting parties do not have to pay. . . . In a developed social order hardly any "free exchange" between individuals is devoid of either good or bad results for outsiders.⁶⁶

These examples illustrate the two conclusions which Knight drew from his ethical criticism of the social order created by the market. The first was the claim that the actual operation of the economic system led to results significantly different from those desired by the proponents of *laissez-faire*. The second stated that the real conditions of economic life often, although not always, departed from ideal conditions in ways that worsen the character of human community. The failure of the competitive system may lead to the building of community (in the case of positive externalities, for example), but more often, it contributes to the corruption of civilized tastes and values. Knight's ability to weave both of these

⁶⁶Knight, "Ethics of Competition," 53.

themes into his discussion of the underlying assumptions of the competitive system led Don Patinkin to describe the first section of "The Ethics of Competition," as being "among the most radical pages ever written in economics."⁶⁷

* * * * *

The second level of Knight's ethical evaluation of the market mechanism looked beyond the question of the extent to which the market, within the actual conditions of human life, brought about results other than those intended by the advocates of free enterprise. At this level, Knight asked whether production was undertaken merely as a means for the satisfaction of consumer desires (i.e., for an end that lies outside the productive process itself), or whether it was undertaken as an end in itself. It is in this context that Knight introduced his now famous suggestion that the market is a game, and that, in the context of liberal democratic society, it had a tendency to become the only game in town.

According to Knight, when the mode of production aimed at private use took on "the character of the desire to capture an opponent's pieces or cards in a game," the relevant ethical questions were: "what kind of a game is it?", and how fair a game is it? The competitive game, Knight claimed, was not only a contest for wealth, but also a contest for power and prestige. In addition, the competitive game was one in which the stakes had to be rising continually in order to keep the game "interesting" to the participants. The problem, of course, was that, in

⁶⁷Patinkin, "Knight as Teacher," 36.

order to keep the game interesting to "a small number of 'captains of industry' and 'Napoleons of finance,'" the rules had to ensure that "the lives of the masses who do the work" were characterized by "monotonous drudgery."⁶⁸

Such a game immediately raised the question of the degree of fairness and equality enshrined in the rules. All should have an equal opportunity to participate in the game, yet the efficiency of the market as a coordination mechanism required a "large concentration of authority."⁶⁹ The ability of those who acquired authority to perpetuate their power and enjoy the fruits of the system to an extent unavailable to others brought about perpetual inequality, and violated the fairness of the game. This did not mean that Knight condemned all inequality arising from the game; e.g., he readily admitted that "differences in the capacity to play the business game are inordinately great from one person to another," and, therefore, that one should expect an unequal distribution of the game's rewards. What he condemned was the way in which the rules of the game perpetuated those differences.

But as the game is organized, the weak contestants are thrown into competition with the strong in one grand *mêlée*; there is no classification of the participants or distribution of handicaps such as is always recognized to be necessary to sportsmanship where unevenly matched contestants are to meet. In fact the situation is worse still; there are handicaps, but, as we have seen, they are distributed to the advantage of

⁶⁸Knight, "Ethics of Competition," 60-61.

⁶⁹*Ibid.*, 61. Knight does not explain what he means here, but is probably referring to his argument about the inevitable encroachment of monopolies, which is discussed in further detail in chapter 7.

the strong rather than the weak. We must believe that business ability is to some extent hereditary, and social institutions add to inherited personal superiority the advantages of superior training, preferred conditions of entrance into the game, and even an advance distribution of the prize money.⁷⁰

Finally, Knight questioned the ethical value of a society in which the business game had become the only game in town.

However favourable an opinion one may hold of the business game, he must be very illiberal not to concede that others have a right to a different view and that large numbers of admirable people do not like the game at all. It is then justifiable at least to regard as unfortunate the dominance of the business game over life, the virtual identification of social living with it, to the extent that has come to pass in the modern world. In a social order where all values are reduced to the money measure in the degree that this is true of modern industrial nations, a considerable fraction of the most noble and sensitive characters will lead unhappy and even futile lives. Everyone is compelled to play the economic game and be judged by his success in playing it, whatever his field of activity or type of interest, and has to squeeze in as a side line any other competition, or non-competitive activity, which may have for him a greater intrinsic appeal.⁷¹

* * * * *

The fact that everyone is compelled to play the business game in a competitive society brought Knight to the third level of his ethical evaluation. At this level, he asked if competition itself was of value. "Is success in any sort of *contest*, as such, a noble objective?" he asked. "Are there no values which are real in a higher sense than the fact that people have agreed to strive after them

⁷⁰Ibid., 64-65.

⁷¹Ibid., 66.

and to measure success in life by the result of their striving?" Must we accept the American "sporting view of life," in which "the greater virtue is to win," and the "lesser virtue is to go out and die gracefully after having lost?" Can one even raise questions about the game without be hailed a heretic?: "To 'play the game' is the current version of accepting the universe, and to protest is blasphemy; the Good Man has given place to the 'good sport.'"⁷²

For Knight, ethical reflection on the game of business went beyond asking questions about the nature of its effects; he also wanted to point to the question of the relation of the "good sport" to the "Good Man."

Ethics deals with the problem of choosing between different kinds of life, and assumes that there is real choice between different kinds, or else there is no such thing as ethics. The ethical character of competition is not decided by the fact that it stimulates a greater amount of activity; this merely raises the question of the ethical quality of what is done or of the motive itself.⁷³

The ethical questions of the "quality of what is done" and of the quality "of the motive itself" brought Knight back to the tradition of ethical reflection in Christianity, with which he had begun the essay, and to the tradition of ethics emerging from classical Greece. Neither tradition, however, could furnish a defense for the ethics of competition itself. For the Greeks, "the ideal seems always to have been the achievement of perfection," which was sought by training oneself to recognize and appreciate true, rather than false, values. Winning was

⁷²Ibid., 66-67 (italics in original).

⁷³Ibid., 71.

secondary, and the winning of power detracted from, if not prevented, a person's quest for perfection. Within the Christian tradition, competition was viewed as a hinderance to, if not the antithesis of, the growth of the spiritual life. Thus, neither the Christian nor the Greek traditions provided an ethical defense of competition.

. . . we appear to search in vain for any really ethical basis of approval for competition as a basis for an ideal type of human relations, or as a motive to action. It fails to harmonize either with the Pagan ideal of society as a community of friends or the Christian ideal of spiritual fellowship. Its only justification is that it is effective in getting things done; but any candid answer to the question, "what things," compels the admission that they leave much to be desired. Whether for good or bad, its aesthetic ideals are not such as command the approval of the most competent judges, and as for spirituality, commercialism is in a fair way to make that term incomprehensible to living men. The motive itself has been generally condemned by the best spirits of the race.⁷⁴

* * * * *

"Ethics and the Economic Interpretation" and "The Ethics of Competition" were, of course, written quite early in Knight's career, and even quite early in the context of the decade of the Twenties. However, as we have seen, the themes set out in those two essays appeared throughout his work during the Twenties, and even beyond (although some of them were modified substantially later in life⁷⁵). In particular, the tension created by the fact that the problem of human choice

⁷⁴Ibid., 74.

⁷⁵For example, cf. *ibid.*, and *idem*, "Ethics and Economic Reform," published in 1939.

was both an economic, and a moral, problem was one that exercised Knight's thoughts for many years.⁷⁶ Perhaps, then, it is appropriate to close our examination of the tension between science and value in his work during the Twenties with a quotation from an unpublished essay, in which Knight called for a form of social inquiry similar to that conducted in "The Ethics of Competition."

What I . . . want to say is that some of our desires are good and some are undoubtedly bad, and that the question whether a desire is good or bad is at least as important as the question whether it gets satisfied or not. Efficiency brings good results only in connection with good aims; in connection with bad aims it is positively better to be inefficient. Our civilization ranks high in the matter of providing the means of want-satisfaction. With regard to the more important matter of the kind of wants and tastes it creates, the uses to which we are putting the mighty forces its technical triumphs have made available--that is to say, the kind of persons it has made of us,--there is among competent critics an alarming prevalence of the note of disapproval and discouragement. It is with this question of the ends, the values, of social life, rather than with that of "social efficiency," that the economics and sociology of the near future have especially to concern themselves.⁷⁷

As we will see in the next chapter, it was exactly that kind of analysis of the values of social life to which Knight--ever the economist as philosopher--increasingly turned in the early Thirties.

⁷⁶Chapter 7 shows how this tension remained important for Knight's work during the Thirties. See also Ross B. Emmett, "Frank Knight and the Conflict of Values in Economic Life," in *Research in the History of Economic Thought and Methodology*, ed. Warren J. Samuels, forthcoming, for an examination of how the tension continued to play a role in Knight's work after the mid-1930's.

⁷⁷Knight, "Efficiency and the Social Ideal," 5-6.

* * * * *

Throughout this chapter we have seen that Knight's work in the 1920's utilized a small number of central themes to explore the tensions within the naturalistic program in the social sciences. Sometimes, in fact, it seems that the different essays and lectures he wrote during this decade simply re-iterate points made in *Risk* or one of the earliest essays from the Twenties, with little or no change. Some readers, then, may question my claim that Knight's work during the 1920's was therapeutic rather than systematic. If there are really only a small handful of ideas at the center of his thought, why can we not say that they constitute his "system of thought," or, to use a term introduced earlier in the dissertation, his "general position?"

One way to respond to this question is to ask a question in return: why would Knight feel the need to return to these central themes over and over again, either repeating them almost verbatim or recasting them in order to find ways of communicating their importance? The reason I ask the question this way is to point out a fundamental difference of outlook between my question and the question which some might ask of my reconstruction of Knight's work. If we ask, "why should we not fit Knight's central themes together into a general position," we are really asking the question: "what can we make of the ideas in Knight's work?" As I indicated in chapter 2, there are some who are interested in this question, and who have expended a fair amount of effort trying to answer it.

Their answers, however, seem artificial and forced (as I also indicated in the second chapter), because they are not connected to what Knight himself *did* with his central themes. The question I have been addressing, therefore, is: what did *Knight* make of his ideas? or to put it differently: to what ends did he employ them? And why did he feel it necessary to repeat them over and over again? Without repeating all that I have said myself, the best way to summarize the answer I have given to those questions is simply to quote one of Knight's favourite aphorisms, borrowed from Herbert Spencer: "Only by varied iteration can alien truths be impressed upon reluctant minds."

CHAPTER SEVEN

FRANK KNIGHT, SOCIAL SCIENCE AND THE CRISIS OF DEMOCRATIC AUTHORITY IN THE EARLY THIRTIES

The spirit of discussion is the essence of the scientific spirit, but the antithesis of the scientific method. The utilitarian-pragmatic philosophy involves the fatal confusion of carrying the scientific method, rather than the spirit, into social relations. The result is inevitably conflict, and finally chaos or tyranny, rather than agreement and unity on a basis of mutuality.

*Frank H. Knight, "Preface to the Re-issue"
of Risk, Uncertainty, and Profit [1933]*

The quotation from John Dewey at the head of chapter 3 poses the central question which exercised Frank Knight's mind during the Twenties: "How is science to be accepted and yet the realm of values to be conserved?" In the last two chapters we have explored Knight's response to that question, and have seen that his answer emerged from his exploration of the way in which the realm of science and the realm of value limited and constrained each other. The motto of chapter 6 comes from a passage which expresses well the tension between science and value as Knight saw it in the Twenties:

Since economics deals with human beings, the problem of its scientific treatment involves fundamental problems of the relations between man and his world. From a rational or scientific point of view, all practically real problems are problems in economics. The problem of life is to

utilize resources "economically," to make them go as far as possible in the production of desired results. The general theory of economics is therefore simply the rationale of life.--In so far as it has any rationale! The first question in regard to scientific economics is this question of how far life is rational, how far its problems reduce to the form of using given means to achieve given ends. Now this, we shall contend, is not very far; the scientific view of life is a limited and partial view; life is at bottom an exploration in the field of values, an attempt to discover values, rather than on the basis of knowledge of them to produce and enjoy them to the greatest possible extent. We strive to "know ourselves," to find out our real wants, more than to get what we want. This fact sets a first and most sweeping limitation to the conception of economics as a science.¹

The 1930's posed new problems for those puzzling over the relation between science and value, however; problems which forced many to rethink their commitments and reflect further on the question of whether or not something fundamental in America's liberal tradition had been lost in its translation into the language of social control.² Frank Knight was no exception in this regard. Despite his prior examination of the tension between science and value, the crisis of democratic authority in the Thirties created a crisis in his own thought, also. And his response, as suggested by the tone of this chapter's motto, fundamentally altered his relation with the scientific naturalists.

¹Knight, "Limitations," 105.

²Reinhold Niebuhr and Walter Lippman are perhaps the most famous examples of individuals who re-evaluated their commitments in light of events in the Thirties. See Purcell, *Crisis of Democratic Theory*, 152-56.

* * * * *

No one who has followed Frank Knight's story thus far will be surprised to find that, when the so-called "Chicago Fight" broke out at the University of Chicago in the mid-1930's (see the beginning of chapter 3), Knight was one of the first into the ring. Some mention was made in chapter 3 of his participation in the "Fight" over scientific naturalism, and in the broader debate over the relation between naturalism and the authority of democracy which came soon after. And in the last chapter we saw that the central issues in the "Fight" (the relations between the emerging language of social control and the realm of value), had been the focus of Knight's attention since at least the early 1920's. What may be surprising, in light of the discussion in the previous chapter, is the extent to which accounts of the "Fight" suggest that he came to the defense of the naturalists, against the attacks of those he styled as "medievalists."³

The degree to which the "Chicago Fight" occupied Knight's attention, and contributed to his sense of impending crisis, is obscured by its almost total absence from his published writings at the time. Apart from the article "Is Modern Thought Anti-Intellectual?", which appeared in the University of Chicago's own magazine and was reprinted in the set of readings required for all students in the University's introductory course in the social sciences, little direct

³This term appears several times in Knight, "Is Modern Thought Anti-Intellectual?"

mention of the "Fight" can be found in Knight's publications.⁴ However, the nature and extent of his involvement in the "Fight" is well attested to in reports of activities in the University at the time, and his own unpublished papers, especially his public lectures at the University and his correspondence.⁵

One incident which bears mention emerged from a graduate seminar on "Systematic Social Science," which Adler and Beardsley Ruml, then dean of the social sciences, co-taught during the academic year 1933-34 (the year in which the famous debate between Adler and Carlson, mentioned at the beginning of chapter

⁴One significant exception was published several years later, at the end of the decade. A review article on the role of theology in modern education, published in 1939, provided Knight with the opportunity to take aim at all who attacked modern thought as anti-intellectual, including the medievalists. In his review, he attempted to show that William Adams Brown's "answer" to Robert Hutchins' *The Higher Learning in America*, shared the same fundamental flaw that marred Hutchins' book; namely, a harking back to the ideals of the Middle Ages. Knight suggested that the only basis for unity in the modern intellectual world was adherence to the Enlightenment ideal of freedom of inquiry. Frank H. Knight, "Theology and Education" (review essay on *The Case for Theology in the University*, by William Adams Brown), *Amer. J. Soc.* 44 (March 1939): 649-79.

⁵The opening lecture of Knight's series on "Intelligence and the Crisis in Western Culture" ("The Passing of Liberalism," TMs, 28 June 193[4], FHK B17 F25:), contains a number of extremely caustic remarks about the new medievalists. With regard to his correspondence, see Frank H. Knight to Beardsley Ruml, TL, [June 1934], FHK B61 F22, in which Knight protests against what he perceived as the discriminatory practices of the President (Hutchins) and Dean (Ruml) in regards to faculty appointments, which Knight claimed they manipulated in order to promote their own academic agenda. For examples of letters in which Knight expressed his concern over events at the University to those further afield, see his letters to: Abram Harris, TL, 16 August 1934, FHK B60 F6; Wesley C. Mitchell, TL, 1 May 1934, FHK B61 F8; and Jacob Viner, TL, FHK B62 F14. See also Frederick D. Kershner to Frank H. Knight, TLS, 7 September 1934, FHK B60 F22.

3, occurred). Throughout the year, Adler lectured several hours each week on the philosophical prolegomena necessary for the unification of the social sciences, without questions or discussion from the three students and numerous professors (including Knight) who sat in attendance (the professors came to see the young upstart, favoured by their University's President, in action). Completely caught up in the logic of his argument, and oblivious to the incongruity of his remarks in the setting of the Social Sciences Research Building, Adler continued to lecture until one day in the spring quarter when "the floodgates burst": Knight, along with sociologist Louis Wirth and the students in the class, unleashed "an attack on the very idea of a unified social science and on the total irrelevance of all the logical distinctions and metaphysical principles with which [Adler] had been wasting their time."⁶

However, despite the fact that Knight joined with Professor Wirth and other scientific naturalists from the University in condemning the medievalism of Adler and company, he was not defending naturalism or the language of social control. Rather, he joined with the naturalists in the mid-1930's to fight a common enemy who threatened to unravel the paradoxical relation between science and value which Knight wished to sustain, by asserting the authority of a particular metaphysical system. The fact that the naturalists also presented a

⁶Adler, *Philosopher at Large*, 153. See also Bulmer, *Chicago School of Sociology*, 203.

threat to the tension between science and value (though, in their case, the danger came from the opposite direction) could, for the moment, be laid aside.

* * * * *

But only for a moment. In fact, published accounts of Knight's participation in the "Chicago Fight" are somewhat misleading because they seem to indicate that he was drawing closer to the naturalists at a time when, in fact, he was distancing himself from them. The reason that he moved away from the naturalists (even further than he had before) is readily apparent from his writings: the flexibility of the tensions he had held during the Twenties hardened in the early Thirties in reaction to the crisis created by the conflux of economic and political developments in Europe and North America. The three developments of greatest importance to him were the Great Depression, the rise of European dictatorships, and the emerging prominence of the language of social control in American social discourse. Purged by a period of pessimism about, and what one can only describe as abject despair over, the prospects for freedom in the modern world, he was being hardened into a sceptic who found little that he could applaud in modern society, despite the fact that he believed the victory of the gathering forces to be inevitable. The change in perspective is reflected in the titles of several of his public lectures. Asked to give a series of lectures in the summer of 1934 on "Observation and Reasoning in Social Science" (a title very much within the boundaries of his interests during the 1920's, of course), Knight

changed the title to reflect more accurately the content of the lectures.⁷ The new title for the series was "Intelligence and the Crisis in Western Culture," and the first lecture was on "The Passing of Liberalism." When he gave a similar (or perhaps even the same) set of lectures at the University of Toronto, the title became more ominous: "The Downfall of Western Civilization."⁸ But perhaps the most striking title from his lectures during the early Thirties came from one he gave six days before Franklin D. Roosevelt was swept into the White House in the election of November 1932. That lecture was "The Case for Communism: From the Standpoint of an Ex-Liberal."⁹

⁷For this title, see Knight, "Intelligence and the Crisis in Western Culture," B17 F25, 1.

⁸See Frank H. Knight, "Toronto II" (lecture notes for second lecture in series on "Downfall of Western Civilization" given at the University of Toronto in 1934), AMs, FHK B55 F26: 4 p. A revised version of the entire series of lectures was eventually published as idem, "Social Science and the Political Trend," *Univ. Toronto Quart.* 3 (1934): 407-27, and reprinted in *Freedom & Reform*, 24-43. It is not clear from Knight's unpublished papers and from other sources available whether the Toronto lectures were given before or after a similar series at the University of Chicago (idem, "Intelligence and the Crisis of Western Culture"). The Chicago lectures were delivered in late June and early July 1934. In either case, the published article "Social Science and the Political Trend" summarizes the content of both lecture series.

⁹"The Case for Communism" is not only a fascinating lecture, but has also had a fascinating history. Knight had the lecture (together with several other lectures from the same time period) privately printed, under the title "The Dilemma of Liberalism," for circulation to a number of friends. However, despite the fact that the lecture has sometimes been referred to by Knight's students and those who have studied his work, neither it nor the set of collected lectures were ever published for the public. That lapse was recently corrected when Warren Samuels arranged for the publication of "The Case for Communism," in a special archival supplement to his annual *Research in the History of Economic Thought*

The purpose of this chapter is to tell the story of that period of pessimism and despair, in order to see how it affected the questions he asked and how it changed his role as "the economist as philosopher." The chapter will also bring my study of Knight's early work to a close, because when he emerged from his period of despair with the firm intention to hold forth the light of reason and freedom in the new "Dark Ages" (ruled by economists and social engineers, rather than priests and kings), the tension between science and value in economic philosophy that had characterized his work during the Twenties had been generalized to become the central paradox of modern thought and liberal democracy. Knight was no longer simply a critic of "the present situation' in economics," as he had described the ascendancy of the language of social control in the letter to Jacob Viner quoted in chapter 6,¹⁰ but also a critic of the type of society created by the dominance of that language.

Knight and the Crisis of Democratic Authority

Knight's participation in the "Chicago Fight" came near the end of a period in which his belief in the inevitability of social progress and, more importantly, his belief in the possibility of intelligent social action, had been shaken to their roots. One indication of the connection between the two aspects of his work in the early

and Methodology. For more on the publication of this lecture, see the bibliographic essay.

¹⁰Knight to Viner, 9 September 1925.

Thirties comes from a letter to Abram Harris in August of 1934, in which Knight described the essay in which he attacked Adler and Hutchins ("Is Modern Thought Anti-Intellectual?") as an addendum to his lectures at the University of Toronto on "The Downfall of Western Civilization."¹¹ Two things were responsible for this crisis in his thinking. The first was the economic crisis brought on by the depression of the early Thirties. Knight's concerns with regard to the crisis emerged from the connection he made between its resilience and his long-standing belief that the system of competitive enterprise was not self-perpetuating. The second thing was the political crisis which emerged, in Knight's mind, from the connection between political events in Europe and the new-found prominence of the language of social control in American social discourse. His work in the early 1930's was marked by a growing conviction that democracy was self-defeating, and that the end of modern liberal society was rapidly approaching. The fact that the political and economic sides of the crisis were, to him, inextricably connected is revealed in a remark made during his lectures at the University of Toronto:

For the first two years or so after the economic crisis of 1929, I was one of the large group of students of economics who condemned the idea that this was fundamentally different from other depressions. But I have become convinced that I was in error, that we are actually in the course of one of the world's great economic and political revolutions. Even if we see some business revival, it will be limited and temporary. The nineteenth-century liberal system is played out, and the world of West-European civilization, based on political "democracy" and economic

¹¹Knight to Harris, 16 August 1934.

"freedom," will go through a drastic reevaluation of its "modern" ideas and values. This change leads backward historically, toward some combination of nationalism--though a nationalism different from that of the post-Renaissance centuries--with a quasi-religious intellectual absolutism, comparable to, yet different from that of the Middle Ages.¹²

In order to understand the crisis Knight perceived, we need to examine both its economic and political aspects in greater detail. I will begin with the economic side of the crisis.

* * * * *

The Great Depression confirmed a suspicion that Knight had harboured at least since the writing of *Risk*; namely, that the competitive system was not, and could not be, self-perpetuating:

There does seem to be a certain Hegelian self-contradiction in the idea of theoretically perfect competition after all. As to what the end would be, it is fruitless to speculate, but it would have to be some arbitrary system of distribution under some sort of social control, doubtless based on ethics or political power or brute force, according to the circumstances--providing that society or somebody in it had sufficient intelligence and power to prevent a reversion to the *bellum omnium contra omnes*. Competitive industry is or hitherto has been saved by the fact that the human individual has been found normally incapable of wielding to his own advantage much more industrial power than, aided by legal and moral restraints, society as a whole can safely permit him to possess. How long this beneficent limitation can be counted upon to play its saving rôle may in the light of current business development occasion some doubt. With this subject we are not here particularly concerned, but it has seemed worth while to point out, in connection with the discussion of an ideal system of perfect competition, that such a system is inherently self-defeating and could not exist in the real world. Perfect competition implies conditions, especially as to the presence of human limitations,

¹²Knight, "Social Science and the Political Trend," 27-28. The same comment appears in idem, "Intelligence and the Crisis of Western Culture," 16.

which would at the same time facilitate monopoly, make organization through free contract impossible, and force an authoritarian system upon society.¹³

The notion that the market system was inherently self-contradictory ran as an undercurrent beneath Knight's work in the Twenties. In "The Ethics of Competition" (1923), for example, he remarked that:

No error is more egregious than that of confounding freedom with free competition, as is not infrequently done. As elementary theory shows, the numbers of any economic group can always make more by combining than they can by competing. Under freedom all that would stand in the way of a universal drift toward monopoly is the fortunate limitations of human nature, which prevent the necessary organization from being feasible or make its costs larger than the monopoly gains which it might secure. . . . The workings of competition educate men progressively for monopoly, which is being achieved not merely by the "capitalist" producers of more and more commodities, but by labour in many fields, and in many branches of agriculture, while the producers of even the fundamental crops are already aspiring to the goal.¹⁴

And in "Statics and Dynamics," at the end of the decade, he said, in the context of discussing the reasons why the economy does not tend toward equilibrium, that

Ordinary economic forces tend toward a progressive concentration. Wealth does breed; "to him that hath shall be given, and from him that hath not shall be taken away."¹⁵

¹³Knight, *Risk*, 193.

¹⁴Knight, "Ethics of Competition," 52. In a footnote attached to this remark, Knight suggested that Marx was right about the inevitable concentration of capital in capitalism, even though the arguments he utilized to defend that claim were based on erroneous notions (such as the labour theory of value). *Ibid.*, 52, n.

¹⁵Knight, "Statics and Dynamics," 184.

In the early Thirties, Knight's suspicions about the failures of competitive society were fuelled by the deepening depression. At the start of the decade he began his response to a news service's request for comments on the need for, and inevitability of, some sort of national economic plan by saying:

The idea that unregulated individualism will automatically promote even business prosperity, not to mention other phases of social well being, without any conscious planning or co-ordination anywhere, is surely discredited by experience. Under modern conditions of machine industry, large-city life, and rapid social change, it will not work. Unemployment even in prosperity was serious, and of the depression there is no need to speak. And unemployment and distress are as every student knows, only the acute symptoms of what must be called a gen. [sic--generally?] diseased condition of economic civilization. Also, it is clear from recent developments that partial, voluntary organization or "rationalization" is no remedy; action by and for the whole of society is essential.¹⁶

And in "Economic Theory and Nationalism" (the very title of which calls to mind Knight's comment from the University of Toronto lecture, quoted earlier), Knight claimed that competitive society naturally leads to the concentration of wealth and economic power because wealth breeds wealth (as he argued in "Statics and Dynamics"), and also because people differ in their "persuasive power," which is a type of "productive capital." When social life becomes a contest among individuals with differing abilities and powers of persuasion, and differing initial endowments of wealth, a competitive economy "can only lead to such a concentration of control over the object of struggle as will put an end to such a social form [i.e., competition]." "Games" of this sort quickly become appeals to

¹⁶Frank H. Knight, response to questions from the Associated Press, TMs, April-May 1931, FHK B24 F8, 1.

power alone, and "the losers can hardly be morally condemned if they refuse to abide by its rules and results."¹⁷

At the time when he wrote his remarks on planning for the news service (1931), Knight did not believe that any special government action was necessary to alleviate the problems created by the depression, beyond actions that should be undertaken under any conditions, which he identified as "enormously greater activities in providing accurate, timely and unquestionably authoritative information" to businesses, and an expansion of public services such as health, education, recreation, and the promotion of culture.¹⁸ But, within a year, he was participating in a call for greater government action, particularly in regard to counter-cyclical government expenditure.

During late June and early July of 1931, and then again in January of 1932, Knight participated in two rounds of talks on the current state of the economy, sponsored by the Harris Foundation, at which the economists attending unanimously agreed with the need for quick and decisive government action; in particular, for the initiation of public works programs and monetary stabilization to prevent further deflation.¹⁹ According to J. Ronnie Davis' account of the Harris Foundation discussions, Knight's role at the meetings was largely that of an

¹⁷Knight, "Economic Theory and Nationalism," 291-93.

¹⁸Knight, response to Associated Press questions, 2.

¹⁹J. Ronnie Davis, *The New Economics and the Old Economists* (Ames: Iowa State University Press, 1971), 107-31, 161-65.

observer. Yet he emerged from these meetings convinced that the majority of American economists were in agreement on the correct course of action, and that, because of their agreement, he also could speak on the issue. Hence, when Senator Robert F. Wagner requested his comments on a proposed deficit-financing bill before the Senate, Knight wrote:

As far as I know, economists are completely agreed that the Government should spend as much and tax as little as possible, at a time such as this--using the expenditure in the way to do the most good in itself and also to point toward relieving the depression.²⁰

Knight's advocacy of a counter-cyclical government expenditure program may strike some as incongruous with his association with the then-fledgling Chicago School of political economy, which is often identified as the bastion of monetarism today. However, Knight's position had less to do with a specific theoretical position that he had newly adopted, than it did with the simple fact that, for once, economists of all political and social persuasions had spoken with one voice on a matter of policy. Knight's willingness to join in, therefore, emerged from his own prior realization that "the real problem of social control is the problem of securing agreement as to policy."²¹

²⁰Frank H. Knight to Senator John F. Wagner; quoted in J. Ronnie Davis, *The New Economics and the Old Economists* (Ames: Iowa State University Press, 1971), 16. Later in the same year, Knight signed his name to a memorandum on the need for deficit financing circulated among the members of the University of Chicago economics faculty. For more on the memorandum, see *ibid.* For more on Knight's involvement, see *idem*, "Three Days with Knight: A Personal Reminiscence," *Nebraska J. Econ. & Bus.* 13 (Winter 1974): 17-29.

²¹Knight, "Fact and Interpretation," 18.

The ability of economists who had previously been sharply divided to come to agreement in the face of a common problem of what was seen to be massive proportions, encouraged Knight to think that economists might be able to put aside their differences and commit themselves to the common search for correct answers. This idea became an important theme in his work, finding its strongest statement in "Economic Theory and Nationalism." In that essay, Knight claimed that "the natural tendency of the competitive game to deteriorate" could only be counter-balanced if a special group of professionals in the social sciences were to be placed alongside the moral and religious leaders of the nation as intellectual leaders. This social science elite would take

a "consecrated" attitude toward their common work, "devoting" themselves to a truly cooperative quest of the right or "best" solutions for problems, absolutely renouncing interest in individual prominence and power, and going to the public only with dispassionate statements of fairly established results. . .²²

In order to understand the role that his "intellectual-moral leadership"²³ would play in a democratic society, we need to turn to an examination of the other side of Knight's perception of the crisis of Western society; namely, the political.

²²Knight, "Economic Theory and Nationalism," 358.

²³Ibid., 359.

* * * * *

In "Economic Theory and Nationalism," Knight claimed that the inherent contradictions of the competitive system were paralleled by certain inherent contradictions in democracy.

What seems to be the fundamental weakness of democracy is briefly to be told, after the foregoing analysis of economic individualism. In principle, democracy is political individualism. The pure or direct democracy of the town meeting or small city-state, governed by an assembly of its entire citizenship, is the nearest approach to pure political individualism short of anarchism, and democracy in the sense of representative institutions is an adaptation necessary for larger communities. The essential point is that, as it has worked out in practice in the modern world, *democracy is competitive politics*, somewhat as free enterprise is competitive economics (though inherently a competition for a monopoly position), and it shows the same weaknesses as the latter.²⁴

Because the notion of the self-contradictory, and hence, self-defeating, properties of democracy has not appeared before this point in our analysis of Knight's work, we need to step back a little and see how he came to it.

We can begin by noting that Knight believed that the "essence of democracy," was "control of policy by *discussion*, in which all who can and will are

²⁴Knight, "Economic Theory and Nationalism," 295 (italics in original). For indications that Knight saw the relation between democracy and competitive economics during the 1920's, see idem, *Risk*, 358-60; and idem, "On Personal and Impersonal Association. On the Interrelation of Forms of Association," TMs, n.d. [probably early 1920's], FHK B55 F1: 5 p. In the latter set of notes he said that both the competitive economic system and democracy "depend on getting rid of the personal, individual factor" in association, replacing it with impersonal, mechanical coordination. Ibid., 3.

invited to participate."²⁵ In chapter 6 we saw that the term "discussion" had special meaning for Knight; he used it to refer to a conversation about what wants and values we should have, not only about how the wants and values we do have can best be satisfied (which, for him, was merely a problem of coordination). He gave the same kind of meaning to the term in the context of democratic theory. Hence, for Knight, democracy was, ideally, a conversation about the wants we should have and the values we should hold (i.e., a conversation about the kind of people we want to become), in which all members of society were deemed eligible to participate.

Unfortunately (at least in Knight's estimation), the actual practice of democracy was only distantly related to its ideal. In his writings during the early Thirties, he emphasized two major reasons for this divergence of practice from theory; namely, the lack of any real desire for intelligent judgement among the general public, and the ability of powerful interests to manipulate the political process for their advantage. Both of these reasons require some further comment.

In order for democracy as discussion to work, Knight argued, the members of society needed to be willing not only to talk about their wants and values, but also to do so in a manner that was cooperative rather than conflictual or competitive. In other words, the members of society had to decide that it was

²⁵Frank H. Knight, "Socialism and Economic Theory," TMs [annotated outline], 14 January 1932, FHK B44 F15, 3-4 (italics added). For similar remarks see idem, "Economic Theory and Nationalism," 296; and idem, "Intelligence and the Crisis in Western Culture," Lecture I: "The Passing of Liberalism," 11.

more important to work together to discover the truth, than to insist upon the correctness of their own ideas and beliefs. "Discussion," Knight said in the preface to the reissue of *Risk* in 1933, "is a co-operative quest of an impersonally, 'objectively' right (or best) solution of an impersonal problem. It cannot be an attempt to 'sell' a solution already reached, or it is not discussion."²⁶ However, two things prevented a modern democracy from being a true discussion.

The first is aptly summarized in Knight's "First Law of Talk: cheaper talk drives out of circulation that which is less cheap."²⁷ In a free society, as in a free market, there is no guarantee that people will actually *want* to improve the quality of their wants and values. In fact, it is likely that exactly the opposite will occur; freedom to pursue our own interests and form our own opinions will reduce our conversation to the lowest common denominator, the basest interests, and the cheapest talk. Knight's argument here runs parallel to one of his arguments about the failure of the market in "The Ethics of Competition." To achieve the best results, the market requires individuals who are actively seeking wants and preferences that will help them to become the people they should be. But encroaching commercialism and social pressures undermines that quest by defining the "good life" in ways that are less conducive to the encouragement of

²⁶Frank H. Knight, "Preface to the Re-Issue," in *Risk, Uncertainty, and Profit*, Reprints of Scarce Tracts in Economic and Political Science, no. 16 (London: London School of Economics and Political Science, 1933), xxxiii.

²⁷Knight, "The Case for Communism," 8.

the true qualities of human well-being.²⁸ The same idea applies to democracy. For the best results to occur, democracy also requires an open search for the true, the good, and the beautiful. But, paradoxically, the openness of democratic practice handicaps that search by allowing the propagation of cheap tastes.

The second thing that Knight thought hindered democracy as discussion was the tendency to turn discussion into debate. "Free discussion," he claimed, "has in fact been experimentally proven a failure" because "social 'discussion' was false to the ideal of discussion." In actual practice, social "discussion" was "not discussion" at all, "but debate, a contest for personal aggrandizement."²⁹ Here Knight laid the blame at the feet of those whom he believed ought to know better--economists and other social scientists. In their enthusiasm to apply the scientific method to the practical problems of social life, social scientists had failed to recognize that the method of science was inappropriate to the goal of social discussion. The difference between the two types of activity, Knight argued, could not be greater: where social discussion required the generation of new ideas, the scientific method tested ideas that were already held; where social discussion drew people into a cooperative quest for better values, the scientific method focused attention on the conflict between competing theories; where

²⁸Of course, this argument runs the opposite direction from the argument that he made in Knight, "Ethics and the Economic Interpretation," 22 (discussed in chapter 6), to the effect that what people want are better wants.

²⁹Knight, "Preface to the Re-Issue," xxxv.

social discussion required *conversation*, the scientific method encouraged *debate*.

Knight's "Second Law of Talk" made the point in a characteristic fashion:

The more intelligent people are, the more certain they are to disagree on matters of social principle and policy, and the more acute will be the disagreement. The more intelligent they are, the more finely they discriminate and the more importance they attach to fine discriminations, and the more completely their entire mental activity runs into the borderland region of doubt.³⁰

By carrying the scientific method over into social discussion, therefore, social scientists reduced the latter to debate and competition. The inevitable result of such sharp disagreement would be social "conflict, and finally chaos and tyranny."³¹ Given Knight's understanding of the inevitable breakdown of a competitive system (described earlier), the final solution for social debate under such conditions could only be the imposition of order by a strong man or group. He expressed his fears (and resignation in the face of the inevitable) in a letter to a German friend:

What do you think of the state and prospects of western civilization in general? My own feeling is that we are in a period of decadence which may well turn out to be the most rapid ever seen in the main current of our civilization from Egypto-Babylonian beginnings. I am convinced that 19th century liberalism rested on intellectual and moral foundations which simply do not exist in the human race. Such a system seemed to work for a while, only because the geographical and scientific discoveries of the Renaissance centuries had removed the confining limits of social expansion, and individual activity, and while the world was filling up we didn't need much social organization. Now it seems to me inevitable that we must go over to a controlled system, and that the only question is

³⁰Knight, "The Case for Communism," 12.

³¹Knight, "Preface to the Re-Issue," xxxiv.

whether any sort of liberty, especially freedom of consumption and intellectual freedom, can be maintained to a significant extent.³²

Knight's fears about the prospects for freedom in a controlled society bring us to the other reason Knight gave for the self-contradictory nature of democracy; namely, the ability of powerful individuals or interest groups to manipulate the political process for their own advantage. Nowhere in his work is this notion more forcefully articulated than in the gloomy set of reflections on the state occasioned by the execution of Nicola Sacco and Bartolomeo Vanzetti on 23 August 1927 (ostensibly for murders committed in the course of a robbery).³³ Few other executions in American history have stirred as much controversy as that of these two men; perhaps none other has epitomized the political tensions of a decade as much as theirs did. For Knight, the political importance of the event, and the apparent injustice done to the two men (all the evidence was circumstantial), focused his attention on the role of government in a way few other events could.

Sacco and Vanzetti were anarchists; Knight was not. Yet in his reflections on their execution he adopted their central claim--that the state existed solely as an agent of social control for those who possessed power in society. "The sphere

³²Frank H. Knight to Dr. Edward Theiss, TL, 9 December 1933, FHK B62 F9.

³³Frank H. Knight, untitled essay [identified as "The Ethic of the State" in the Catalogue of the Frank Knight Papers], n.d. [probably 1927], FHK B55 F5: 13 p.

of activity of the state," he said, "is the realm in which the possessors of the dominant social power consider unity of action, secured by force and fraud, whichever is cheaper . . . , more important than freedom of truth."³⁴ Sacco and Vanzetti were "enemies of the state,"³⁵ Knight argued, not because of any crime that they were purported to have committed, but rather because they refused to recognize the state's authority--even in a "democratic" society. They were executed for the same reason Jesus was--because they were "dangerous to 'the public peace' which specifically means to the power of established authority to keep the peace, and its own dominant position."³⁶

In the midst of these rather pessimistic remarks, Knight provided the connection between his remarks on the state as an instrument in the hands of the dominant social group and his observations on the political process as competitive politics (discussed above): the state, he said, had little to do with the selection of "ends," but was, instead, simply a mechanism for their satisfaction.

Neither the methods of the state nor its fundamental aim can be ethical, in any ideal sense which distinguishes the ethical from the merely expedient. The method of the state is force and fraud, and if any organization which uses any more ethical methods is called a state the word is used in a sense antithetical to any meaning it has ever had (or ever will have, either). The aim of the state is not to do "right", but simply, as it has always been, to keep the peace. . . . In short, the state has nothing to do with "ends," but simply with the means by which ends

³⁴Ibid., 3.

³⁵Ibid., 8.

³⁶Ibid., 7.

are achieved or reached. It is not its business to tell society what to do, or to care what it does. It probably can have relatively little to do with that, and even more probably such influence as it does exert will be evil. Its job is to keep society together, preserve its unity, and enable it to do *something*, besides fight itself, to do what it does undertake as a unit and with some degree of effectiveness. It comes into play only (a) where society has to act as a unit in order to act at all, and (b) where it cannot act as a unit on any other than a compulsory basis (or fraudulent, if there is any real difference).³⁷

Knight's remarks on the role of the government in this essay have to be counter-balanced by the observations he made elsewhere regarding democracy as discussion in order to see the tension he tried to sustain in his treatment of liberalism. But this much can be said in the context of his participation in the debate over authority in a democratic society in the 1930's: for Knight, when the process of representative democracy becomes a contest over the operations of government for the purposes of control, democracy becomes the political equivalent of competitive economics and the inevitable result is the concentration of political power. As he said in the essay on "Economic Theory and Nationalism":

In the political system of democracy, what was in economics an especially important factor in individual power becomes virtually the whole. Democratic politics works out in practice as campaigning, electioneering, and "organization," featuring the type of human capacity suggested by such terms as "spell-binder," "boss," and "machine." Such abilities are more unequally distributed among men by nature than is economic ability or power of any other kind, and also tend more strongly to cumulative increase through their own exercise. . . .

³⁷Ibid., 3 (italics in original).

Thus liberal economics and liberal politics are at bottom the same kind of "game." The fundamental fact in both is the moral fact of rivalry, competitiveness, and the interest in power.³⁸

* * * * *

Thus, Knight's treatment of democracy as competitive politics in his lectures and essays in the early 1930's established a tension in his understanding of the political process in liberal society that is similar to the tension he already had formulated in regard to the market's place in such a society. In the same way that the market was both a coordinating mechanism and a "game" or an occasion for the attempt to try out a better preference structure, so too the democratic process is both a coordinating mechanism and a discussion. But the quest for truth and value was attacked now on every side by science. The economic and political events of the early Thirties suggested to Knight that science was winning: modern society was reducing both the market and democracy to mere coordinating mechanisms--a prospect which alarmed him because of his understanding of the inevitable concentration of power in any competitive system.

³⁸Knight, "Economic Theory and Nationalism," 296-97. It is remarks such as these that have led Jim Buchanan to argue (in keeping with his own work on public choice) that, for Knight, "Politics is the collective counterpart of individual choice *and nothing more.*" (James M. Buchanan, "Politics and Science: Reflections on Knight's Critique of Polanyi" (comment on "Virtue and Knowledge: The View of Professor Polanyi," by Frank H. Knight), *Ethics* 77 (July 1967): 305, italics added). I have argued elsewhere, however, that the line of tension between democracy as discussion and democracy as a coordination mechanism is one which is still important to his work after the mid-1930's. See Emmett, "Knight on the Conflict of Values."

Recognition of the similarity between the lines of tension in democratic theory and in economic theory, along with Knight's estimation of the prospects for liberal society in the Thirties, also provides us with a clue to understand the lecture that is certainly the most enigmatic of all Knight's work; namely, "The Case for Communism: From the Standpoint of an Ex-Liberal." Several months prior to his presentation of that lecture, Knight gave another unusual lecture at the University of Chicago; this time it was a lecture to the Socialist Club on "Socialism and Economic Theory." In this earlier lecture, Knight's presentation covered many of the points we have explored in this chapter.³⁹ His conclusion, however, opened up a new question: if democracy was simply competitive politics,

³⁹I might point out that Knight used Sumner Slichter's new textbook *Modern Economic Society* as a foil for his ideas in this lecture. Reference to Slichter provided Knight with the opportunity to try out several of the ideas he used in his review essay on the textbook, published later in 1932. The review followed the basic organization of the lecture, without the references to socialism. Many of the most acerbic remarks from the lecture about economists, politics, and social control are left out of the review article or are toned down considerably. See Frank H. Knight, "The Newer Economics and the Control of Economic Activity" (review article on *Modern Economic Society*, by S.H. Slichter), *J. Polit. Econ.* 40 (August 1932): 433-76. In connection with the latter item, see also, Sumner H. Slichter, "Modern Economic Society--Further Considered" (reply to "The Newer Economics and the Control of Economic Activity," by Frank H. Knight), *J. Polit. Econ.* 40 (December 1932): 814-20; Frank H. Knight, "Comment on Mr. Slichter's Comment and on the Issues" (rejoinder to "Modern Economic Society--Further Considered," by Sumner H. Slichter), *J. Polit. Econ.* 40 (December 1932): 820-25; and Sumner H. Slichter, "A Concluding Word" (rejoinder to "Comment on Mr. Slichter's Comments and the Issues," by Frank H. Knight), *J. Polit. Econ.* 40 (December 1932): 825-27. Knight published a shorter review of Slichter's book also: idem, review of *Modern Economic Society*, by S.H. Slichter, *Amer. J. Soc.* 38 (July 1932): 130-32.

plagued by the same problems as competitive economics, was socialism really any different than capitalism? His answer was no.

If we accept the rationalist-intellectualist social philosophy of the 19th Century, there is not so much difference between a "socialistic" and a "competitive" organization; . . . In a phrase, you put "politics" instead of "business"; if men's basic life-philosophy is not changed this means *competitive* politics in place of *competitive* business, vote-grabbing in place of dollar-grabbing, and it is not easy to see what the change would amount to, or especially where there would be any wonderful improvement.⁴⁰

It is the idea that socialism and capitalism were two sides of the same coin that provides us with the key to understanding "The Case for Communism." Speaking on what was practically the eve of a major election, Knight set himself the task of convincing his audience of students and professors that liberalism and socialism were essentially the same and, hence, that a vote for the socialist party, or even for Roosevelt, was really the same as a vote for Hoover. Most of his arguments, of course, followed those we have examined already in the chapter: the importance of discussion (or "talk" as he calls it in this lecture), the self-contradictory nature of democracy and the market, and the inevitability of their decline. In order to give his audience something to remember, however, Knight issued a call to vote communist: "Those who want a change and wish to vote intelligently should vote Communist."⁴¹

⁴⁰Knight, "Socialism and Economic Theory," 5 (italics in original).

⁴¹Knight, "The Case for Communism," 1. For a version of the same argument which did not call for a communist vote, see *idem*, "Can We Vote Ourselves Out of the Fix We Are In?," *The Christian Century*, 1 February 1933,

Therapeutic Philosophy and the Crisis of Democratic Authority

Of course, Knight was never a Communist, although I would not be surprised if he voted Communist in the 1932 election as a sign of protest against the direction that western civilization was taking. In any case, it is clear from the focus of "The Case for Communism" (i.e., the decline of liberalism), and from the arguments he presented in favour of Communism at the end of lecture, that Knight used the idea of voting Communist as more of a rhetorical device to keep his audience with him, or as a cover for the pessimism he allowed himself to express, than as a new party affiliation. The label in the sub-title of the lecture--"Ex-liberal"--is probably closer to the mark.

Nonetheless, "The Case for Communism" and the other lectures Knight presented at about the same time, are important because they show us, in a way his published work during the early Thirties (apart from "Economic Theory and Nationalism") never did, his growing awareness of the integral relation between the economic and political aspects of the crisis of liberalism. In one sense, Knight never stopped being "the economist as philosopher," for his work often returned to economic issues, and he generally addressed an audience composed mainly of economists. But after the mid-Thirties, his ruminations often concerned the broader issues of social science and liberal society. Although he was still 10 years

away from writing his last article on economic theory,⁴² and continued to write articles on economic philosophy and method until his death, the issues he addressed in the early 1930's remained thereafter his central concerns.

The crisis of democratic theory also changed Knight's relation with scientific naturalism. In regards to his work before 1930, it was appropriate, as I have shown in earlier chapters, to refer to Knight as an internal critic of naturalism, because he viewed himself as a participant in their discussion. After the mid-1930's, however, it is probably better simply to refer to him as a critic of naturalism. By saying that he was no longer an *internal* critic of scientific naturalism, I do not intend to imply that his work lost the sense of paradox and tension which was a necessary part of its therapeutic quality. Rather, I would suggest that his work lost the other aspect of its therapeutic quality; namely, the sense that he was actually engaged in conversation with the naturalists--that the edifying quality of his criticisms were actually being heard. Perhaps this is to be expected; after all, how could a man who had described the language of social control as a means by which discussion and conversation were suppressed discuss and converse with those whom, in his estimation, did the suppressing? And how

⁴²Knight's last article on economic theory was "Diminishing Returns from Investment," *J. Polit. Econ.* 52 (March 1944): 26-47. However, that article was, in fact, the last of a series of articles on capital theory which began in the early 1930's. Thus, Knight's participation in the debate over capital theory was his last significant contribution to economic theory, and it occurred during the period in which his interests were turning from economic theory and philosophy to the philosophy of the social sciences and their relation to social action.

could someone who had described scientific naturalism as the death of intelligence hold an intelligent conversation with those who did the killing? Perhaps the best way to end, therefore, is to repeat the statement Knight always made when confronted with yet another example of (what he took to be) naturalistic folly: "you can be with the majority--or you can be in the right!"⁴³

⁴³See Patinkin, "Knight as Teacher," 35.

BIBLIOGRAPHIC ESSAY

Introduction

Because extensive footnotes are provided throughout the text and a table of contents for the list of sources consulted is provided below, there is no need for a chapter-by-chapter description of the sources I used. Nevertheless, the reader will probably appreciate some bibliographic direction regarding four aspects of my reconstruction of Frank Knight's work. The first aspect is the range of writings by Knight that have been consulted in the process of preparing the dissertation. Because Knight's work has not been collected in one place, and no guide to what does exist has ever been put together, a brief summary of the material available will assist the reader to discern the range of material used here, and to understand the organization of the list of works which follows.

The second aspect is the literature about Frank Knight, other than that reviewed in the introduction or in chapter two above. In the introduction, I surveyed the literature on Knight's distinction between risk and uncertainty. Chapter 2 surveyed the literature which attempts to reconstruct Knight's "general position" on economics and philosophy. Here I direct the reader to the literature which has assisted me in formulating the perspective on Knight's work that I have adopted.

Thirdly, the reader may appreciate a guide to the literature relevant to the historiographic issues raised in the introduction, and especially to the work of the Cambridge School of historiography. Because the Cambridge School is relatively unfamiliar to historians of economic thought, I have tried to identify its major works, even when they are only distantly related to my dissertation. My survey of other historiographic work is not complete by any means, but covers the range of material appropriate to the issues raised in the introduction.

Finally, the fourth topic is the relation between social science and American social discourse in the Twenties and early Thirties. Reconstructing the languages of social discourse available to Knight during that period took me far afield from economics, but significantly enriched my understanding of Knight's writing. I have included here those studies which assisted me to understand and reconstruct the interaction among the languages discussed in chapter three.

Because the footnotes in the text of the dissertation generally cite only the immediate source to which I have referred or works closely associated with that source, I sometimes refer in this essay to works which are not cited in the dissertation itself. The list of sources consulted provides complete bibliographic citations for all published works to which I refer in either the main body of the dissertation or this essay. Because no unpublished manuscripts by Frank Knight are listed in the bibliography, all the pertinent bibliographic information is provided here when unpublished material is mentioned, even if the unpublished item was cited in the main body of the text.

The Work of Frank H. Knight

No comprehensive bibliography of Frank Knight's work has ever been compiled, although a partial bibliography of his early work (up to 1935) is printed in *The Ethics of Competition and Other Essays*, 11-18. His best-known work during the period under consideration (roughly up to 1935) is found in *Risk, Uncertainty, and Profit*, *The Economic Organization*, and the eleven essays collected in *The Ethics of Competition*. The extent to which these three books constitute what most economists familiar with Knight know of his early work is represented by the fact that, of the 331 citations of Knight's early work in social science journals published between 1983 and August 1989, only 7 were citations of other works (2.1%).¹

However, despite the significance of the work found in those books, they represent only a small portion of Knight's total scholarly output up to the mid-1930's. Between 1915, when he began publishing while still a graduate student at Cornell, and 1935, Knight published 15 other journal articles, 9 review articles, 63 book reviews, 12 encyclopedia articles, 9 short articles in popular magazines or newspapers, and 18 miscellaneous items such as discussion comments or replies and rejoinders. He also translated Max Weber's *General Economic History*. And that is only his published writings. His unpublished papers include: approximately 10 annotated outlines or drafts of an economics text he began in 1919 and

¹The citation count was compiled from the *Social Sciences Citation Index* for the years 1983 to 1989.

continued to work on throughout the rest of his life; a variety of notes, outlines, and drafts for a short book on social science and ethical value theory begun in the late 1920's and never finished; 15 essays on a variety of topics in economics and social philosophy; notes, outlines, or prepared drafts for approximately 25 public lectures or addresses; and 6 book reviews. All told, his work during the twenty years from 1915 to 1935 totals approximately 2500 pages.

Almost all of Knight's published work from this period will be found in Part A:II (Frank H. Knight -- Published Work) of the list of sources consulted which follows this bibliographic essay. The list of Knight's publications is organized topically by the type of publication, and therefore the reader is urged to consult the list's table of contents prior to seeking a publication in order to determine its location within the bibliography. Unpublished material by Knight that is cited in the dissertation is not listed in the bibliography, because all of it is in the Frank Knight Papers held in the Special Collections of the Joseph Regenstein Library at the University of Chicago.² A brief description of three of the most important groups of items from that unpublished material follows.

²With the exception of a few items of correspondence found in the collections of the papers of Frederick Kershner or Jacob Viner, held at the Christian Theological Seminary in Indianapolis or the Statecraft Collection at the Princeton University Library, respectively.

Knight's Economics Textbook and The Economic Organization

The first group of items is the collection of outlines and drafts of an economics textbook that Knight began working on as early as 1919 (see "The Economic Organization of Society," TMs, FHK B37 F18: 25 p., which is an annotated outline of a textbook that Knight used as lecture notes for Political Economy 14 at the University of Chicago in the summer of 1919). A bound manuscript of an early version of the textbook is in the front of FHK B9, but Knight was still working on a textbook as late as 1944 (see "Economics," TMs, FHK B11 F13-30 and B12 F1-12). Some of the material in the earliest drafts of the text eventually found its way into *The Economic Organization*, which Knight published privately for classroom use at the University of Chicago in 1933. However, he had begun to circulate this material among his classes as early as the mid-1920's when he was still at the University of Iowa,³ and some of it also found its way into his other published essays. In particular, the extensive comments contained in the early drafts on the limitations of both methodological individualism and the market as a form of social organization are related to the

³For confirmation of this, see the "Bibliography" in Knight, *The Ethics of Competition*, 15; Don Patinkin, "In Search of the 'Wheel of Wealth': On the Origins of Frank Knight's Circular-Flow Diagram," *Amer. Econ. Rev.* 63 (December 1973): 53, n.1; and the recollections of the late Professor Harold McCarthy of the University of Iowa's geography department (McCarthy's recollections were recounted to me by Gerald Nordquist of the University of Iowa in a telephone interview on 31 March 1988).

first two essays in *The Ethics of Competition*--"Ethics and the Economic Interpretation," and "The Ethics of Competition."

Unpublished Material from the 1920's

The second set of unpublished material in the FHK Papers which requires special mention is the group of essays, notes for public lectures, and book reviews which Knight most likely wrote during the 1920's. A number of the essays and lectures are officially undated, but, according to Ethel Knight (his second wife), most of these were probably written in the Twenties, while Knight was still at the State University of Iowa.⁴ The books reviews and review essays are also undated (with one exception), but were probably written around the time of the books' publication. The unpublished items are listed below, divided between the essays and lectures, and the review articles and book reviews.

Essays and Lectures

"Beauty." Paper presented to the Bureau of Personnel Administration, Conference on Fundamental Objectives of Business Management, TMs, 28 March 1929. FHK B1 F6-7: 30 p.

"The 'Concept' of Spirituality," TMs, n.d. FHK B: 10 p.

⁴See the note at the beginning of the addendum to section I of Glen James Gilchrist, "A Catalogue for the Frank H. Knight Papers: as Compiled after His Death," n.d., FHK.

- "Considerations on the Why of Behavior." Paper presented to the University of Iowa Political Science Club, TMs, 9 January 1927. FHK B4 F25: 4 p.⁵
- "Dismal Science," TMs, n.d. FHK B55 F4: 18 p.
- "Efficiency and the Social Ideal," TMs, n.d. FHK B13 F6 and B55 F4: 6 p.
- "Ethical Critique of Competition." Lecture (Part II) presented at Harvard University, TMs, [1922], FHK B44 F2: 6 p.
- "Ethics and the Economic Interpretation." Lecture (Part I) presented at Harvard University, TMs, [1922]. FHK B55 F23: 4 p.
- "Limitations of Competitive Individualism. I: Mechanical Limitations, and II: Ethical Limitations." Annotated outline of potential book, TMs, n.d. [probably 1920's], FHK B44 F8: 3 p.
- "The Limits of Liberalism," Tms, n.d. FHK B55 F10: 2 p.
- "Love and Force," TMs, n.d. FHK B21 F16-18 and B55 F10-11: 33 p.
- "The Mathematical Method in Treating the Price Problem," TMs [with extensive handwritten revisions and additions], [1921]. FHK B21 F23-26: 23 p. (14 p. typed).
- "Non-Economistic Value," TMs, n.d. FHK B55 F13: 29 p.
- "On Personal and Impersonal Association. On the Interrelation of Forms of Association," TMs, n.d. FHK B55 F1: 5 p.
- "Play, Art and Work: A Little Book on the Value Problem for Students." Outline of a potential book, TMs, n.d. [probably late 1920's, after Knight had returned to Chicago]. FHK B55 F22: 6 p.⁶
- "On Power: The Invincible Logic of Asceticism," TMs, n.d. FHK B55 F1: 9 p.

⁵This may be simply the introduction for the paper Knight presented, though there is no record as to what paper it might have been.

⁶In connection with this little book, see the accompanying material which Knight gathered, in FHK B55 F22-23.

- "Price of Peace." Lecture notes, AMs, 23 February 1929. FHK B55 F27: 3 p.
- "Price Theory and Social Function," TMs, 1930. FHK B27 F14: 35 p.
- "Science and Human Values." Outline of opening remarks to the Men's Club, Iowa City Unitarian Church, Iowa City, TMs [outline], 9 December 1925. FHK B55 F23: 2 p.
- "The Science of Economics, or Political Economy," TMs, n.d. FHK B55 F17: 12 p.
- "Social Organization: A Survey of its Problems and Forms from the Standpoint of the Present Crisis," TMs, 1920. FHK B31 F6-7: 36 p.
- "Social Study and the Social Movement in the Post-War World," TMs, 1928. FHK B34 F25: 19 p.
- "Society." Freshman lecture given at the State University of Iowa, Iowa City, TMs [annotated outlines], 24-26 March 1924. FHK B44 F16 and B55 F17: 3 p.
- "Some Explorations in the Twilight Zone Between Economics and Ethics." Paper presented to the State University of Iowa Political Science Club, TMs, n.d. [probably mid-1920's]. FHK B35 F5-6 and B55 F18-19: 26 p.⁷
- Untitled draft [referred to as "The Ethics of the State" in the Catalogue of the Frank H. Knight Papers]. TMs (with several handwritten sections), n.d. [probably 1927]. FHK B55 F5: 13 p.⁸
- Untitled draft [with "For Political Science Club. Reworked for Tugwell volume" written across upper-right-hand corner of first page in Knight's handwriting], TMs, n.d. FHK B5 F5: 24 p.

⁷This essay appears to be a preliminary draft of Knight, "Freedom as Fact and Criterion," which was published in 1929. It was, therefore, probably presented to the Political Science Club at the University of Iowa shortly before Knight returned to Chicago (perhaps in 1926 or 1927). See also, Frank H. Knight, "Notes on Criticisms of paper of Ethics & Economics (read at Po. Sci. Club)," TMs, n.d., FHK B55 F22: 1 p.

⁸This essay is a reflection on the relation between the ethical evaluation of the goals of human action and the actions of the state, occasioned by the execution of Sacco and Vanzetti on August 23, 1927.

Untitled notes. For a discussion group in religion, Iowa City Unitarian Church, TMs, 30 September - 2 December 1923. FHK B47 F25: 9 p.

Review Articles and Book Reviews

Review of *Charter for the Social Sciences*, by Charles Beard, and *An Introduction to the History of Social Science*, by Henry Johnson, TMs, n.d. FHK B39 F13: 3 p.

Review of *Common Wealth*, by C.G. Campbell, TMs, n.d. FHK B39 F23: 3 p.

"Economic Theory Restated" (review article on *The Theory of Marginal Value*, by L.V. Birck, and *Supply and Demand*, by Hubert D. Henderson), TMs, n.d. FHK B39 F15: 4 p.⁹

Review of *The Economics of Taxation*, by Harry G. Brown, TMs, n.d. FHK B39 F18: 2 p.

"Energy, Human Energy, and Value" (review article on *The Economy of Human Energy*, by T.N. Carver), TMs, 1925. FHK B13 F14: 35 p.¹⁰

Review of *The Pulse of Progress*, by Ellsworth Huntington.¹¹

Note on *Senior's Industrial Efficiency and Social Economy*, edited by L. Leon Levy, TMs, n.d. FHK B41 F21: 1 p.

⁹Knight submitted this essay to *The New Republic*, which rejected it on the grounds that it was too long to suit their purposes. See [R.M. Lovett?] to Frank H. Knight, TLS, 20 October 1922, FHK B39 F15.

¹⁰Knight submitted this essay to the *Journal of Political Economy*, but it was never published. See Frank H. Knight to Jacob Viner, TL, 30 August 1925, and Jacob Viner to Frank H. Knight, TL, 6 September 1925, both in Jacob Viner Papers, Statecraft Collection, Princeton University Library, Princeton, NJ. An earlier draft of this review essay can be found under the title "Human Energy and Human Value," TMs, 1925, FHK B55 F7-8: 38 p.

¹¹No copy of this review is extant, but Knight mentions it in a list of references he could not discover, in FHK B47 F1-2.

Review of *Three Essays on the Taxation of Earned Income*, by Harry G. Brown, TMs, n.d. FHK B39 F18: 1 p.

Knight's Public Lectures from the Early 1930's

Thirdly, there is a group of unpublished lectures from the early 1930's in which Knight began to work out his understanding of the relation between social science and the crisis of democratic theory. The first published indication of Knight's growing concern for the problems of democratic authority was his 1927 untitled essay reflecting on the execution of Sacco and Vanzetti (mentioned above in list of Knight's unpublished essays in the 1920's under "Other"). However, "Economic Theory and Nationalism," first delivered as a paper at an economic history round-table discussion at the American Economic Association annual meetings in December 1934 and published in an expanded form in *The Ethics of Competition* in 1935, is the landmark essay which signals the reorientation of his thought discussed in chapter 7. Knight had a revised version of "Economic Theory and Nationalism" published as a separate pamphlet in 1935 and again, although this time for classroom use only, in 1947. He also published a revised version of the fourth section of the essay as "Social Science and Action" in the *International Journal of Ethics*.

Between 1927 and 1935, the evolution of Knight's thought about the crisis of western culture must be traced through his unpublished lectures. The most famous of these lectures is "The Case for Communism: From the Standpoint of an Ex-liberal" (TMs, FHK B2 F1-9: 73 p.), which Knight addressed to the National

Student League at the University of Chicago on 2 November 1932, six days before the election which swept Franklin D. Roosevelt into the presidency.¹² Knight privately printed "The Case for Communism," along with two other lectures he gave at about the same time in a pamphlet he entitled "The Dilemma of Liberalism." The other two lectures were: "Economic Theory and the Depression," presented to the Graduate Club of Economics and Business at the University of Chicago on the 9th of November and then incorporated into the text of "The Case for Communism"; and "The Intellectual and the Worker," a lecture Knight presented along with Oscar Ameringer to the Socialist Club at the University on 11 January 1933.

Few copies of "The Dilemma of Liberalism" exist. The FHK Papers do not have one, but there are copies available in the general collections of the libraries of The University of Michigan, The London School of Economics, and perhaps Columbia University. Portions of "The Case for Communism" were reprinted for classroom use as "The Genesis and Character of the Modern Liberal Regime" and "The Breakdown of the Liberal System: Its Weaknesses--Reasons for Failure" in "Selected Readings for the Second-Year Course in the Study of Contemporary Society (Social Science II)," 8th ed. Permission to publish the entirety of the revised version of "The Case for Communism" (but not "The Intellectual and the Worker") has been granted recently and the lecture will be appear in the near

¹²For an account of Knight's lecture by someone in the audience, see Shils, "Some Academics," 179-82.

future in a special archival supplement to Warren Samuels' annual *Research in the History of Economic Thought and Methodology*.

Several other unpublished lectures during the early 1930's which deserve mention in regards to Knight's consideration of social science and the crisis of democratic theory are:

"Socialism and Economic Theory." Lecture presented to the Socialist Club at the University of Chicago, TMs, 14 January 1932. FHK B44 F15: 9 p.

"Economic Implication of Communism." Lecture given with Harold Lasswell and [?] Schumann at the University of Chicago, TMs, 9 March 1933. FHK B43 F25 and F27: 4 p.

"Pragmatism, Social Science and Leadership. Liberty and Economics; Leadership or Salesmanship." Lecture presented to the Philosophy Club at the University of Chicago, TMs, 10 May 1933. FHK B44 F11: 6 p.

"Social Psychology and Economic Change." Lecture presented at the University of Chicago Sociology Club, TMs, 10 May 1934. FHK B31 F7: 4 p.

"Intelligence and the Crisis in Western Culture." Three lectures presented at the University of Chicago, TMs, June and July 1934. FHK B17 F25, B29 F25, B36 F2-12, and B7 F27: 123 p.¹³

"Downfall of Western Civilization." Two (or three) lectures presented at the University of Toronto, 1934. Notes for the second lecture (AMs) are in FHK B55 F26: 4 p.

"The New Deal and Liberalism." Lecture presented to the Midwest Conference on Industrial Relations, TMs, 1934. FHK B24 F9.¹⁴

¹³In connection with this lecture, see the set of notes in FHK B38 F8-11 under the title "Intelligence and the Culture Crisis: Social Science and Social Control."

¹⁴The draft for this lecture has been missing from the Knight Papers since at least 1979. There is no other extant copy.

"Sci. Econ. and Current Polit. Movements." Lecture given at Cornell University, AMs, n.d. [probably 1934]. FHK B44 F14: 8 p.¹⁵

"Liberalism." Lecture presented the Philosophy Club, TMs, 24 October 1934. FHK B18 F6: 4 p.

"History and Social Science." Public lecture (place unknown, but probably the University of Chicago), TMs, 7 January 1935. FHK B44 F5: 4 p.

"Are Social Sciences Possible?" Public lecture [location unknown], TMs, n.d. FHK B43 F23: 5 p.

Pre-1915 Material

Finally, some indication should be given regarding the availability of material that Knight wrote before 1915, during his student days at Milligan College, the University of Tennessee, and Cornell University. Most of Knight's work from this period consists, quite naturally, of student notes, presentations, and papers, the majority of which have been lost. However, a number of items have been preserved, and several of these deserve mention.

The first set of items is the collection of Knight's occasional reports on campus life at Milligan, which he wrote for the *Christian Standard*, a weekly publication of the conservative branch of the Disciples of Christ (at least one of Knight's reports was also published in the *Christian Evangelist*, the weekly publication of the liberal branch of the denomination--see Dewey, "Frank Knight

¹⁵This lecture bears a close resemblance to Knight, "Intelligence and the Crisis of Western Culture," and idem, "Social Science and the Political Trend." The resemblance suggests that Knight may have included Cornell on his itinerary for his trip to Toronto in 1934.

Before Cornell," 56, n. 21). No comprehensive list of these reports exists, but the first article that Knight ever published appears to have been a report on the 1908 commencement exercises at Milligan (according to Dewey, "Frank Knight Before Cornell," 33-34). The reports continued until 1911, when Knight graduated from Milligan.

The second set of items is the group of term papers that Knight wrote while a philosophy student at Cornell. The papers probably all date from the 1913-14 academic year, and are of importance to anyone tracing the evolution of Knight's thought on epistemology and ethics. The most important of these papers are:

"Causality and Substance." An essay for Philosophy 30: Empiricism and Rationalism, TMs, Fall 1913. FHK B55 F27: 51 p.

"Kant's Transcendental Analytic," TMs, n.d. FHK B55 F9: 21 p.

"Mill's Utilitarianism and Social Justice," TMs, n.d. FHK B55 F12: 29 p.

"Spencerian Evolution and Moral Progress," TMs, n.d. FHK B55 F20: 45 p.

The last several items from Knight's student days which need to be mentioned are three public presentations, probably given outside of a classroom setting. The first two of these are public addresses from Knight's time at Milligan entitled "Culture and the Classics" (Junior Class Oration, Milligan College, TMs, 1910, FHK B55 F1: 20 p.) and "The Problem" (TMs, n.d. [probably *circa* 1910], FHK B55 F15: 7 p.) respectively. The quotations from these addresses in chapter 4 provide a flavour of their rather optimistic and moralistic tone. The third

address is more familiar to those who know Knight's work. It is his presentation to the Cornell Philosophy Club entitled "The Ethical Basis of Socialism" (TMs, January 1914, FHK B55 F27: 11 p.).

Works About Frank H. Knight

Chapter 2 mentions every major study of Frank Knight's work on the relation between economics and philosophy currently available, and the introduction mentions every major study of *Risk, Uncertainty, and Profit*. Because there is no need to repeat the studies cited in those places again, my purpose here is to indicate what other material regarding Knight and his work is available and to identify that material's relation to my reconstruction of his work. All of the sources cited here, in chapter 2, and in the introduction are listed in section B:I (Works About Frank Knight) of the list of sources consulted.

No biography of Knight has ever been written, and the few short accounts of his life that do exist concentrate on his academic career. The best of these brief accounts is George Stigler's recent essay on Knight for *The New Palgrave* ("Frank Hyneman Knight"). See also: Mark Blaug, "Frank H. Knight"; James M. Buchanan, "Frank H. Knight," 424; Joseph Dorfman, *The Economic Mind in American Civilization*, vols. 4 & 5, 1918-1933, 467-69; "In Memoriam: Frank H. Knight, 1885-1972"; John Wesley McKinney, "A Critique of Frank H. Knight's Economic Philosophy," 11-21 passim; and Ben B. Seligman, "Frank H. Knight and

Abstractionism," 646-47. A variety of biographical material, ranging from *curriculum vitae* to personal reminiscences, can be found in FHK B47 F3.

Three longer accounts of specific aspects of Knight's career require separate mention because they contain a great deal of information about Knight's life that is not found elsewhere, and have contributed substantially to my reconstruction of Knight's work. The first is Donald Dewey's essay on "Frank Knight Before Cornell: Some Light on the Dark Years," which has not yet been published. Dewey's careful piecing together of the story of Knight's early years provided a wealth of previously unavailable information which significantly aided my task, especially in writing chapter three. I also found Richard Howey's account of Knight's life up to his return to Chicago in 1927, and especially his treatment of Knight's studies at Cornell, helpful because it bridged the gap between Dewey's account of Knight's early life and what is generally known of Knight's life after 1927. See Howey, "Frank Hyneman Knight and the History of Economic Thought," 163-70. Thirdly, Don Patinkin's essay on "Frank Knight as Teacher" remains a valuable source of information on the therapeutic effect of Knight's teaching style, which reinforces my own characterization of his work.

Finally, one of the most interesting aspects of the literature on Frank Knight is the fact that, more often than not, the relatively short descriptions of his work, written for a general audience and often around the time of his death, provide a better "feel" for the uniqueness of Knight's thought than the longer articles which attempt to make all of his work cohere together in one unified,

general position. The short articles are also often written by individuals who were associated with Knight as either students or colleagues. For short, general descriptions of Knight's work that point toward my characterization of his "therapeutic orientation," see Buchanan, "Frank H. Knight"; idem, foreword to reprint edition of *Freedom & Reform*; Scott Gordon, "Frank Knight and the Tradition of Liberalism"; Arthur H. Leigh, "Frank H. Knight as Economic Theorist"; Edward Shils, "Some Academics, Mainly at Chicago," 179-83; George J. Stigler, "Frank Knight as Teacher"; idem, *Memoirs*, 16-22 and 181-90; and Warner Wick, "Frank Knight, Philosopher at Large."

Historiography

Discussions of historiography in economics can typically be divided along the absolutist/relativist lines originally drawn by Mark Blaug in an early edition of *Economic Theory in Retrospect*. The absolutist position is well-articulated in the various articles to which I refer in the introduction. The relativist position is more difficult to pin down, in part because the "position" has generally been described by absolutists. However, the general approach is a contextualist one, whether the importance of context upon text is understood in an extreme deterministic way, or in a more moderate fashion. Two of the more articulate defenses of relativist work in the history of economic thought are: William Breit, "Biography and the Making of Economic Worlds"; and Warren J. Samuels, "The History of Economic Thought as Intellectual History."

My discussion of the historiography of economics in the introduction cuts across the usual absolutist/relativist division by articulating the relevance of different methods for different questions that historians might ask. The introduction and the first chapter also situate my attempt at historical reconstruction within the historiographic framework of the Cambridge School. Because the Cambridge School is relatively unknown to historians of economic thought, I have provided a brief guide to the literature here.

The central figures in the Cambridge School are Quentin Skinner and J.G.A. Pocock. Controversy has swirled around the work of these authors, not only because of the content of their historical studies, but also because of their self-conscious articulation of a particular relation between the historian's craft and philosophical theory (also, perhaps, because of their somewhat arrogant attitude toward the work of other historians). Although I am not convinced by the specific interpretations of Wittgensteinian language theory (those of Austin and Searle, for example) which underlie their understanding of how discursive contexts shape an author's meaning, Skinner and Pocock have helped me to articulate more clearly how one must approach Knight's work if one wishes to understand it.

The most important of Quentin Skinner's historiographic articles have recently been collected by James Tully in *Meaning & Context: Quentin Skinner and His Critics*. I profited enormously early on from a reading of Skinner's "Meaning and Understanding in the History of Ideas" (the first of his essays reprinted in *Meaning & Context*), and found that "A Reply to My Critics," which closes *Meaning*

& Context, helped to clarify several questions raised by my reading of his critics. See also Skinner's "Preface" to his *The Foundations of Modern Political Thought*. The best criticisms of Skinner's work can also be found in *Meaning & Context*, although the interested reader might also consult Peter L. Janssen's "Political Thought as Traditionary Action: The Critical Response to Skinner and Pocock."

While Skinner's historiographic concerns had an early and immediate impact upon my reconstructions of Knight, J.G.A. Pocock's concern for the discovery of political "languages" struck me at first as somewhat removed from my own interests. However, as I began to struggle with various ways of articulating Knight's relation to the intellectual context of early twentieth-century American social thought, I increasingly found Pocock's approach attractive. Among Pocock's many writings on historiography, see the introductory essays to *Politics, Language, and Time: Essays on Political Thought and History* and *Virtue, Commerce, and History: Essays on Political Thought and History, Chiefly in the Eighteenth Century*, as well as "The Concept of a Language and the *métier d'historien*: Some Considerations on Practice," and "The History of Political Thought: A Methodological Inquiry." Surveys of the critical literature on Pocock can be found in the article by Janssen mentioned above, and in Iain Hampsher-Monk's "Political Languages in Time--The Work of J.G.A. Pocock."

There are several other historiographic studies which have also played a role in shaping my approach to Knight's work. Herbert Butterfield's *The Whig Interpretation of History* is the classic statement of the historiographic distortions

that arise from the kind of work often presented within the history of economic thought. Even though I defended what Paul Samuelson has called "Whig History" in economics (absolutism) in the introduction, I did so by arguing that the absolutists are asking different questions than those with which Butterfield was concerned. John Dunn's "The Identity of the History of Ideas" ably states the Cambridge School's arguments as to why there are no perennial questions and why discursive contexts establish meaning. Richard Rorty's categorization of historiographic methods in "The Historiography of Philosophy: Four Genres" is also quite helpful because he distinguishes between rational reconstruction and historical reconstruction (the latter he identifies with the work of Skinner), and contrasts both with the "doxographic" method of most histories of philosophy and economics. Among historians of American intellectual thought, David Hollinger's historiographic writings, recently collected in his *In the American Province: Studies in the History and Historiography of Ideas*, are particularly helpful because he seeks to balance the more relativistic implications of historiographic work such as that of the Cambridge School or Richard Rorty with the "absolutist" concerns of traditional American intellectual historiography. See also the opening essays in *New Directions in American Intellectual History*, edited by John Higham and Paul K. Conkin, and Henrika Kuklick's fine essay on "Restructuring the Past: Toward an Appreciation of the Social Context of Social Science." Finally, the story of the emergence and eventual breakdown of the mainstream tradition of American

intellectual historiography has been well-told by Peter Novick in *That Noble Dream: The "Objectivity Question" and the American Historical Profession*.

Social Science and Social Discourse in Early Twentieth-Century America

Daniel Rodgers' article "In Search of Progressivism" first suggested to me that Pocock's method of identifying the "languages" of social discourse could successfully be applied to early twentieth-century American social thought. My discussion of the interplay among the four "languages" identified in chapter 4 is largely a summarization, elaboration, and extension of the argument Rodgers presents in his review essay.

One important aspect of American social discourse during the early twentieth century that Rodgers fails to take adequate account of is the lingering vestiges (and in some areas more than vestiges) of the tradition of Protestant religion. My understanding of the relation between Protestantism and social science comes largely from reading Bruce Kuklick on the relation between philosophy and theology during the late nineteenth and early twentieth century in *Churchmen and Philosophers: From Jonathan Edwards to John Dewey*, and Arthur Vidich and Stanford Lyman on the relation between the rise of America's sociological traditions and the discourse of Protestant religion in *American Sociology: Worldly Rejections of Religion and Their Directions*. Several general studies of religion and American social discourse during the early twentieth century were also helpful: Paul Carter, *The Decline and Revival of the Social*

Gospel: Social and Political Liberalism in American Protestant Churches, 1920-1940; Giles Gunn, ed., *The Bible and American Arts and Letters*; William Hutchison, *The Modernist Impulse in American Protestantism*, James T. Johnson, ed., *The Bible in American Law, Politics, and Political Rhetoric*; George Marsden, *Fundamentalism and American Culture: The Shaping of Twentieth-Century Evangelicalism, 1870-1925*; and Martin Marty, *Modern American Religion*, vol. 1: *The Irony of it All, 1893-1919*.

The "revolutionary" importance (in the Kuhnian sense) of the introduction of the language of social integration into American social discourse in the 1890's is discussed at length in the first two chapters of Thomas Haskell's *The Emergence of Professional Social Science*. Haskell's work provides a historiographic framework within which the many other works on the professionalization of the social sciences at the end of the nineteenth century can be fit. Other works which assisted my understanding of the importance of the language of social cohesion in the social sciences were: Robert Church, "Economists as Experts: The Rise of an Academic Profession in America, 1870-1917"; Henry Steele Commager, *The American Mind: An Interpretation of American Thought and Character Since the 1880's*; Mary Furner, *Advocacy and Objectivity: A Crisis in the Professionalization of American Social Science, 1865-1905*; John Higham, "The Reorientation of American Culture in the 1890's"; H. Stuart Hughes, *Consciousness and Society: The Reorientation of European Social Thought, 1890-1930*; James Kloppenberg, *Uncertain Victory: Social Democracy and Progressivism in European and American*

Thought, 1870-1920; Bruce Kuklick, *Churchmen and Philosophers*; Peter Novick, *That Noble Dream*; Dorothy Ross, "The Development of the Social Sciences"; Morton White, *Social Thought in America: The Revolt Against Formalism*; R. Jackson Wilson, *In Quest of Community: Social Philosophy in the United States, 1860-1920*; and Robert Wiebe, *The Search for Order, 1877-1920*.

The 1920's are seldom identified in the popular accounts as a critical watershed in American history. And they are even less frequently identified as a decade in which a new language began to flourish in the social sciences (notice how many of the sources mentioned in the previous paragraph have 1920 as their end point). Nevertheless, as historians begin to realize that the Twenties were not a self-contained unit of time during which America excused itself from the flow of history for a grand party under the conditions of "normalcy" (as Frederick Lewis Allen's had claimed that they were in *Only Yesterday: An Informal History of the Nineteen-Twenties*), many are beginning to recognize the critical importance of the decade.

Although there are not many recent historiographic surveys of the literature on the 1920's, several older surveys provide good introductions to the changing perspectives on the decade's importance and its major trends: see Don Kirschner, "Conflicts and Politics in the 1920's: Historiography and Prospects"; Arthur Link, "What Happened to the Progressive Movement in the 1920's"; Henry May, "Shifting Perspectives on the 1920's"; Burl Noggle, "The Twenties: A New Historiographical Frontier"; and idem, "Configurations of the Twenties." Among

the general studies of the decade available, I found the following works helpful: Loren Baritz's introduction to his *The Culture of the Twenties*; the various essays in John Braeman, Robert Bremner, and David Brody (eds.), *Change and Continuity in Twentieth-Century America: The 1920's*; Ellis Hawley, *The Great War and the Search for a Modern Order: A History of the American People and Their Institutions, 1917-1933*; William Leuchtenburg, *The Perils of Prosperity, 1914-1932*; Roderick Nash, *The Nervous Generation: American Thought, 1917-1930*; and Geoffrey Perrett, *America in the Twenties: A History*.

My reconstruction of the language of social control is pieced together from Rodgers' essay on "Progressivism"; Edward Purcell's excellent study on *The Crisis of Democratic Theory: Scientific Naturalism & the Problem of Value*; and a number of studies of specific professions and academic disciplines. Among the latter, the most helpful studies, apart from those already mentioned, were: Robert Bannister, *Sociology and Scientism: The American Quest for Objectivity, 1880-1940* (despite the breadth of time mentioned in the title, Bannister really concentrates on the 1920's); William Barber, *From New Era to New Deal: Herbert Hoover, the Economists, and American Economic Policy, 1921-1933*; Martin Bulmer, *The Chicago School of Sociology: Institutionalization, Diversity, and the Rise of Sociological Research*; Clarke A. Chambers, *Seedtime of Reform: American Social Service and Social Action, 1918-1933*; Alfred D. Chandler, Jr., *The Visible Hand: The Managerial Revolution in American Business*; Joseph Dorfman, *The Economic Mind in American Civilization*, Vols. 4 & 5, 1918-1933; Samuel Haber, *Efficiency*

and Uplift: Scientific Management in the Progressive Era, 1890-1920; Barry Karl, *Charles E. Merriam and the Study of Politics*; R. Jeffrey Lustig, *Corporate Liberalism: The Origins of Modern American Political Theory, 1890-1920*; David Ricci, *The Tragedy of Political Science: Politics, Scholarship, and Democracy*; Raymond Seidelman, *Disenchanted Realists: Political Science and the American Crisis, 1884-1984*; Dennis Smith, *The Chicago School: A Liberal Critique of Capitalism*; and James Weinstein, *The Corporate Ideal in the Liberal State, 1900-1918*.

Finally, the emergence of "the crisis of democratic theory" is the central concern of Purcell's book by the same title. My discussion of the crisis is largely drawn from Purcell's, because no other work that I am aware of examines the relation between naturalistic social science and America's changing perspectives on democracy during this period (Kloppenbergs' *Uncertain Victory* ends at the magic date 1920). Supplemental material was drawn from the studies of various academic disciplines mentioned above, Arthur M. Schlesinger, Jr., *The Age of Roosevelt*, vol. 1, *The Crisis of the Old Order, 1919-1933*, and from studies of the relation between social science and the federal government during the Hoover and Roosevelt administrations. The most important of the latter group of studies which have not already been mentioned are: J. Ronnie Davis, *The New Economics and the Old Economists*, Ellis Hawley, "Herbert Hoover, The Commerce Secretariat, and the Vision of an 'Associative State,' 1921-1928"; J. Joseph Huthmacher and Warren I. Susman, ed., *Herbert Hoover and the Crisis of*

American Capitalism; and Gene M. Lyons, *The Uneasy Partnership: Social Science and the Federal Government in the Twentieth Century*.

SOURCES CONSULTED

TABLE OF CONTENTS

A. PRIMARY SOURCES	303
I. Private Papers	303
II. Frank H. Knight -- Published Work	303
a. Books and Volumes of Collected Essays	303
b. Theses and Privately Published Material	304
c. Journal Articles	305
d. Review Articles and Book Reviews	307
e. Replies and Rejoinders	313
f. Encyclopedia Articles	314
g. Round Table Discussions and Discussant Comments	314
h. Newspaper and Magazine Articles	315
B. SECONDARY SOURCES	316
I. Works about Frank Knight	316
a. Articles and Essays	316
b. Book Reviews	319
c. Replies and Rejoinders	319
d. Encyclopedia Articles	320
e. Forewords to Reprint Editions of Knight's Work	320
f. Theses and Unpublished Papers	320
II. Other	321
a. Books	321
b. Articles and Essays	329
c. Unpublished Papers	335

A. PRIMARY SOURCES

I. Private Papers

Frederick D. Kershner Papers, Library of the Christian Theological Seminary, Indianapolis.

Frank H. Knight Papers, Special Collections, Joseph Regenstein Library, University of Chicago, Chicago.

Jacob Viner Papers, Statecraft Collection, Princeton University Library, Princeton, NJ.

II. Frank H. Knight -- Published Work

a. Books and Volumes of Collected Essays

The Economic Organization: with an Article, "Notes on Utility and Cost" (public publication of essays privately published under the same title in 1933). New York: A.M. Kelley, 1951; reprint, New York: Augustus M. Kelley (Reprints of Economic Classics), 1967.

Economic Theory and Nationalism (a revised version of the final essay in *The Ethics of Competition*). New York: Harper & Bros., 1935; reprint, Chicago: University of Chicago Press, 1947.

The Ethics of Competition and Other Essays. Essays selected by Milton Friedman, Homer Jones, George Stigler, and Allen Wallis. New York: Harper & Bros., 1935.

Freedom & Reform: Essays in Economics and Social Philosophy. Essays selected by Hubert Bonner, William Grampp, Milton Singer, and Bernard Weinberg. New York: Harper & Bros., 1947; reprint (with a foreword by James M. Buchanan), Indianapolis: Liberty Press, 1982.

Intelligence and Democratic Action. Lectures delivered at the Thomas Jefferson Center for Studies in Political Economy, University of Virginia. With a Foreword by James M. Buchanan and G. Warren Nutter. Cambridge: Harvard University Press, 1960.

On the History and Method of Economics: Selected Essays. Essays selected by William L. Letwin and Alexander J. Morin. Chicago: University of Chicago Press, 1956; Phoenix Books, 1963.

Risk, Uncertainty, and Profit. Hart, Schaffner, and Marx Prize Essays, no. 31. Boston and New York: Houghton Mifflin Co., 1921; reprint (with a new "Preface to the Re-Issue"), Reprints of Scarce Tracts in Economic and Political Science, no. 16, London School of Economics and Political Science, 1933; reprint (with a foreword by George J. Stigler), Chicago: University of Chicago Press, 1971; Midway Reprint, 1985.

Knight, Frank H., and Thornton W. Merriam. *The Economic Order and Religion.* New York: Harper & Bros., 1945; reprint, Westport, CT: Greenwood Press, 1979.

Translation of *General Economic History*, by Max Weber. With a translator's preface. Adelphi Economic Series. London: George Allen & Unwin; New York: Greenberg, 1927.

b. Theses and Privately Published Material

"Gerhart Hauptmann as an Idealist." M.A. thesis, University of Tennessee, 1913.

"A Theory of Business Profit." Ph.D. diss., Cornell University, 1916.

"The Dilemma of Liberalism." Ann Arbor, MI: Edward Bros., 1933 (photolithograph).

"The Breakdown of the Liberal System: Its Weaknesses--Reasons for Failure." In "Selected Readings for the Second-Year Course in the Study of Contemporary Society (Social Science II)." 8th ed. Chicago: University of Chicago Press, 1939.

"The Genesis and Character of the Modern Liberal Regime." In "Selected Readings for the Second-Year Course in the Study of Contemporary Society (Social Science II)." 8th ed. Chicago: University of Chicago Press, 1939.

c. Journal Articles

- "Bemerkungen über Nutzen und Kosten." *Zeitschrift für Nationalökonomie* (Vienna) Band VI, Heft 1, 3 (1935): 28-32; 318-36. A revised English version appeared as "Notes on Utility and Cost," in *The Economic Organization*, 122-79.
- "Capital, Time and the Interest Rate." *Economica*, n.s., 1 (August 1934): 257-86.
- "The Concept of Normal Price in Value and Distribution." *Quarterly Journal of Economics* 30 (February 1916): 279-310.
- "Cost of Production and Price Over Long and Short Periods." *Journal of Political Economy* 29 (April 1921): 304-35. Reprinted in *The Ethics of Competition*, 186-216.
- "Diminishing Returns from Investment." *Journal of Political Economics* 52 (March 1944): 26-47.
- "Economic Psychology and the Value Problem." *Quarterly Journal of Economics* 39 (May 1925): 372-409. Reprinted in *The Ethics of Competition*, 76-104.
- "Economic Theory and Nationalism." In *The Ethics of Competition*, 277-359.
- "Ethics and Economic Reform," Parts I - III. *Economica* (February, August, November 1939): 1-29, 296-321, 398-422. Reprinted in *Freedom & Reform*, 55-153.
- "Ethics and the Economic Interpretation." *Quarterly Journal of Economics* 36 (May 1922): 454-81. Reprinted in *The Ethics of Competition*, 19-40.
- "The Ethics of Competition." *Quarterly Journal of Economics* 37 (August 1923): 579-624. Reprinted in *The Ethics of Competition*, 41-75.
- "Fact and Interpretation in Economics." *Special Lectures on Economics* (U.S. Department of Agriculture, Graduate School) (February-March 1930).
- "Fact and Metaphysics in Economic Psychology." *American Economic Review* 15 (June 1925): 247-66.

*The date in brackets following an article's title is its original date of publication.

- "Freedom as Fact and Criterion." *International Journal of Ethics* 39 (January 1929): 129-47. Reprinted in *Freedom & Reform*, 3-23.
- "The Limitations of Scientific Method in Economics." In *The Trend of Economics*, ed. R.G. Tugwell, 229-67. New York: F.S. Crofts & Co., 1924. Reprinted in *The Ethics of Competition*, 105-47.
- "Neglected Factors in the Problem of Normal Interest." *Quarterly Journal of Economics* 32 (November 1917): 66-100.
- "Professor Fisher's Interest Theory: A Case in Point." *Journal of Political Economy* 39 (April 1931): 176-212.
- "The Quantity of Capital and the Rate of Interest," Parts I-II. *Journal of Political Economy* 44 (August, October 1936): 433-63; 612-42.
- "Relation of Utility Theory to Economic Method in the Work of Stanley Jevons and Others." In *Methods in Social Science: A Case Book*, ed. S. Rice, 59-69. Compiled under the direction of the Committee on Scientific Method in the Social Sciences of the Social Science Research Council. Chicago: University of Chicago Press, 1931.
- "The Ricardian Theory of Production and Distribution," Parts I-II. *Canadian Journal of Economics and Political Science* 1 (February 1935): 3-25, 171-96. Reprinted in *History & Method*, 37-88.
- "The Role of Principles in Economics and Politics." Presidential Address to the American Economic Association, 28 December 1950. *American Economic Review* 41 (March 1951): 1-29. Reprinted in *History & Method*, 251-81.
- "The Sickness of Liberal Society." *Ethics* 56 (January 1946): 76-96. Reprinted in *Freedom & Reform*, 440-78.
- "Social Science." *Ethics* 51 (January 1941): 127-43. Reprinted in *History & Method*, 121-34.
- "Social Science and Action." *International Journal of Ethics* 46 (October 1935): 1-33.
- "Social Science and the Political Trend." *University of Toronto Quarterly* 3 (1934): 407-27. Reprinted in *Freedom & Reform*, 24-43.

"Statik und Dynamik--zur Frage der Mechanischen Analogie in den Wirtschaftswissenschaft." *Zeitschrift für Nationalökonomie* 2 (August 1930): 1-26.
English version: "Statics and Dynamics: Some Queries Regarding the Mechanical Analogy in Economics." In *The Ethics of Competition*, 161-85 and *History & Method*, 179-201.

"A Suggestion for Simplifying the Statement of the General Theory of Price." *Journal of Political Economy* 36 (June 1928): 353-70.

"Das Wertproblem in der Wirtschaftstheorie." Translated by E. Ephrussi. In *Die Wirtschaftstheorie der Gegenwart*. Vol. II, ed. H. Mayer with assistance from F.A. Fetter and R. Reisch, 52-72. Vienna: J. Springer, 1932. English version: "The Problem of Value in Economics," TMs, FHK B55 F16: 38 p. (an English TMs of the first two sections of the paper is in FHK B28, F9: 25 p.).

*d. Review Articles and Book Reviews***

"Barbara Wootton on Economic Planning" (review article on *Plan or No Plan*, by B. Wootton). *Journal of Political Economy* 43 (December 1935): 809-14.

Review of *The Book of English Law*, by E. Jenks and *The Development of European Law*, by M. Smith. *Journal of Political Economy* 38 (April 1930): 237-38.

Review of *Capital and Finance in the Age of the Renaissance: A Study of the Fuggers and Their Connections*, by R. Ehrenberg. *Journal of Political Economy* 38 (June 1930): 361-64.

"Cassel's *Theoretische Sozialökonomie*" (review article on *Theoretische Sozialökonomie*, by G. Cassel). *Quarterly Journal of Economics* 36 (November 1921): 145-53.

Review of *The Christian Outlook: Being the Sermons of an Economist*, by W.J. Ashley. *Political Science Quarterly* 40 (December 1925): 624-26.

"The Common Sense of Political Economy (Wicksteed Reprinted)" (review essay on the reprint edition of *The Common Sense of Political Economy and*

**The term "Note" is used to refer to reviews which are less than 500 words in length and mention nothing more than the book's organization and central thesis.

- Selected Papers and Reviews on Economic Theory*, by P.H. Wicksteed, ed. L. Robbins). *Journal of Political Economy* 42 (October 1934): 660-73.
Reprinted in *History & Method*, 104-118.
- Review of *Cooperation and the Future of Industry*, by L.S. Woolf. *Journal of Political Economy* 27 (November 1919): 805-6.
- Review of *Cooperation at Home and Abroad*, by C.R. Fay; *Liberalism and Industry*, by R. Muir; and *The Economics of Communism*, by L. Pasvolsky. *Journal of Political Economy* 30 (August 1922): 582-85.
- Review of *A Critique of Economics: Doctrinal and Methodological*, by O.F. Boucke. *American Economic Review* 13 (June 1923): 286-88.
- Note on *De l'utilité et de sa mesure. Ecrits choisis et republiés par Mario de Bernardi*, by J. Dupuit. *Journal of Political Economy* 43 (February 1935): 119-20.
- Review of *The Development of Economic Doctrine*, by A. Gray. *Journal of Political Economy* 40 (October 1932): 711-13.
- Review of *The Development of Economics*, by W.A. Scott. *American Journal of Sociology* 40 (November 1934): 413-14.
- Note on *Economic and Social Conditions in France during the Eighteenth Century*, by H. Sée. *Journal of Political Economy* 37 (April 1929): 235-36.
- Note on *The Economic History of England*, Vol. I: *The Middle Ages*, 5th ed., by E. Lipson. *American Economic Review* 20 (June 1930): 278.
- Review of *The Economic Problem*, by R.G. Hawtrey. *Journal of Political Economy* 36 (August 1928): 523-25.
- Review of *Economic Stabilization in an Unbalanced World*, by A.H. Hansen. *Journal of Political Economy* 41 (April 1933): 242-45.
- Note on *Economic Theory and Correct Occupational Distribution*, by H.F. Clark. *Journal of Political Economy* 41 (April 1933): 260.
- Review of *Economics and Ethics*, by J.A.R. Marriot. *Journal of Social Forces* 2 (May 1924): 757-58.

- Review of *Economics and Human Behaviour -- A Reply to Social Psychologists*, by P.S. Florence. *Journal of Political Economy* 37 (June 1929): 363-64.
- "Economics at Its Best" (review article on *The Economics of Welfare*, by A.C. Pigou). *American Economic Review* 16 (March 1926): 51-58.
- Review of *Economics in the Twentieth Century*, by T. Suranyi-Unger. *Journal of Political Economy* 40 (October 1932): 708-10.
- Note on *The Economics of a Food Supply*, by W.O. Hedrick. *Journal of Social Forces* 2 (May 1924): 757.
- Review of *The Economics of Freedom*, by D. Atkins. *American Economic Review* 14 (December 1924): 718-19.
- Review of *The Economy of Human Energy*, by T.N. Carver. *Journal of Social Forces* 3 (May 1925): 777-78.
- Review of *Essai sur l'évolution de la pensée économique*, by G.H. Bousquet. *American Economic Review* 18 (June 1928): 278-79.
- Review of *Ethics and Some Modern World Problems*, by W. McDougall. *Political Science Quarterly* 40 (March 1925): 138-40.
- Review of *The Federal Trade Commission*, by T.C. Blaisdell, Jr. *American Journal of Sociology* 39 (July 1933): 133-34.
- Review of *Gerechtigkeit in der Wirtschaft?*, by B. Moll. *Journal of Political Economy* 43 (February 1935): 113-16.
- "Historical and Theoretical Issues in the Problem of Modern Capitalism" (review essay on *Der Moderne Kapitalismus*, by W. Sombart). *Journal of Economic and Business History* 1 (November 1928): 119-36. Reprinted in *History & Method*, pp. 89-103.
- Review of *The History of Economics*, by O. Spann. *Journal of Political Economy* 39 (April 1931): 258-60.
- "Homan's *Contemporary Economic Thought*" (review essay on *Contemporary Economic Thought*, by P.T. Homan). *Quarterly Journal of Economics* 43 (November 1928): 132-41.

- Review of *Institutional Economics: Its Place in Political Economy*, by J.R. Commons. *Columbia Law Review* 35 (May 1935): 803-5.
- Review of *Interest as a Cost*, by C.H. Scovell. *Journal of Political Economy* 33 (August 1925): 468-70.
- Review of *Is Capitalism Doomed?*, by L. Dennis. *American Economic Review* 22 (September 1932): 512-13.
- Note on *Jobs, Machines, and Capitalism*, by A.O. Dahlberg. *Journal of Political Economy* 40 (August 1932): 573.
- Review of *Laissez Faire and After*, by O.F. Boucke. *American Journal of Sociology* 39 (July 1933): 148-49.
- Review of *La liquidation financière de la guerre*, by H. Charriaut and R. Hacault. *Journal of Political Economy* 27 (July 1919): 611-13.
- Review of *Making Goods and Making Money*, by H. Taylor. *Journal of Political Economy* 38 (February 1930): 117-18.
- Note on *The Marxian Theory of the State*, by S.H.M. Chang. *Journal of Political Economy* 40 (February 1932): 130-31.
- Review of *The Measurement of Economic Value*, by D. Atkins. *Journal of Political Economy* 35 (August 1927): 552-53.
- Review of *Modern Economic Society*, by S.H. Slichter. *American Journal of Sociology* 38 (July 1932): 130-32.
- "Money" (review of *Wealth, Virtual Wealth and Debt: The Solution of the Economic Paradox*, by F. Soddy). *The Saturday Review of Literature*, 16 April 1927, p. 732.
- Review of *Nassau Senior: And Classical Economics*, by M. Bowley. *Journal of Political Economy* 47 (February 1939): 131-35.
- Review of *The Nature and Significance of Economic Science*, by L. Robbins. *International Journal of Ethics* 44 (April 1934): 358-61.
- "The Nature of Economic Science in Some Recent Discussion" (review article on *Prolegomena to Relativity Economics: An Elementary Study in the Mechanics*

- and Organics of an Expanding Economic Universe*, by R.W. Souter). *American Economic Review* 24 (June 1934): 225-38.
- "The Newer Economics and the Control of Economic Activity" (review article on *Modern Economic Society*, by S.H. Slichter). *Journal of Political Economy* 40 (August 1932): 433-76.
- Note on *Organization Engineering*, by H. Dennison. *American Journal of Sociology* 37 (September 1931): 316.
- Review of *Origins of Sociology*, by A.W. Small. *American Economic Review* 15 (December 1925): 724-27.
- Review of *The Philosophy of Henry George*, by G.R. Geiger. *International Journal of Ethics* 44 (October 1933): 162-65.
- Review of *The Philosophy of Henry George*, by G.R. Geiger. *Journal of Political Economy* 41 (October 1933): 687-90.
- Review of *The Place of Science in Modern Civilization*, by T. Veblen. *Journal of Political Economy* 28 (June 1920): 518-20.
- Review of *Plain Talk on Economics*, by F. Franklin. *Journal of Social Forces* 3 (January 1925): 353-54.
- Review of *A Planned Society*, by G. Soule. *Journal of Political Economy* 41 (June 1933): 421-23.
- Review of *Primitive Trade: Its Psychology and Economics*, by E.E. Hoyt. *American Economic Review* 17 (March 1927): 73-74.
- Review of *Principles of Economics*, by O.F. Boucke. *Journal of Political Economy* 35 (April 1927): 315-17.
- Note on *Probleme der Wertlehre*, Teil I, ed. L. von Mises and A. Spiethoff. *American Journal of Sociology* 38 (November 1932): 471-72.
- Review of *Probleme der Wertlehre*, Teil II, ed. L. von Mises and A. Spiethoff. *American Journal of Sociology* 41 (July 1935): 122-24.
- Review of *Profits*, by W.T. Foster and W. Catchings. *Political Science Quarterly* 41 (September 1926): 468-71.

- Review of *Proposed Roads to Freedom: Socialism, Anarchism and Syndicalism*, by B. Russell. *American Journal of Sociology* 25 (September 1919): 227-28.
- Note on *Readings in the History of Economic Thought*, by S.H. Patterson. *Journal of Political Economy* 41 (August 1933): 557-58.
- Note on *Recent Developments in the Social Sciences*, ed. E.C. Hayes. *American Economic Review* 17 (December 1927): 686-87.
- "The Rights of Man and Natural Law" (review article on *The Rights of Man and Natural Law*, by J. Maritain). *Ethics* 54 (January 1944): 124-45. Reprinted in *Freedom & Reform*, 312-57.
- Note on *La Science Economique! Ses lois inductives*, by Y. Guyot. *Journal of the American Statistical Association* 24 (1929): 345-46.
- Review of *Scientific Research and Human Welfare*, by F.S. Harris. *Journal of Social Forces* 3 (May 1925): 778.
- Review of *The Seven Seals of Science*, by J. Mayer. *American Economic Review* 17 (December 1927): 688-89.
- Note on *Social Economic Planning in the Union of Soviet Socialist Republics: Report of Delegation from the U.S.S.R. to the World Economic Congress in Amsterdam, August 23-29, 1931*, by V.V. Obolensky-Ossinsky, S.L. Ronin, A. Gayster, and I.A. Kraval. *Journal of Political Economy* 41 (February 1933): 131-32.
- Review of *Social Progress*, by U.G. Weatherly. *American Economic Review* 17 (September 1927): 487-88.
- Review of *Social Purpose*, by H.J.W. Hetherington and J.H. Muirhead and *Outlines of Social Philosophy*, by J.S. MacKenzie. *Journal of Political Economy* 27 (December 1919): 898-900.
- Note on *The Social Sciences and Their Interrelations*, ed. W.F. Ogburn and A. Goldenweiser. *American Economic Review* 18 (March 1928): 82-83.
- "Some Books on Fundamentals" (review article on *Supply and Demand*, by H.D. Henderson, *The Economics of Welfare*, by A.C. Pigou, *Principles of the New Economics*, by L.D. Edie, and *Introduction to Economics*, by A.S. Johnson). *Journal of Political Economy* 31 (June 1923): 342-59.

Note on *Teaching the Social Studies*, by E. Dawson, R.M. Brown, S.J. Holmes, A.I. Gates, R.T. Ely, W.B. Munro, J.H. and M.C. Tufts, H. Johnson, and F.T. Giddings. *American Economic Review* 18 (March 1928): 84.

"Theology and Education" (review article on *The Case for Theology in the University*, by W.A. Brown). *American Journal of Sociology* 44 (March 1939): 649-79.

"The Thirteenth Census Report on Occupations" (review article on the *Thirteenth Census of the United States, Vol. IV., Population. Occupation Statistics*). *American Economic Review* 5 (March 1915): 184-48.

Note on *Traité général de science économique*, Tome III, Vols. 1 and II: *Théorie du capital et du profit*, by C. Cornéliussen. *American Economic Review* 19 (March 1929): 94-95.

"'What is Truth' in Economics?" (review article on *The Significance and Basic Postulates of Economic Theory*, by T.W. Hutchison). *Journal of Political Economy* 48 (February 1940): 1-32. Reprinted in *History & Method*, 151-78.

Review of *World Social Economic Planning*, by the International Industrial Relations Institute. *American Economic Review* 23 (June 1933): 357-59.

e. Replies and Rejoinders

Comment on "The Arbitrary as Basis for Rational Morality," by Charner M. Perry. *International Journal of Ethics* 43 (January 1933): 148-51.

"Comment on Mr. Slichter's Comment and on the Issues" (rejoinder to "Modern Economic Society--Further Considered," by S.H. Slichter), *Journal of Political Economy* 40 (December 1932): 820-25.

"Intellectual Confusion on Morals and Economics" (reply to "Moral Confusion in Economics," by C.E. Ayres). *International Journal of Ethics* 45 (January 1935): 200-20.

"Natural Law: Last Resting Place of a Bigot" (reply to "A Note on Knight's Criticism of Maritain," by F.S. Yeager). *Ethics* 59 (January 1949): 127-35.

"A Note on Professor Clark's Illustration of Marginal Productivity" (comment on "The Economics of Overhead Costs," by J.M. Clark). *Journal of Political Economy* 33 (October 1925): 550-53.

- "On Decreasing Cost and Comparative Cost: A Rejoinder" (to "Some Fallacies in the Interpretation of Social Cost: A Reply," by F.D. Graham). *Quarterly Journal of Economics* 39 (February 1925): 331-33.
- "Rejoinder" (to "Reply to Professor Knight's Remarks," by J.M. Clark). *Journal of Political Economy* 33 (October 1925): 555-61.
- "Some Fallacies in the Interpretation of Social Cost" (comment on "Some Aspects of Protection Further Considered," and "The Theory of International Value Re-Examined," by F.D. Graham, and *The Economics of Welfare*, by A.C. Pigou). *Quarterly Journal of Economics* 38 (August 1924): 582-606. Reprinted in *The Ethics of Competition*, 217-36.

f. Encyclopedia Articles

- "Economics." In *Encyclopedia Britannica*, 1951. Reprinted in *History & Method*, 3-33.
- "Fred Manville Taylor." In *The Encyclopedia of the Social Sciences*, vol. 14, ed. E.R.A. Seligman, 541-42. New York: Macmillan, 1934.

g. Round Table Discussions and Discussant Comments

- "Economic Theory and Practice--Discussion" (comment on "Some Social Aspects of Overhead Costs," by J.M. Clark). *American Economic Review* (Supplement) 13 (March 1923): 105-7.
- "The Relation between Economics and Ethics--Discussion." *American Economic Review* (Supplement) 12 (March 1922): 192-201.
- "The Theory of Economic Dynamics--Discussion" (comment on "The Theory of Economic Dynamics as Related to Industrial Instability," by F.C. Mills). *American Economic Review* (Supplement) 20 (March 1930): 35-37.
- "Traditional Economic Theory--Discussion" (comment on "A Revaluation of Traditional Economic Theory," by C.E. Parry and "Soundings in Non-Euclidean Economics," by J.M. Clark). *American Economic Review* (Supplement) 11 (March 1921): 143-46.

"The Use of the Quantitative Method in the Study of Economic Theory-- Discussion." *American Economic Review* (Supplement) 17 (March 1927): 18-24.

h. Newspaper and Magazine Articles

"Can We Vote Ourselves Out of the Fix We Are In?" *The Christian Century*, 1 February 1933, 151-54.

"God and Professor Adler and Logic." *The Daily Maroon* (University of Chicago), 14 November 1940.

"In Defense of Agricultural Relief on the General Plan of the McNary-Haugen Measure." *Journal of Business* (State University of Iowa) 7 (December 1926): 4, 20-22.

"Is Modern Thought Anti-Intellectual?" *University of Chicago Magazine* 27 (November 1934), 20-21, 23. Reprinted in "Introductory General Course in the Study of Contemporary Society (Social Science I): Syllabus and Selected Readings," ed. H.D. Gideonse, W.H.C. Laves, and L. Wirth, 154-59. Chicago: University of Chicago Press, 1934.

"The Tariff." *Journal of Business* (State University of Iowa) 4 (March 1923): 23.

B. SECONDARY SOURCES

I. Works about Frank Knight

a. Articles and Essays

Barzel, Yoram. "Knight's 'Moral Hazard' Theory of Organization." *Economic Inquiry* 25 (January 1987): 117-20.

Blaug, Mark. "Frank H. Knight." In *Great Economists Since Keynes: An Introduction to the Lives and Works of One Hundred Modern Economists*, 116-18. Brighton: Wheatsheaf Books, 1985.

Breit, William, and Roger L. Ransom. "Frank Knight--Philosopher of the Counter-Revolution." Chap. in *The Academic Scribblers*, rev. ed., 193-204. Chicago: Dryden Press, 1982.

Buchanan, James M. "Methods and Morals in Economics." In *What Should Economists Do?*, 202-17. With a preface by H. Geoffrey Brennan and Robert D. Tollison. Indianapolis: Liberty Press, 1979.

_____. "The Economizing Element in Knight's Ethical Critique of Capitalist Order." *Ethics* 98 (October 1987): 61-75.

Coleman, Jules. "Competition and Cooperation." *Ethics* 98 (October 1987): 76-90.

Davis, J. Ronnie. "Three Days with Knight: A Personal Reminiscence." *Nebraska Journal of Economics and Business* 13 (Winter 1974): 17-29.

DeGregori, Thomas R. "Ethics and Economic Inquiry: The Ayres-Knight Debate and the Problem of Economic Order." *American Journal of Economics and Sociology* 36 (January 1977): 41-50.

Dewey, Donald. "Frank Knight Before Cornell: Some Light on the Dark Years." In *Research in the History of Economic Thought and Methodology*, vol. 8, ed. Warren J. Samuels. Greenwich, CT: JAI Press, forthcoming.

Emmett, Ross B. "Frank Knight and the Conflict of Values in Economic Life." In *Research in the History of Economic Thought and Methodology*, ed. Warren J. Samuels. Greenwich, CT: JAI Press, forthcoming.

"Frank Hyneman Knight." *The Journal of Business* (State University of Iowa) 7 (November 1926): 12.

Gonce, Richard A. "Frank H. Knight on Social Control and the Scope and Method of Economics." *Southern Economic Journal* 38 (April 1972): 547-58.

Gordon, Scott. "Frank Knight and the Tradition of Liberalism." *Journal of Political Economy* 82 (May-June 1974): 571-77.

Hammond, J. Daniel. "Frank Knight's Anti-Positivism." *History of Political Economy*, forthcoming.

Hirsch, Eva and Abraham. "The Heterodox Methodology of Two Chicago Economists." In *The Chicago School of Political Economy*, ed. Warren J. Samuels, 59-78. Michigan State University Business Studies. East Lansing: Michigan State University, 1976.

Howey, Richard. "Frank Hyneman Knight and the History of Economic Thought." In *Research in the History of Economic Thought and Methodology*. Vol. 1, *The Craft of the Historian of Economic Thought*, ed. Warren J. Samuels, 163-86. Greenwich, CT: JAI Press, 1983.

"In Memoriam: Frank H. Knight, 1885-1972." *American Economic Review* 63 (December 1973): 1047-48.

Kern, William S. "On the Market as a Game: Hayek vs. Knight." In *Research in the History of Economic Thought and Methodology*. Vol. 3, ed. Warren J. Samuels, 51-59. Greenwich, CT: JAI Press, 1985.

_____. "Frank Knight on Preachers and Economic Policy: A 19th Century Liberal Anti-Religionist, He Thought Religion Should Support the Status Quo." *American Journal of Economics and Sociology* 47 (January 1988): 61-69.

Lawson, Tony. "Probability and Uncertainty in Economic Analysis." *Journal of Post-Keynesian Economics* 11 (Fall 1988): 38-65.

Leigh, Arthur H. "Frank H. Knight as Economic Theorist." *Journal of Political Economy* 82 (May-June 1974): 578-86.

LeRoy, Stephen F. and Larry D. Singell, Jr. "Knight on Risk and Uncertainty." *Journal of Political Economy* 95 (April 1987): 394-406.

- McKinney, John Wesley. "Frank H. Knight and Chicago Libertarianism." In *The Chicago School of Political Economy*, ed. Warren J. Samuels, 191-213. Michigan State University Business Studies. East Lansing: Michigan State University, 1976.
- _____. "Frank H. Knight on Uncertainty and Rational Action." *Southern Economic Journal* 43 (April 1977): 1438-52.
- Patinkin, Don. "Frank Knight as Teacher." In *Essays On and In the Chicago Tradition*, 23-51. Durham, NC: Duke University Press, 1981.
- _____. "In Search of the 'Wheel of Wealth': On the Origins of Frank Knight's Circular-Flow Diagram." In *Essays On and In the Chicago Tradition*, 53-72. Durham, NC: Duke University Press, 1981.
- Raines, J. Patrick. "Frank H. Knight's Contributions to Social Economics." *Review of Social Economy* 47 (Fall 1989): 280-92.
- Raines, J. Patrick, and Clarence R. Jung. "Knight on Religion and Ethics as Agents of Social Change: An Essay to Commemorate the Centennial of Frank H. Knight's Birth." *American Journal of Economics and Sociology* 45 (October 1986): 429-39.
- Rostow, Eugene V. "The Ethics of Competition Revisited." *California Management Review* 5 (Spring 1963): 13-24.
- Samuels, Warren J. "The Knight-Ayres Correspondence: The Grounds of Knowledge and Social Action." *Journal of Economic Issues* 11 (September 1977): 485-525.
- _____. "Introduction" (to "The Case for Communism: From the Standpoint of an Ex-liberal," by Frank H. Knight). In *Research in the History of Economic Thought and Methodology, Archival Supplement*, vol. 2, ed. Warren J. Samuels. Greenwich, CT: JAI Press, forthcoming.
- Schweikhardt, David B. "The Role of Values in Economic Theory and Policy: A Comparison of Frank Knight and John R. Commons." *Journal of Economic Issues* 22 (June 1988): 407-14.
- Schweitzer, Arthur. "Frank Knight's Social Economics." *History of Political Economy* 7 (1975): 279-92.

Seligman, Ben B. "Frank H. Knight and Abstractionism." Chap. in *Main Currents in Modern Economics*, vol. 3, *The Thrust Toward Technique*, 646-665. Glencoe, IL: The Free Press, 1962; reprint (with a preface by John K. Galbraith), Chicago: Quadrangle Books, 1971.

Stigler, George J. "Frank Knight as Teacher." *Journal of Political Economy* 81 (May-June 1973): 518-20.

_____. "The Ethics of Competition: The Friendly Economists." The Tanner Lectures on Human Values. In *The Economist as Preacher and Other Essays*, 14-26. Chicago: University of Chicago Press, 1982.

Wick, Warner. "Frank Knight, Philosopher at Large." *Journal of Political Economy* 81 (May-June 1973): 513-15.

b. Book Reviews

Ayres, C.E. Review of *The Ethics of Competition and Other Essays*, by Frank H. Knight. *International Journal of Ethics* 46 (April 1936): 364-70.

Shackle, G.L.S. Review of *On the History and Method of Economics: Selected Essays*, by Frank H. Knight. *Economica* (February 1958): 65-66.

c. Replies and Rejoinders

Ayres, C.E. "Confusion Thrice Confounded" (rejoinder to "Intellectual Confusion on Morals and Economics," by Frank H. Knight). *Ethics* 45 (April 1935): 356-58.

Buchanan, James M. "Politics and Science: Reflections on Knight's Critique of Polanyi" (comment on "Virtue and Knowledge: The View of Professor Polanyi," by Frank H. Knight). *Ethics* 77 (July 1967): 303-10.

Slichter, Sumner H. "Modern Economic Society--Further Considered" (reply to "The Newer Economics and the Control of Economic Activity," by Frank H. Knight). *Journal of Political Economy* 40 (December 1932): 814-20.

_____. "A Concluding Word" (rejoinder to "Comment on Mr. Slichter's Comments and the Issues," by Frank H. Knight). *Journal of Political Economy* 40 (December 1932): 825-27.

d. Encyclopedia Articles

Buchanan, James M. "Frank H. Knight." In *The International Encyclopedia of the Social Sciences*, vol. 3, ed. David Sills, 424-28. New York: Macmillan, 1968.

Stigler, George J. "Frank Hyneman Knight." In *The New Palgrave: A Dictionary of Economics*, ed. John Eatwell, Murray Milgate, and Peter Newman, vol. 3, 55-59. New York: Stockton Press, 1987.

e. Forewords to Reprint Editions of Knight's Work

Buchanan, James M. Foreword to reprint edition of *Freedom & Reform: Essays in Economics and Social Philosophy*, by Frank H. Knight. Indianapolis: Liberty Press, 1982.

Stigler, George J. Foreword to reprint edition of *Risk, Uncertainty, and Profit*, by Frank H. Knight. Chicago: University of Chicago Press, 1971; Midway Reprint, 1985.

f. Theses and Unpublished Papers

Bewley, Truman. "Knightian Decision Theory: Part I." Cowles Foundation Discussion Paper, no. 807, November 1986.

_____. "Knightian Decision Theory, Part II: Intertemporal Problems." Cowles Foundation Discussion Paper, no. 835, May 1987.

_____. "Knightian Decision Theory and Econometric Inference." Cowles Foundation Discussion Paper, no. 868, March 1988.

_____. "Market Innovation and Entrepreneurship: A Knightian View." Cowles Foundation Discussion Paper, no. 905, April 1989.

Casson, Mark. "Frank Knight and the Theory of Society." University of Reading Discussion Paper in Economics, Series A, no. 162. April 1985.

Demsetz, Harold. "Managed Coordination: The Theory of the Firm Revisited, With Special Reference to Frank H. Knight's *Risk, Uncertainty, and Profit*." Paper presented at the "Frank H. Knight: A Reappraisal of His Intellectual Contributions" Symposium at the University of Chicago, Chicago, 7-9 November 1985.

- Dewey, Donald. "The Uncertain Place of Frank Knight in Chicago Economics." Paper presented at a joint session of the American Economic Association and the History of Economics Society, Chicago, 30 December 1987.
- Ellison, Julian. "Abram L. Harris, Frank H. Knight and the Development of the Idea for the Mont Pelerin Society, 1932-1947." Paper presented to the Association for Social Economics, Chicago, 28 December 1987.
- Kasper, Sheryl Davis. "Frank Knight's Case for Laissez Faire." Paper presented at the annual meeting of the History of Economics Society, Richmond, VA, June 1989.
- Kern, William S. "Frank Knight on Scientism, Moralism, and Social Progress." Paper presented at a session at the annual meetings of Southwestern Social Science Association co-sponsored by the Association of Christian Economists, San Antonio, TX, March 1986.
- Langlois, Richard N., and Metin M. Cosgel. "Knight on Risk, Uncertainty, and the Firm: A New Interpretation." Paper presented at the annual meeting of the History of Economics Society, Lexington, VA, June 1990.
- McKinney, John Wesley. "A Critique of Frank H. Knight's Economic Philosophy." Ph.D. diss., Columbia University, 1967.
- Raines, J. Patrick. "Frank Knight on Religion, Ethics and Public Policy." Paper presented at a meeting of the History of Economics Society, Atlanta, GA, 29 December 1989.

II. Other

a. Books

- Adler, Mortimer J. *Philosopher at Large: An Intellectual Autobiography*. New York: Macmillan, 1977.
- Allen, Frederick Lewis. *Only Yesterday: An Informal History of the Nineteen-Twenties*. New York: Harper & Bros., 1931.
- Backhouse, Roger. *A History of Modern Economic Analysis*. Oxford: Basil Blackwell, 1985.

- Bannister, Robert C. *Sociology and Scientism: The American Quest for Objectivity, 1880-1940*. Chapel Hill: University of North Carolina Press, 1987.
- Barber, William J. *From New Era to New Deal: Herbert Hoover, the Economists, and American Economic Policy, 1921-1933*. Historical Perspectives on Modern Economics. Cambridge: Cambridge University Press, 1985.
- Baritz, Loren, ed. *The Culture of the Twenties*. The American Heritage Series. Indianapolis, IN: Bobbs-Merrill, 1970.
- Barnes, Harry Elmer. *History and Social Intelligence*. New York: Alfred A. Knopf, 1926.
- _____. *Social Science: The Hope of Democracy*. Girard, KS: Haldeman-Julius, 1931.
- Blaug, Mark. *The Methodology of Economics: Or How Economists Explain*. Cambridge Surveys of Economic Literature. Cambridge: Cambridge University Press, 1980.
- _____. *Economic Theory in Retrospect*. 4th ed. Cambridge: Cambridge University Press, 1985.
- Borch, Karl Henrik. *The Economics of Uncertainty*. Princeton Studies in Mathematical Economics, ed. Oskar Morgenstern, Harold W. Kuhn, and David Gale, no. 2. Princeton: Princeton University Press, 1968.
- Braeman, John, Robert Bremner, and David Brody, eds. *Change and Continuity in Twentieth-Century America: The 1920's*. Modern America, no. 2. Columbus: Ohio State University Press, 1968.
- Bulmer, Martin. *The Chicago School of Sociology: Institutionalization, Diversity, and the Rise of Sociological Research*. The Heritage of Sociology. Chicago: University of Chicago Press, 1984.
- Butterfield, Herbert. *The Whig Interpretation of History*. London: G. Bell and Sons, 1931; reprint, New York: W.W. Norton, 1965.
- Carter, Paul A. *The Decline and Revival of the Social Gospel: Social and Political Liberalism in American Protestant Churches, 1920-1940*. Revised ed. Hamden, CT: Archon Books, 1971.

- Caldwell, Bruce. *Beyond Positivism: Economic Methodology in the Twentieth Century*. London: George Allen & Unwin, 1982.
- Chamberlin, Edward. *The Theory of Monopolistic Competition*. 8th ed. Cambridge: Harvard University Press, 1962.
- Chambers, Clarke A. *Seedtime of Reform: American Social Service and Social Action, 1918-1933*. Ann Arbor: University of Michigan Press, 1963; Ann Arbor Paperbacks, 1967.
- Chandler, Alfred D., Jr. *The Visible Hand: The Managerial Revolution in American Business*. Cambridge: Belknap Press (Harvard University Press), 1977.
- Collingwood, R.G. *An Autobiography*. Oxford: Oxford University Press, 1939.
- _____. *The Idea of History*. Oxford: Clarendon Press, 1946.
- Commager, Henry Steele. *The American Mind: An Interpretation of American Thought and Character Since the 1880's*. New Haven: Yale University Press, 1950.
- Davis, J. Ronnie. *The New Economics and the Old Economists*. Ames: The Iowa State University Press, 1971.
- Dorfman, Joseph. *The Economic Mind in American Civilization*. Vols. 4 & 5, 1918-1933. New York: Viking Press, 1959.
- Everett, J.R. *Religion in Economics: A Study of John Bates Clark, Richard T. Ely, and Simon N. Patten*. New York: King's Crown Press, 1946.
- Fine, Sidney. *Laissez Faire and the General-Welfare State: A Study of Conflict in American Thought, 1865-1901*. Ann Arbor: University of Michigan Press, 1956; Ann Arbor Paperbacks, 1964.
- Friedman, Milton. *Price Theory: A Provisional Text*. Chicago: Aldine, 1976.
- Furner, Mary O. *Advocacy & Objectivity: A Crisis in the Professionalization of American Social Science, 1865-1905*. Lexington: University Press of Kentucky, 1975.
- Greenblatt, Stephen. *Shakespearean Negotiations: The Circulation of Social Energy in Renaissance England*. Berkeley and Los Angeles: University of

- California Press, 1988, 1. Quoted in H. Aram Veesser. "Introduction." In *The New Historicism*, ed. H. Aram Veesser. New York: Routledge, 1989, ix.
- Grunzel, Josef. *Economic Protectionism*. Edited by Eugen von Philippovich. Carnegie Endowment for International Peace, Division of Economics and History. Oxford: Clarendon Press, 1916.
- Gunn, Giles, ed. *The Bible and American Arts and Letters*. Philadelphia: Fortress Press, 1983.
- Haber, Samuel. *Efficiency and Uplift: Scientific Management in the Progressive Era, 1890-1920*. Chicago: University of Chicago Press, 1964.
- Hartz, Louis. *The Liberal Tradition in America: An Interpretation of American Political Thought Since the Revolution*. New York: Harcourt, Brace & World, 1955.
- Haskell, Thomas L. *The Emergence of Professional Social Science: The American Social Science Association and the Nineteenth-Century Crisis of Authority*. Urbana: University of Illinois Press, 1977.
- Hawley, Ellis. *The Great War and the Search for a Modern Order: A History of the American People and Their Institutions, 1917-1933*. New York: St. Martin's Press, 1979.
- Hawthorn, Geoffrey. *Enlightenment and Despair: A History of Social Theory*. 2nd ed. Cambridge: Cambridge University Press, 1987.
- Higham, John, and Paul K. Conkin, eds. *New Directions in American Intellectual History*. Baltimore: Johns Hopkins University Press, 1979.
- Hofstadter, Richard. *Anti-Intellectualism in American Life*. New York: Alfred A. Knopf, 1969.
- Hollinger, David A. *In the American Province: Studies in the History and Historiography of Ideas*. Bloomington: Indiana University Press, 1985.
- Hughes, H. Stuart. *Consciousness and Society: The Reorientation of European Social Thought, 1890-1930*. New York: Alfred Knopf, 1958; Vintage Books, 1961.
- Hutchison, T.W. *The Significance and Basic Postulates of Economic Theory*. London: Macmillan, 1938.

- Hutchison, William R. *The Modernist Impulse in American Protestantism*. Oxford: Oxford University Press, 1976.
- Huthmacker, J. Joseph and Warren Sussman, eds. *Herbert Hoover and the Crisis of American Capitalism*. American Forum Series. Cambridge: Schenkman, 1973.
- Johnson, Alvin S. *Pioneer's Progress: An Autobiography*. New York: Viking Press, 1952.
- Johnson, James T., ed. *The Bible in American Law, Politics, and Political Rhetoric*. Philadelphia: Fortress Press, 1985.
- Karl, Barry D. *Charles E. Merriam and the Study of Politics*. Chicago: University of Chicago Press, 1974.
- Keynes, J.M. *The Collected Writings of John Maynard Keynes*. Vol. 10, *Essays in Biography*, eds. D. Moggridge and E. Johnson. London: Macmillan, 1972, 168. Quoted in A.M.C. Waterman. "Economists on the Relation Between Political Economy and Christian Theology: A Preliminary Survey." *International Journal of Social Economics* 14 (1987): 50.
- Kloppenber, James T. *Uncertain Victory: Social Democracy and Progressivism in European and American Thought, 1870-1920*. New York: Oxford University Press, 1986.
- Krutch, Joseph Wood. *More Lives Than One*. New York: William Sloane Associates, 1962.
- Kuhn, Thomas S. *The Structure of Scientific Revolutions*. 2nd ed., enlarged. Chicago: University of Chicago Press, 1970.
- Kuklick, Bruce. *Churchmen and Philosophers: From Jonathan Edwards to John Dewey*. New Haven: Yale University Press, 1985.
- Lasswell, Harold. *Propaganda Technique in the World War*. New York, 1927, 5. Quoted in Edward A. Purcell, Jr. *The Crisis of Democratic Theory: Scientific Naturalism & the Problem of Value*. Lexington: University Press of Kentucky, 1973, 102.
- Leuchtenburg, William E. *The Perils of Prosperity, 1914-1932*. The Chicago History of American Civilization. Chicago: University of Chicago Press, 1958.

Lippmann, Walter. *Drift and Mastery: An Attempt to Diagnose the Current Unrest*. New York: Mitchell Kinnerley, 1914.

_____. *Public Opinion*. New York: Harcourt, Brace & Co., 1922.

Lustig, R. Jeffrey. *Corporate Liberalism: The Origins of Modern American Political Theory, 1890-1920*. Berkeley: University of California Press, 1982.

Lyons, Gene M. *The Uneasy Partnership: Social Science and the Federal Government in the Twentieth Century*. New York: Russell Sage Foundation, 1969.

MacIntyre, Alasdair. *After Virtue: A Study in Moral Theory*. 2nd ed. Notre Dame, IN: University of Notre Dame Press, 1984.

Marsden, George M. *Fundamentalism and American Culture: The Shaping of American Evangelicalism, 1870-1925*. Oxford: Oxford University Press, 1980.

Marty, Martin E. *Righteous Empire: The Protestant Experience in America*. Two Centuries of American Life: A Bicentennial Series. New York: The Dial Press, 1970.

_____. *Modern American Religion*. Vol. 1, *The Irony of It All, 1893-1919*. Chicago: University of Chicago Press, 1986.

Mayo, Elton. *The Human Problems of an Industrial Civilization*. New York, 1933, 177. Quoted in Edward A. Purcell, Jr. *The Crisis of Democratic Theory: Scientific Naturalism & the Problem of Value*. Lexington: University Press of Kentucky, 1973, 103.

Morgan, Mary S. *The History of Econometric Ideas*. Cambridge: Cambridge University Press, 1990.

Nash, Roderick. *The Nervous Generation: American Thought, 1917-1930*. Rand McNally Series on the History of American Thought and Culture. Chicago: Rand McNally College Publishing Co., 1970.

Neill, Robin. *A New Theory of Value: The Canadian Economics of H.A. Innis*. Toronto: University of Toronto Press, 1972.

- Novick, Peter. *That Noble Dream: The "Objectivity Question" and the American Historical Profession*. Ideas in Context. Cambridge: Cambridge University Press, 1988.
- Perrett, Geoffrey. *America in the Twenties: A History*. New York: Simon and Schuster, 1982.
- Pocock, J.G.A. *Politics, Language, and Time: Essays on Political Thought and History*. New York: Atheneum, 1971.
- _____. *The Machiavellian Moment: Florentine Political Thought and the Atlantic Republican Tradition*. Princeton, NJ: Princeton University Press, 1975.
- _____. *Virtue, Commerce, and History: Essays on Political Thought and History, Chiefly in the Eighteenth Century*. Ideas in Context. Cambridge: Cambridge University Press, 1985.
- Purcell, Edward A., Jr. *The Crisis of Democratic Theory: Scientific Naturalism & the Problem of Value*. Lexington: University Press of Kentucky, 1973.
- Rauschenbusch, Walter. *Christianity and the Social Crisis*. New York: Macmillan, 1907; reprint, New York: Harper and Row, 1964, 65. Quoted in William R. Hutchison. *The Modernist Impulse in American Protestantism*. Oxford: Oxford University Press, 1976, 173.
- _____. *A Theology for the Social Gospel*. New York: Macmillan, 1917, page reference unknown. Quoted in Paul A. Carter. *The Decline and Revival of the Social Gospel: Social and Political Liberalism in American Protestant Churches, 1920-1940*. Revised ed. Hamden, CT: Archon Books, 1971, 14.
- Ricci, David M. *The Tragedy of Political Science: Politics, Scholarship, and Democracy*. New Haven: Yale University Press, 1984.
- Rodgers, Daniel T. *Contested Truths: Keywords in American Politics since Independence*. New York: Basic Books, 1987.
- Rorty, Richard. *Philosophy and the Mirror of Nature*. Princeton, NJ: Princeton University Press, 1979.
- Schiesinger, Arthur M., Jr. *The Age of Roosevelt*. Vol. 1, *The Crisis of the Old Order, 1919-1933*. Boston: Houghton Mifflin, 1956.

- Seidelman, Raymond. With the assistance of Edward J. Harpham. *Disenchanted Realists: Political Science and the American Crisis, 1884-1984*. SUNY Series in Political Theory: Contemporary Issues. Albany: State University of New York Press, 1985.
- Smith, Dennis. *The Chicago School: A Liberal Critique of Capitalism*. Theoretical Traditions in the Social Sciences. New York: St. Martin's Press, 1988.
- Smith, T.V. *The Democratic Way of Life*. Chicago: University of Chicago Press, 1926, 35. Quoted in David M. Ricci. *The Tragedy of Political Science: Politics, Scholarship, and Democracy*. New Haven: Yale University Press, 1984, 99.
- Stigler, George J. *Memoirs of an Unregulated Economist*. Alfred P. Sloan Foundation Series. New York: Basic Books, 1988.
- Taylor, F.W. *The Principles of Scientific Management*. New York, 1911, 7. Quoted in R. Jeffrey Lustig. *Corporate Liberalism: The Origins of Modern American Political Theory, 1890-1920*. Berkeley: University of California Press, 1982, 2.
- Tugwell, Rexford Guy, ed. *The Trend of Economics*. New York: F.S. Crofts & Co., 1924.
- Tully, James, ed. *Meaning and Context: Quentin Skinner and his Critics*. Princeton, NJ: Princeton University Press, 1988.
- Vidich, Arthur J., and Stanford M. Lyman. *American Sociology: Worldly Rejections of Religion and Their Directions*. New Haven: Yale University Press, 1985.
- Weinstein, James. *The Corporate Ideal in the Liberal State: 1900-1918*. Boston: Beacon Press, 1968.
- White, Morton G. *Social Thought in America: The Revolt Against Formalism*. With a new preface and an Epilogue. Boston: Beacon Press, 1957.
- Wiebe, Robert H. *The Search for Order, 1877-1920*. The Making of America. New York: Hill and Wang, 1967.
- Wilson, R. Jackson. *In Quest of Community: Social Philosophy in the United States, 1860-1920*. New York: John Wiley, 1963.

Wittgenstein, Ludwig. *Philosophical Investigations*. Translated by G.E.M. Anscombe. Oxford: Basil Blackwell, 1968.

b. Articles and Essays

Anderson, Gary M., David M. Levy, and Robert D. Tollison. "The Half-life of Dead Economists." *Canadian Journal of Economics* 22 (February 1988): 174-83.

Appleby, Joyce. "Republicanism in Old and New Contexts." *William and Mary Quarterly*, 3rd series, 43 (1986): 20-34.

Arrow, Kenneth J. "Alternative Approaches to the Theory of Choice in Risk-Taking Situations." In *Essays in the Theory of Risk-Bearing*, 1-43. Amsterdam: North-Holland, 1970.

Ayres, C.E. "Moral Confusion in Economics." *International Journal of Ethics* 45 (January 1935): 170-99.

Bernard, Luther L. "Sociological Research and the Exceptional Man." *Papers of the American Sociological Society* 27 (1932): 4. Quoted in Edward A. Purcell, Jr. *The Crisis of Democratic Theory: Scientific Naturalism & the Problem of Value*. Lexington: University Press of Kentucky, 1973, 22.

Blaug, Mark. "On the Historiography of Economics." *Journal of the History of Economic Thought* 12 (Spring 1990): 27-37.

Blicht, Charles P. "Allyn A. Young: A Curious Case of Professional Neglect." *History of Political Economy* 15 (1983): 1-24.

Breit, William. "Biography and the Making of Economic Worlds." *Southern Economic Journal* 53 (April 1987): 823-33.

Breit, William, and William P. Culbertson, Jr. "Clarence Edwin Ayres: An Intellectual's Portrait." In *Science and Ceremony: The Institutional Economics of C.E. Ayres*, ed. William Breit and William P. Culbertson, Jr. Austin: University of Texas Press, 1976.

Breit, William, and Roger L. Ransom. "Edward Hastings Chamberlin: The Wastes of Competition." Chap. in *The Academic Scribblers*, rev. ed., 53-63. Chicago: Dryden Press, 1982.

Brody, David. "The Rise and Decline of Welfare Capitalism." In *Change and Continuity in Twentieth-Century America: The 1920's*, ed. John Braeman, Robert Bremner, and David Brody, 147-78. Modern America, no. 2. Columbus: Ohio State University Press, 1968.

Chalk, Alfred F. "Relativist and Absolutist Approaches to the History of Economic Theory." *Southwestern Social Science Quarterly* 48 (June 1967): 5-12.

Church, Robert L. "Economists as Experts: The Rise of an Academic Profession in America, 1870-1920." In *The University in Society*, vol. II: *Europe, Scotland, and the United States from the 16th to the 20th Century*, ed. Lawrence Stone, 571-609. Princeton: Princeton University Press, 1974.

Clark, John Maurice. "Wesley C. Mitchell's Contribution to the Theory of Business Cycles." In *Methods in Social Science: A Case Book*, ed. Stuart A. Rice. Compiled under the direction of the Committee on Scientific Method in the Social Sciences of the Social Science Research Council. Chicago: University of Chicago Press, 1931.

_____. "The Changing Basis of Economic Responsibility." In *Preface to Social Economics: Essays on Economic Theory and Social Problems*, 66-91. Reprints of Economic Classics. New York: Augustus M. Kelley, 1967.

Coats, A.W. "Half a Century of Methodological Controversy in Economics: As Reflected in the Writings of T.W. Hutchison." In *Methodological Controversy in Economics: Historical Essays in Honor of T.W. Hutchison*, ed. A.W. Coats, 1-42. Greenwich, CT: JAI Press, 1983.

Cunningham, G. Watts. "In Memoriam: James Edwin Creighton." *International Journal of Ethics* 35 (January 1925): 214-16.

Dunn, John. "The Identity of the History of Ideas." In *Philosophy, Politics and Society*, 4th series, ed. Peter Laslett, W.G. Runciman, and Quentin Skinner, 158-73. Oxford: Basil Blackwell, 1972.

Fite, Gilbert C. "The Farmer's Dilemma, 1919-1929." In *Change and Continuity in Twentieth-Century America: The 1920's*, ed. John Braeman, Robert H. Bremner, and David Brody, 67-102. Modern America, no. 2. Columbus: Ohio State University Press, 1968.

Hammond, W.C. "James Edwin Creighton." *Journal of Philosophy* 22 (7 May 1925): 253-56.

- Hampsher-Monk, Iain. "Political Languages in Time--The Work of J.G.A. Pocock." *British Journal of Political Science* 14 (1983): 89-116.
- Harrell, David Edwin, Jr. "Restorationism and the Stone-Campbell Tradition." In *Encyclopedia of the American Religious Experience: Studies of Traditions and Movements*. Vol. II, ed. Charles H. Lippy and Peter W. Williams, 845-58. New York: Scribner's Sons, 1988.
- Hawley, Ellis. "Herbert Hoover, The Commerce Secretariat, and the Vision of an 'Associative State,' 1921-1928." *Journal of American History* 61 (1974): 116-40.
- Hayek, F.A. "The Transmission of the Ideals of Economic Freedom." In *Studies in Philosophy, Politics, and Economics*, 195-200. Chicago: University of Chicago, 1967; Midway Reprint, 1980.
- _____. "Two Kinds of Minds." In *New Studies in Philosophy, Politics, Economics and the History of Ideas*, 50-56. Chicago: University of Chicago Press, 1978.
- _____. "The Influence of the Natural Sciences on the Social Sciences." In *The Counter-Revolution in Science: Studies on the Abuse of Reason*, 2nd ed., 19-25. Indianapolis, IN: Liberty Press, 1979.
- Higham, John. "The Reorientation of American Culture in the 1890's." In *Writing American History: Essays on Modern Scholarship*, 73-102. Bloomington: Indiana University Press, 1970.
- Janssen, Peter L. "Political Thought as Traditional Action: The Critical Response to Skinner and Pocock." *History and Theory: Studies in the Philosophy of History* 24 (1985): 115-46.
- Karl, Barry. "Presidential Planning and Social Scientific Research." *Perspectives in American History* 3 (1969): 347-409.
- Keckskemeti, Paul. "Ethics and the 'Single Theory.'" *Social Research* 2 (May 1935): 221. Quoted in Edward A. Purcell, Jr. *The Crisis of Democratic Theory: Scientific Naturalism & the Problem of Value*. Lexington: University Press of Kentucky, 1973, 183.
- Kenny, Anthony. "Wittgenstein on the Nature of Philosophy." In *The Legacy of Wittgenstein*, 38-60. Oxford: Basil Blackwell, 1984.

- Kirschner, Don S. "Conflicts and Politics in the 1920's: Historiography and Prospects." *Mid-America: An Historical Review* 48 (October 1966): 219-33.
- Kuklick, Henrika. "Restructuring the Past: Toward an Appreciation of the Social Context of Social Science." *The Sociological Quarterly* 21 (Winter 1980): 5-21.
- Kurdas, Cigdem. "The 'Whig Historian' Adam Smith: Paul Samuelson's Canonical Classical Model." *History of Economics Society Bulletin* 10 (Spring 1988): 13-21.
- Lakatos, Imre. "History of Science and Its Rational Reconstructions." In *The Methodology of Scientific Research Programmes: Philosophical Papers, vol. 1*, ed. John Worrall and Gregory Currie, 102-38. Cambridge: Cambridge University Press, 1978.
- Link, Arthur. "What Happened to the Progressive Movement in the 1920's?" *American Historical Review* 64 (July 1959): 833-51.
- May, Henry F. "Shifting Perspectives on the 1920's." *Mississippi Valley Historical Review* 43 (December 1956): 405-27.
- Machlup, Fritz. "The Problem of Verification in Economics." In *Methodology of Economics and Other Social Sciences*, 137-57. Economic Theory, Econometrics, and Mathematical Economics. New York: Academic Press, 1975.
- Ménard, Claude. "Why Was There No Probabilistic Revolution in Economic Thought?" In *The Probabilistic Revolution. Vol. 2: Ideas in the Sciences*, eds. Lorenz Krüger, Gerd Gigerenzer, and Mary S. Morgan, 139-46. Cambridge: MIT Press, 1987.
- Merton, Robert K., David L. Sills, and Stephen M. Stigler. "The Kelvin Dictum and Social Science: An Excursion into the History of an Idea." *Journal of the History of the Behavioral Sciences* 20 (October 1984): 319-31.
- Morgan, Mary S. "Statistics Without Probability and Haavelmo's Revolution in Econometrics." In *The Probabilistic Revolution. Vol. 2: Ideas in the Sciences*, eds. Lorenz Krüger, Gerd Gigerenzer, and Mary S. Morgan, 171-97. Cambridge: MIT Press, 1987.
- Nogge, Burl. "The Twenties: A New Historiographical Frontier." *Journal of American History* 53 (September 1966): 299-314.

- _____. "Configurations of the Twenties." In *The Reinterpretation of American History and Culture*, ed. William H. Cartwright and Richard L. Watson, Jr., 465-90. Washington, D.C.: National Council for the Social Studies, 1973.
- Pocock, J.G.A. "The History of Political Thought: A Methodological Enquiry." In *Philosophy, Politics and Society*, 2nd series, ed. Peter Laslett and W.G. Runciman, 183-202. Oxford: Basil Blackwell, 1982.
- _____. "The Concept of a Language and the *métier d'historien*: Some Considerations on Practice." In *The Languages of Political Theory in Early-Modern Europe*, ed. Anthony Pagden, 19-38. Ideas in Context. Cambridge: Cambridge University Press, 1987.
- Rodgers, Daniel T. "In Search of Progressivism." *Reviews in American History* 10 (December 1982): 113-32.
- Rorty, Richard. "The Historiography of Philosophy: Four Genres." In *Philosophy in History: Essays in the Historiography of Philosophy*, ed. Richard Rorty, J.B. Schneewind, and Quentin Skinner, 49-75. Ideas in Context. Cambridge: Cambridge University Press, 1984.
- Ross, Dorothy. "The Development of the Social Sciences." In *The Organization of Knowledge in Modern America, 1860-1920*, ed. Alexandra Oleson and John Voss, 107-38. Baltimore: John Hopkins University Press, 1979.
- Sabine, George H. "The Philosophy of James Edwin Creighton." *Philosophical Review* 34 (May 1925): 230-61.
- Samuels, Warren J. "The History of Economic Thought as Intellectual History." *History of Political Economy* 6 (1974): 305-23.
- Samuelson, Paul A. "Economics in a Golden Age: A Personal Memoir." In *The Twentieth-Century Sciences: Studies in the Biography of Ideas*, ed. Gerald Holton, 155-70. New York: W.W. Norton, 1972.
- _____. "Out of the Closet: A Program for the Whig History of Economic Science." *History of Economics Society Bulletin* 9 (Fall 1987): 51-60.
- Shils, Edward. "Some Academics, Mainly at Chicago." *American Scholar* 50 (Spring 1981): 179-96.

- Skinner, Quentin. "Meaning and Understanding in the History of Ideas." In *Meaning and Context: Quentin Skinner and His Critics*, ed. James Tully, 29-67. Princeton, NJ: Princeton University Press, 1988.
- _____. "Preface." In *The Foundations of Modern Political Thought*. Vol. 1, *The Renaissance*, ix-xv. Cambridge: Cambridge University Press, 1978.
- _____. "A Reply to My Critics." In *Meaning and Context: Quentin Skinner and His Critics*, ed. James Tully, 231-88. Princeton, NJ: Princeton University Press, 1988.
- Stigler, George J. "The Scientific Uses of Scientific Biography, with Special Reference to J.S. Mill." In *James and John Stuart Mill: Papers of the Centenary Conference*, ed. John M. Robson and Michael Laine, 55-66. Toronto: University of Toronto Press, 1976.
- _____. "Do Economists Matter?" In *The Economist as Preacher and Other Essays*, 57-67. Chicago: University of Chicago Press, 1982.
- _____. "Textual Exegesis as a Scientific Problem." In *The Economist as Preacher and Other Essays*, 68-71. Chicago: University of Chicago Press, 1982.
- Thilly, Frank. "The Philosophy of James Edwin Creighton." *Philosophical Review* 34 (May 1925): 211-29.
- Tugwell, Rexford G. "Human Nature in Economic Theory." *Journal of Political Economy* 30 (June 1922): 317-45.
- _____. "Experimental Economics." In *The Trend of Economics*, ed. Rexford Guy Tugwell, 369-422. New York: F.S. Crofts & Co., 1924.
- Veese, H. Aram. "Introduction." In *The New Historicism*, ed. H. Aram Veese, ix-xvi. New York: Routledge, 1989.
- von Wright, G.H. "Wittgenstein in Relation to His Times." In *Wittgenstein*, 203-16. Minneapolis: University of Minnesota Press, 1982.
- Wachterhauser, Brice R. "Introduction: History and Language in Understanding." In *Hermeneutics and Modern Philosophy*, ed. Brice R. Wachterhauser, 5-61. Albany: State University of New York Press, 1986.

Waterman, A.M.C. "Economists on the Relation Between Political Economy and Christian Theology: A Preliminary Survey." *International Journal of Social Economics* 14 (1987): 46-68.

White, Leonard D. "The Local Community Research Committee and the Social Science Research Building," in *Chicago: An Experiment in Social Science Research*, ed. T.V. Smith and Leonard D. White (Chicago: University of Chicago Press, 1929), 25. Quoted in Edward A. Purcell, Jr. *The Crisis of Democratic Theory: Scientific Naturalism & the Problem of Value*. Lexington: University Press of Kentucky, 1973, 31.

Wirth, Louis. "The Social Sciences." In *American Scholarship in the Twentieth Century*, ed. Merle E. Curti. Cambridge: Harvard University Press, 1953, 40. Quoted in Gene M. Lyons. *The Uneasy Partnership: Social Science and the Federal Government in the Twentieth Century*, 22. New York: Russell Sage Foundation, 1969.

Wolfe, A.B. "Functional Economics." In *The Trend of Economics*, ed. Rexford Guy Tugwell, 445-81. New York: F.S. Crofts & Co., 1924.

c. Unpublished Papers

Coats, A.W. "Religion, Economics, and the Emergence of the Social Sciences in Victorian Britain and the United States." Paper presented at a meeting of the History of Economics Society, Atlanta, GA, 29 December 1989.

Tugwell, Rexford G. "The New Deal: The Contributions of Herbert Hoover." TMs, n.d., Tugwell Papers, Franklin D. Roosevelt Presidential Library, 30, and 61. Quoted in William J. Barber. *From New Era to New Deal: Herbert Hoover, the Economists, and American Economic Policy, 1921-1933*. Historical Perspectives on Modern Economics. Cambridge: Cambridge University Press, 1985, 195.

Wittgenstein, Ludwig. "The Big Typescript." TMs, 1933, Ludwig Wittgenstein Papers, Wren Library, Trinity College, Cambridge, 415. Quoted in Anthony Kenny. "Wittgenstein on the Nature of Philosophy." In *The Legacy of Wittgenstein*. Oxford: Basil Blackwell, 1984, 42.