

AN ABSTRACT OF THE THESIS OF

JACOB F. LESTER for the degree of DOCTOR OF PHILOSOPHY

GENERAL SCIENCE
in (Biological Science) presented on April 10, 1979

title: JOHN FISKE'S PHILOSOPHY OF SCIENCE:

THE UNION OF SCIENCE AND RELIGION

THROUGH THE PRINCIPLE OF EVOLUTION

Abstract Approved:

Redacted for privacy

Paul L. Farber

Modern science was produced by a Christian society, and although science has had an effect on Christianity, it could not itself remain unaffected. In the second half of the nineteenth century, the subject of evolution was as much a religious as a scientific issue. The battle line was drawn and science seemed to be putting an end to the religious faith of times past. Science was explaining the meaning of the universe through the doctrine of evolution, and it was defining the symbols religion was using in its own defense. Some concerned thinkers sought to modify the course and the methods of both science and religion.

John Fiske grew up in the traditional New England theology of that period and he felt that there was a need for revision in theology in order to meet the needs of the times. Unlike the nonbelievers and positivists, Fiske saw in science an ally of religion. He proposed a system of science based on reciprocation and sympathy between science

and religion. It was patterned after the philosophy of Herbert Spencer, the philosopher he idolized. Like Spencer, Fiske was overwhelmed by one scientific concept, the unifying principle of evolution. His system is cosmic, dealing with the whole spectrum of phenomena from the development of planetary systems to the evolution of psychical power.

The focus of this history is on Fiske's conviction that religion and science are pointing to the same thing, and that the common ground can be found in the doctrine of evolution. He qualified his enthusiasm for Positivism and was not worried about skepticism. He easily passed by the older arguments because he was confident that science would eventually give more certain proofs. In Spencer's philosophy he saw the makings of theism, while his contemporaries saw materialism. In evolution he saw theistic implications while others saw more naturalistic implications.

We will see that Fiske refused to go the way of his colleagues into agnosticism because he was willing to have a system that was essentially *a priori*. Moreover, he was convinced that the study of evolution, especially as it bears upon man's ethical nature and his awareness of God would set at rest the apparent contrariety separating science and the institution of religion.

Our concern will be with Fiske's philosophy of science as it is set forth in the *Outlines of Cosmic*

Philosophy: Based on the Doctrine of Evolution with Criticisms on the Positive Philosophy, which was a popularization of Herbert Spencer's "Synthetic Philosophy." And this dissertation will concentrate on that part which Fiske and others considered to be his own original contribution to evolutionary theory, his concept of the "prolongation of infancy" in man. Our interest in his subsequent philosophical works will be confined to areas which give evidence of the viability of his theory as a means of attaining the unified theoretical perspective he envisioned.

This evaluation of Fiske's scientific originality is of interest in that it supplies what is felt to be an essential chapter in the history of American scientific thought, and is justified by the position that Fiske held as a popular lecturer and respected intellectual. Although Fiske's contributions were not lasting, his ideas were widely accepted and influential in his own time. He wrote extensively in philosophy and contributed to the understanding and acceptance of evolutionary theory in America.

© 1979

JACOB FRANKLIN LESTER

ALL RIGHTS RESERVED

John Fiske's Philosophy of Science: The Union of
Science and Religion Through the
Principle of Evolution

by

Jacob Franklin Lester

A THESIS

submitted to

Oregon State University

in partial fulfillment of
the requirements for the
degree of

Doctor of Philosophy

Completed April 1979

Commencement June 1979

APPROVED:

Redacted for privacy

Associate Professor of the History of Science
in charge of major

Redacted for privacy

Chairman of the Department of General Science

Redacted for privacy

Dean of Graduate School

Date thesis is presented April 10, 1979

Typed by Alice C. Lester for Jacob Franklin Lester

ACKNOWLEDGEMENTS

I would like to dedicate this dissertation to my wife Alice and daughter Angela whose patience and encouragement and enthusiasm have given me the perseverance necessary for such an undertaking.

I would like to thank Paul Farber, philosopher and creative historian of biology, who made me aware of the nature of dogmatic science and provided me with inspiration and insight into the philosophy of science.

TABLE OF CONTENTS

PART I. BACKGROUND

<u>Chapter</u>		<u>Page</u>
I.	INTRODUCTION: THE INTELLECTUAL CLIMATE	
	Fiske's Inherited Tradition: The American Scholarly Ideal	1
	Spencer or Darwin: The Vogue of Spencer in America	11
	The New Theologians: Ethics in a Different Light	30
II.	BIOGRAPHICAL SKETCH	
	1842-1859 Boyhood: Liberation of the Spirit	61
	1860-1873 The New Faith: Spencer and the Development of Cosmic Theism	70
	1874-1901 An American Popularizer of Science, Religion and History	86
PART II. AN INTUITIVE CLAIM FOR RELIGION AND EVOLUTION		
III.	FISKE'S PHILOSOPHY OF SCIENCE: FROM A SUMMARY OF ALL KNOWLEDGE TO MORAL EVOLUTION	
	The Limits of Knowledge	115
	The Law of Evolution	128
	Prolongation of Infancy: Religion and Science Reconciled	148
IV.	EMENDING THE ARGUMENT FOR UNITY	
	<i>The Unseen World</i>	187
	<i>The Destiny of Man Viewed in the Light of his Origin</i>	195
	<i>The Idea of God as Affected by Modern Knowledge</i>	201
	<i>Through Nature to God</i>	206
V.	CONCLUSION	
	The Case for the Prolongation of Infancy as a Means of Achieving Unity	217
	Satisfying a Cultural Need	248
	BIBLIOGRAPHY	268

JOHN FISKE'S PHILOSOPHY OF SCIENCE:
THE UNION OF SCIENCE AND RELIGION
THROUGH THE PRINCIPLE OF EVOLUTION

PART I. BACKGROUND

I. INTRODUCTION: THE INTELLECTUAL CLIMATE

FISKE'S INHERITED TRADITION: THE AMERICAN SCHOLARLY IDEAL

No one longer holds with the ancient skeptic, that all things remain as they were since the beginning. All alike admit that the universe, as we know it, has had a beginning in time, and the problem which all alike propose is, to account for its origin and history. There was a time in the eternal duration when the present order did not exist, and a time when it began to be. How? This is the question which both science and religion attempt to answer.¹

BORDEN PARKER BOWNE

The purpose of this work is to examine certain scientific ideas of the popular nineteenth-century American philosopher, lecturer and historian, John Fiske, and to comment upon their plausibility and influence. To examine Fiske's original scientific ideas as they developed in the shadow of evolution is interesting and may, I hope, be instructive. He was one of a handful of American thinkers who, using evolution to interpret religion and morality, wanted to show that every part of life could be viewed as an aspect of the doctrine of evolution. Moreover, he believed that he had discovered the specific

¹Borden Parker Bowne, *The Philosophy of Herbert Spencer* (Phillips & Hunt, 1881), p. 9.

agency by which man's religious and scientific beliefs could be unified, that is, the origin of morality.

In order to pursue this thesis, we will first examine the character of the period in which he lived and the style of life that led him to his ideas. It is not my intention, however, to write a memoir of a public individual who has already had more than one biographer.² First we will discuss the function of the scholar in America when Fiske was deciding upon a career. Then we will examine those factors forming the intellectual climate in which he grew, sketch his life, and move to his evolutionary hypothesis.

In the period when sectionalism was developing in America, between the war of 1812 and the 1830's, the thinking of the people and the very structure of society were undergoing change. New England's population was stable, with very little growth compared to the rest of the country. The best land was already cultivated and

²See John Spencer Clark, *The Life and Letters of John Fiske* (New York: Houghton, Mifflin and Company, 1917); Milton Berman, *John Fiske: The Evolution of a Popularizer* (Cambridge: Harvard University Press, 1961); Patrick D. Hazard, "John Fiske as American Scholar: A Study in the Testing of a Native American Tradition" (unpublished Ph.D. dissertation, Western Reserve University, 1957); Harry Burnell Pannill, "John Fiske: Cosmic Theist" (unpublished Ph.D. dissertation, Duke University, 1952); George P. Winston, *John Fiske* (New York: Twayne Publishers, 1972.)

land prices were high. The manners and social attitudes common to the northern states were derived from British roots. Socially conscious people emulated what they considered to be the style of London. Each city had its own character, and Boston, more than others, had all the appearance of a small English province. Most of the people living there had British ancestors. So it was with other New England cities, each with its distinctive character.

The North not only had many individualized communities, it was the cultural center for art, theater, and writing. Most of the nation's scholars lived in the northern states, and their common preoccupation became the creation of a tradition that was distinctively American. The *North American Review*, one of the nation's prominent magazines, set out to "foster American genius," and literary clubs sprang up in New York and Boston to encourage American authors.³

To choose the life of a scholar in Fiske's day was to find oneself in a dilemma. During the Jacksonian period, the prevailing sentiment was that in order to develop a stable society, the nation had to generate a

³John A. Garraty, *The American Nation* (New York; Harper & Row, Publishers, Inc., 1971), p. 295.

sound, American intellectual leadership. America needed its own thinkers, its own creativity. Yet a conflicting sentiment could be seen in other parts of society. It was a period that saw the rise of the common man: every man was thought to be as good as his neighbor. Back in Jefferson's day the ordinary man could be educated so that he might know what is right, and so that he could protect himself against unjust government. But under Jacksonian Democracy there was an air of self-confidence, a contempt for learning, and a glorification of the ordinary. The common man, instinctively knew what was right, and "had become so proud of himself that he glorified his very ordinariness and made mediocrity a virtue."⁴

Scholars were very critical of themselves, critical of the role they should play in society and of the duties they should hold toward society. Of major concern was how a scholar should deal with the average man. Some felt that they should work actively with him so as to direct his mind to higher thoughts; that it was their repayment to society for the opportunity to pursue their education. If the American people were to succeed and become the best nation, they would have to be

⁴*Ibid.*, p. 314

instructed intellectually.

Some scholars, however, held ambivalent attitudes toward the common man, for in theory the scholar saw himself as a relayer of his knowledge to all, but in practice the common man was disinterested in the kinds of thoughts, the poetry, and the art of the intellectual. In a massive two-volume dissertation on John Fiske in the American tradition, Patrick D. Hazard describes this cultural environment in which Fiske decided to "lead the life of an American scholar in the Gilded Age."⁵ The scholar was confronted with this newly created American tradition in which there was a "tension between what he feels he should do and his revulsion from the grimy arena wherein his responsibilities have to be discharged. This tension between the duty to one's ideals and respect for one's own feelings would impose an intolerable burden on scholars in Fiske's time."⁶

Besides the unclear role the American scholar felt he should play, there were other factors molding

⁵Patrick D. Hazard, "John Fiske as American Scholar: A Study in the Testing of a Native American Tradition" (unpublished Ph.D. dissertation, Western Reserve University, 1957), p. ii.

⁶*Ibid.*, p. 9.

intellectual attitudes in America. The "Romantic Age" appeared in America early in the nineteenth century. By the 1820's many intellectuals were displaying its main characteristics, namely, the use of intuition and the revolt against the Age of Reason. By the 1850's there were some very imaginative works produced in America: Nathaniel Hawthorne wrote *The House of Seven Gables* and *The Scarlet Letter*; Henry David Thoreau wrote *Walden*; Herman Melville wrote *Moby Dick*; and Walt Whitman wrote *Leaves of Grass*. These were American writers who had been affected by the European romantics.

Of no less importance was the growing feeling of nationalism. American scholars were, in some instances, obsessed with their European heritage and everything that Europe stood for. There was a particular preoccupation with demonstrating our independence from and ability to equal or surpass European accomplishment. In every kind of art Americans tried "to achieve a uniqueness appropriate to the new democracy."⁷ Drama, architecture, literature, music, art, were all seen in nationalistic terms

⁷*Ibid*

with hopes for American originality.⁸ The arts were under pressure to produce a particularly native American character and to show the uniqueness of American talent.

As a developing intellectual and as an American scholar, Fiske felt these pressures to elevate the condition of the common man and to examine critically and surpass the European tradition. In his youth his enthusiasm sometimes led him to frustration over the inferiority of his own country in achievement and culture. As he matured and his accomplishments accrued, we see his gradual acceptance of the cultural disparity between the old world and the new.

Although this condition is particularly evident in Fiske's historical writings, it is of interest to our examination of his scientific philosophy because it too was an effort to give strength and understanding to the common man. He wanted to meet the challenge of European scientific and philosophic ideas, and to bring the American audience up to the European level. Hazard

⁸See Oliver W. Larkin, *Samuel F. B. Morse and American Democratic Art* (Boston: Little, Brown and Company, 1954), p. v., and Oscar F. Handlin, ed., *This was America* (Cambridge: Harvard University Press, 1949) p. 104, *passim*. Hazard discusses a dissertation that thoroughly covers literature as it was affected by this trend: Thomas J. Tracy, "The American Attitude Toward American Literature During the Years 1800-1812" (unpublished Ph.D. dissertation, St. John's University, Brooklyn, 1941), p. 83, *passim*.

makes clear the depressing effects that the popular taste had.⁹ It was common knowledge among writers of the era that novels had to be written with a particular regional taste of the reader in mind; anything out of the ordinary would not sell.

The common frame of mind is better understood when one sees the kind of writing that did sell. In the early 1800's the etiquette book was very popular, not so much for the concern over proper behavior, but because possession of such a book gave the impression of having studied it. An etiquette book on the parlor table was a "passport to culture." Also popular were small volumes of poetry, which almost everyone kept on hand. Sentimental poetry found an especially wide audience. "Besides reading countless volumes of such sentimental nonsense . . . , Americans consumed many volumes of religious literature. In 1840 the American Tract Society disposed of three million copies of its various publications; in 1855 the total exceeded 12 million."¹⁰

⁹Hazard, *John Fiske*, pp.16-20.

¹⁰Garraty, *American Nation*, p. 427.

The appearance of culture without the reality was just one of many problems confronting a scholar who had hopes of advancing his countrymen. Taste in the visual arts, for example, was influenced by an odd piety toward nudity in some cases, and by self-appointed critics in others. The self-appointed critics advice usually stifled the imagination and called for what was popular and fashionable, in other words, what would sell.

It is for reasons like these that when Fiske decided to pursue the career of a scholar and writer, his step-father, a practical sort-of man, tried to persuade him to look for a career that was more down to earth, more in touch with the needs of the people. He recommended law, and for a few years Fiske submitted to the idea. He ended up following his original goal, but having to modify his approach in order to survive.

America was a country where money was not spent on literary or artistic works, and where much more money could be made lecturing on popular subjects. We shall see that Fiske was never able to live comfortably as a writer. He had a very difficult time writing popular articles, and later in life, even though his writing was extensive, he suffered one financial crisis

after another.

Hazard summarizes the difficulties confronting scholars like Fiske. "Urbanization and industrialization were making the simple democratic faith of the founding fathers look inadequate. City bosses and robber barons were simply not accounted for in the plans of the semi-pastoral republic. The new immigration seemed to threaten the ascendancy of the solid, respectable Puritan middle class. Fiske's ambition to become an American scholar in the Gilded Age meant that he had to try to fit these new facts into his hopes for America, or accept the new expedients of literary tests, restricted immigration, and 100 per cent Americanism."¹¹ As an American Scholar, Fiske had to adjust to the difficulties at hand. He became one of the best popularizers of the nineteenth century, and one of the most prolific writers on popular religious ideas.

¹¹Hazard, *John Fiske*, p. 24.

SPENCER OR DARWIN: THE VOGUE OF SPENCER IN AMERICA

I am an ultra and thoroughgoing American. I believe there is great work to be done here for civilization. What we want are ideas - large, organizing ideas - and I believe there is no other man whose thoughts are so valuable for our needs than yours are.¹²

Edward L. Youmans to Herbert Spencer

In a recent collection of Auguste Comte's writings Gertrud Lenzer characterizes the early part of the nineteenth century as holding forth "bewildering, frightening and unknown changes - conceptions such as 'history,' 'organic,' 'spirit of the age,' 'progress,' 'evolution,' 'reconstruction,'" that were in part "an expression of how problematic and uncertain the present and future had become. . . ." ¹³ Many of the new intellectual conceptions produced in the first half of the nineteenth century in Europe were vehicles for coping with the changes, attempts to triumph over fear of the unfamiliar. Most major thinkers, she says, felt compelled to address the problems and try to discover where they were leading. The period brought forth a "multitude of systems, schemes, and blueprints for the reorganization of knowledge, power,

¹²Cited in Richard Hofstadter, *Social Darwinism and American Thought* (Boston: Beacon Press, 1955), p. 31.

¹³Gertrud Lenzer (ed.) *Auguste Comte and Positivism: The Essential Writings* (New York: Harper & Row, 1975), p. xxvii.

property and feelings."¹⁴

Besides trying to fit into the tradition of the American scholar, Fiske involved himself in an intellectual search, abandoning religion, for a system of philosophy that was universal, that would explain equally the origin of the universe and the origin of ethics. The uncertainties of the age demanded it. In his youth he moved from one philosopher to the next, grasping each new system as it came to his attention and as it answered his specific needs. The philosophy of his choice had to be sweeping, an all-inclusive theory of the universe.

For a while the "positivism" of Auguste Comte (1798-1857) held his attention.¹⁵ Comte's system was based upon a notion common to the nineteenth century, the notion that society and the ideas of man are directly related to the natural world. Human thought and the processes of society are both subject to investigation by methods similar to those used in the investigation of the natural

¹⁴ *Ibid.*

¹⁵ The term "positivism" has been used inaccurately in a number of ways, especially to describe empiricist methods and attitudes. Comte coined the term for his doctrine, however, a complete system of philosophy rather than a method. Fiske sometimes used the term "positivist" to describe someone searching for truth and using the science of his day as the means. In his *Outlines*, however, he used the term as Comte did.

world. Comte set himself apart from others holding this idea by proposing his unique Law of the Three Stages and the Hierarchy of the Sciences. His goal was the restructuring and regeneration of mankind: his *Cours de philosophie positive* was an introduction to the grand scheme.¹⁶ Fiske was attracted to Comte's call for the service to humanity, and to the idea of a moral and philosophical maturing process.

In 1857 a new guiding star appeared on Fiske's horizon. In that year Herbert Spencer (1820-1903) wrote an essay entitled, "Progress: Its Law and Cause," in which he presented the evolutionary views he had adopted in the early 1840's. He stated that several evolutionary ideas had been around for some time, and that they had never been suitably unified into a coherent view. A "synthesis" was in order, and he set out to provide it. An obscure resident of Salem, Massachusetts named Edward Silsbee became interested in Spencer's synthesis and tried to find other interested Americans.¹⁷ Two men who

¹⁶Auguste Comte, *Cours de philosophie positive* (Paris: Borrani et Droz, 1835-1852).

¹⁷Hofstadter, *Social Darwinism*, pp. 13-14.

would ultimately play a very important role in the advancement of evolution in America were immediately taken up with this English thinker.

One was Edward Livingston Youmans, founder and editor of the widely-read American periodical entitled the *Popular Science Monthly*. William Leverette, his biographer, characterized Youmans as being "especially interested in the promotion of an understanding and respect for science, its ethic, its value as a way of thought, and its revelation of the place of man within the naturalistic frame of reference."¹⁸

The other supporter, the subject of this study, was John Fiske. Hofstadter says that "when public attention turned to the problems raised by Darwinism, Fiske and Asa Gray led the movement to make evolution respectable, and Youmans became the self-appointed salesman of the scientific world-outlook."¹⁹ What was it that made these men, Fiske in particular, find solace in an evolutionary philosophy? Why should Fiske find the Spencerian

¹⁸William E. Leverette, "Science and Values: A Study of Edward L. Youmans' *Popular Science Monthly*, 1872-1887" (unpublished Ph.D. dissertation, Vanderbilt University, 1963), p. 1.

¹⁹Hofstadter, *Social Darwinism*, p. 14.

synthesis of evolutionary doctrine so appealing as to devote his major life's work to its restatement and defense? We will see that even with the tide of evolutionary debate that followed Darwin, Fiske remained steadfastly Spencerian. If we examine the nature of Spencer's great appeal for Americans, in most cases greater than Darwin's, we will have a better understanding of Fiske.

Herbert Spencer was born in Derby, England on April 27, 1820. By his mid-teens he had become proficient in mathematics and served as civil engineer for the Birmingham and Gloucester Railway. In 1841 his work for the railway was completed, but in 1843 he returned to the railway briefly as an inventor. This was not an intellectually rewarding life for Spencer who was thinking about pursuing a literary career.

One fortunate result of his time spent with the railway was an interest he developed in fossil beds and their implications. While he was working as an engineer, part of the road bed under construction passed through a type of blue lias clay that was rich in fossils. In his autobiography he says that there were always lying about in the Worcester Office, samples of ammonites and other forms of molluscs. He developed an interest

in fossil remains which resulted in the purchase of Lyell's *Principles of Geology* in 1840.²⁰ Although part of Lyell's book was devoted to the refutation of Lamarck's views concerning the origin of species, Spencer was inclined to accept them. "My inclination to accept it as true," he said, "in spite of Lyell's adverse criticisms, was, doubtless, chiefly due to its harmony with that general idea of the order of Nature toward which I had, throughout life, been growing."²¹

Spencer's longest association with the Railway ended in 1841, after which he gave thought to a literary career. He went to London, and while working as sub-editor for a newspaper entitled the *Economist* he became acquainted with George Henry Lewes (1817-1878), the literary critic and philosopher, and Marian Evans (1819-1880) (later known under the pen-name of George Eliot). With Lewes he carried on discussions about the then unfashionable "development hypothesis," the theory that the organic world is a product of development and not of creation.

²⁰Herbert Spencer, *An Autobiography* (2 vols.; New York: D. Appleton & Company, 1904), I, p. 200.

²¹*Ibid.*, p. 201.

Spencer spent a great deal of his time thinking and writing about the principles of political economy. His attitude was distinctly *laissez faire*, yet even in this area his thoughts were influenced by a dominating developmental conception of nature, of human nature, and of society. *Social Statics*, published in 1850, was his first book. In it he tried to describe laws that must be obeyed if we are to obtain happiness, and what laws are involved in the advancement of society toward perfection.

He was urged by John Chapman, editor of the *Westminister Review*, to write an article on some of his theories. Chapman had noticed unifying, law-like concepts in Spencer's ideas, such as the idea that a decrease in fertility went along with more advanced animal development. He urged Spencer to bring them forward. When later looking back on this period of his life Spencer said, "Here again was illustrated the truth that a germinal idea thrown among unorganized materials sets up organization. The notion had been present with me, certainly from 1846-47, and how much earlier I do not know."²² The concept of development,

²²David Duncan, *Life and Letters of Herbert Spencer* (2 vols.; New York: D. Appleton & Company, 1908), II, p. 317.

of evolution, was his organizing principle.

In 1852 he attended a meeting of the British Association for the Advancement of Science at which he listened to Thomas Henry Huxley (1825-1895), later famous as a staunch defender of Darwin, present a paper on marine hydrozoa. Later that year, Spencer published the "Theory of Population deduced from the General Law of Animal Fertility," in which he used some of Huxley's data. He gave Huxley a copy and they became good friends. William Irvine points out that "Spencer's article was even more significant than Huxley realized. It expounded a theory of social evolution based on something very close to natural selection."²³ (It is also famous because in it he coined the phrase "survival of the fittest.") Spencer wanted to show that there is a kind of equilibrium that exists between each population and its food supply. Evolution is due to the occasional imbalance that results from over reproduction. Population pressure brings about change, and that change is survival of the most intelligent. There is an inverse relationship that exists between intelligence and reproductive capacity. As the more intelligent

²³William Irvine, *Apes, Angels, and Victorians* (New York: Time Incorporated, 1963), pp. 34-35.

survive the stresses of competition, their numbers become fewer, and there is less of a tendency to overproduce.

Lewes, at the time editor of a paper called the *Leader*, persuaded Spencer to write a series of short papers called the "Haythorne Papers."²⁴ The second in the series was entitled the "Development Hypothesis," and was published in March, 1852. This particular article was important relative to later accusations of Spencer's riding on the coat-tails of Darwin. Here Spencer advocated an evolutionary theory seven years before the publication of the *Origin of Species*.

Supporters of the development hypothesis could show, even though they were unable to trace many phases that existing species had gone through and could not identify the past influences that had brought about such changes, how these changes continue in successive generations until the new conditions become the natural ones. This was evident in cultivated plants, domesticated animals, and in the races of men. We can see daily changes in ourselves in the "development of every faculty, bodily, moral or intellectual, according to the use made of it."

²⁴Duncan, *Life and Letters*, II, p. 318.

And thus they can show that throughout all organic nature there is at work a modifying influence of the kind they assign as the cause of these specific differences: an influence which, though slow in its action, does in time, if the circumstances demand it, produce marked changes - an influence which, to all appearance, would produce in the millions of years, and under the great varieties of conditions which geologic records imply, any amount of change.²⁵

For the next few years Spencer was involved in writing another book, *The Principles of Psychology*, which he published in 1855. This was followed by an essay entitled "Progress: Its Law and Cause," which was published in 1857 in the *Westminster Review*. In this essay he presented his view of universal evolution. He first looked at the development of the individual organism, with its growth in complexity, from the homogeneity of structure in the ovum to the heterogeneity of structure in the adult. The process moves from differentiation into contrasting parts, to a final, complex combination of tissues and organs constituting the adult. The organic process can be reduced to a change from the homogeneous to the heterogeneous. He proposed to show that "this law of organic progress is the law of all progress," and he applied it to the earth, ". . . in the development of life upon its surface, in the develop-

²⁵ Herbert Spencer, *Essays: Scientific, Political, and Speculative* (New York: D. Appleton & Company, 1910), I, p. 4.

ment of Society, of Government, of Manufactures, of Commerce, of Language, Literature, Science and Art."²⁶
In all these things there is a built-in tendency toward greater complexity.

Spencer was unable to give a clear explanation of why differentiation is something achieved naturally. He could not explain why homogeneity is a less-desirable or less-stable condition than heterogeneity. His explanations were largely physical explanations using the current framework of physics - the law of the "Persistence of Force," and cause and effect. He felt that we can use this kind of explanation to a point. Beyond that there is the "Unknowable" mystery of the universe. It was his way of unifying all knowledge under the concept of progress, and at the same time accepting man's limitations.

These essential elements of Spencer's concept of progress and evolution show that his background and ambitions were considerably different from Darwin's. His explanation was applicable to all existence, not just biological phenomena. In 1857 he collected a number of his essays together and prepared to publish them as a separate volume. During this preparation he decided to

²⁶*Ibid*, p. 10.

write a system of philosophy. He drew up the plan early in 1858 - most of the articles to be included had reference to evolution.²⁷

Like Comte who had erected his entire system without a thorough presentation of the systems he was opposing or following, Spencer went far to claim auto-genesis for most of his ideas. In a letter written in 1899 to his friend Leslie Stephen he said that he had done very little reading of serious books and therefore owed hardly anything to anyone.²⁸ The foundation for the system was simply the Law of Progress, upon which all areas of science and philosophy would be understood. In 1860 he distributed the prospectus which envisioned ten volumes. This was the prospectus Fiske found when he arrived at Harvard in 1860. It changed the course of his life.

In America, the Civil war was about to begin when Darwin published the *Origin of Species*. There was no widespread reaction as there was in England. There were reviews in the existing journals, but the coming war

²⁷Hugh Elliot, *Herbert Spencer*, (New York: Henry Holt & Company, 1917), pp. 26-27.

²⁸Letter from Spencer to Leslie Stephen, 1899, in Duncan, *Life and Letters*, II, pp. 145-147.

obscured the debate except for certain independent thinkers. Some of those men who did devote their attention to the subject were looking for alternatives to the traditional religious explanations of the universe. Fiske's life exemplifies such a man. He was searching for a comprehensive synthesis of knowledge apart from traditional religion. Knowledge was too fragmented for Fiske. If truth was to be had, it had to come through an all-inclusive explanation. Religion had lost its power to do this. "When Darwinism appeared, with its imposing answers to the riddle of species, when Spencer promised a profound and authoritative interpretation of *the meaning of science*, Fiske had long since changed gods."²⁹

Fiske's reasons for choosing Spencer are clear. Spencer not only treated the subject of evolution before it became widely debated, he was the first to write upon evolution as a universal process. Fiske said that,

. . . though other thinkers, before Mr. Spencer, may have generalized about the concrete universe as a whole, it cannot be denied that he has been the first to frame a verifiable hypothesis upon this stupendous scale. The law of evolution is the first generalization concerning the concrete universe as a whole, which has been framed in conscious conformity to the rigorous requirements of the objective method, and which has therefore

²⁹Hofstadter, *Social Darwinism*, p. 15.

served to realize the prophetic dream of Bacon, by presenting Philosophy as an organism of which the various sciences are members.³⁰

Another of Spencer's contemporaries put it bluntly, "The doctrine of evolution when taken up by Mr. Spencer was little more than a crotchet. He made it the idea of the age."³¹ Alfred Russel Wallace (1823-1913), the English naturalist and co-discoverer of natural selection with Darwin, said that Spencer was "the greatest all-round thinker and most illuminating reasoner of the Nineteenth Century."³²

Spencer's books were bestsellers, especially in America.³³ Peel tells us that it was in America where

³⁰ John Fiske, *Outlines of Cosmic Philosophy* (2 vols.; Boston: Houghton, Mifflin & Company, 1874), I, p. 276. (Hereinafter referred to as *Outlines*).

³¹ Douglas A. Spalding, "Herbert Spencer's Psychology," *Nature* 7 (1873): p. 298, cited in Robert L. Carnerio, *Herbert Spencer: The Evolution of Society* (Chicago: University of Chicago Press, 1967), p. x.

³² Alfred Russel Wallace to Raphael Meldola, June 23, 1910, cited in Robert L. Carnerio, *Herbert Spencer: The Evolution of Society* (Chicago: University of Chicago Press, 1967), p. ix.

³³ Richard Hofstadter tells us that "the sales of Spencer's books in America from their earliest publication in the 1860's to December 1903 came to 368,755 volumes, a figure probably unparalleled for works in such difficult spheres as philosophy and sociology." From *Social Darwinism and American Thought* (Boston: Beacon Press, 1955), p. 34.

"hundreds of thousands of his books were sold and where his theories were an acknowledged pressure on legislation."³⁴ One of his greatest admirers was Andrew Carnegie, the industrialist. But, as Peel says, Spencer's message was much more than its "ideological utility for big business. It was the promise of order in seeming chaos."³⁵

In 1864 Spencer wrote a series of discussions called "Illustrations of Progress" for D. Appleton and Company. A review appeared in the June issue of *Atlantic Monthly*, providing a good example of the American attitudes toward Spencer.

Mr. Spencer is already a power in the world. Yet it is not the vulgar apprehension of power which is associated with notoriety that we claim for him. He holds no position of civil authority, neither do his works compete with Miss Braddon's poorest novel in the circulating libraries. But he has already influenced the silent life of a few thinking men whose beliefs mark the point to which the civilization of the age must rise. In America, we may even now confess our obligations to the writings of Mr. Spencer, for here sooner than elsewhere the mass feel as utility what a few recognize as truth. . . . As far as the frontiers of knowledge where the intellect may go, there is no living man whose guidance may

³⁴J. D. Y. Peel, *Herbert Spencer: The Evolution of a Sociologist* (New York: Basic Books., 1971), p. 2.

³⁵*Ibid.*

more be trusted. Mr. Spencer represents the scientific spirit of the age. . . . The world as it is today is seen by Mr. Spencer as by few living men. The sciences, which taken singly too often seem only good to expel the false, have been summoned together to declare the truth. . . . And it can hardly be necessary to say that the sympathies of Mr. Spencer, like those of Mill and Cochin, have been with the government and loyal people of the United States.³⁶

Spencer called for a *laissez faire* attitude in matters of government and economics, an attitude in harmony with the thinking of a rapidly growing country. Hofstadter described Spencer's philosophy as "admirably suited to the American scene. It was scientific in derivation and comprehensive in scope. It had a reassuring theory of progress based upon biology and physics. It was large enough to be all things to all men, broad enough to satisfy agnostics like Robert Ingersoll and theists like Fiske and Beecher."³⁷

Of course Spencer was not the only thinker working on a comprehensive philosophy. Men like Büchner, Haeckel and Engels also envisioned universal change that had irreversible direction. Haeckel offered a new system in his *History of Creation: or, the Development of Earth*

³⁶*Atlantic Monthly*, XIII (June, 1864), pp. 775-777.

³⁷Hofstadter, *Social Darwinism*, p. 31.

and its Inhabitants by the Action of Natural Causes. Büchner and Engels both conceived of laws governing events.³⁸ But for a system to simply be broad enough to fit all tastes was not enough for Fiske. Spencer supplied a comprehensive world view that incorporated everything "from protozoa to politics," but more than that, he emphasized the progress and perhaps the perfection of man in the struggle for existence. Spencer equated development with improvement.

Concerning the present position of the human race, we must therefore say that man needed one moral constitution to fit him for his original state; that he needs another to fit him for his present state; and that he has been, is, and will long continue to be in process of adaptation. By the term *civilization* we signify the adaptation that has already taken place. . . . And the belief in human perfectibility merely amounts to the belief that in virtue of this process man will eventually become suited to his mode of life. . . . when it is shown that this advancement is due to the working of a universal law, and that in virtue of that law it must continue until the state we call perfection is reached, then the advent of such a state is removed out of the region of probability into that of certainty.³⁹

³⁸Maurice Mandelbaum, *History, Man, and Reason* (Baltimore: Johns Hopkins Press, 1971), p. 403.

³⁹Herbert Spencer, *Social Statics* (New York: Robert Schalkenbach Foundation, 1954), p. 58. *passim*.

To a nation with a strong religious tradition, the prospect of an endless struggle for survival, with morality being determined by might, Spencer's prospect of a world improving constantly and men tending toward perfection was much more appealing than was Darwinism. This apparent service to religion, above all, made Spencer acceptable to Americans. Fiske could not emphasize it enough.

The doctrine of evolution asserts, as the widest and deepest truth which the study of nature can disclose to us, that there exists a Power to which no limit in time or space is conceivable, and that all phenomena in the universe, whether they be what we call material or what we call spiritual phenomena, are manifestations of this infinite Power. Now, this assertion, which Mr. Spencer had so elaborately set forth as a scientific truth, - nay, as the ultimate truth of science, as the truth upon which the whole structure of human knowledge philosophically rests, - this assertion is identical with the assertion of an eternal Power, not ourselves, that forms the speculative basis of all religions.⁴⁰

Fiske was caught up in Spencer's way of thinking. Spencer "was to most of his educated American contempo-

⁴⁰ John Fiske, *Excursions of an Evolutionist* (Boston: Houghton, Mifflin & Company, 1899), p. 301. This came from an address entitled, "Evolution and Religion," which he delivered at the farewell dinner given to Herbert Spencer, in New York, on November 9, 1882.

raries a great man, a grand intellect, a giant figure in the history of thought."⁴¹ He "struck American universities like lightning in the early 1860's and dominated them for thirty years."⁴²

⁴¹Hofstadter, *Social Darwinism*, p. 32.

⁴²Peel, *Herbert Spencer*, p. 2.

THE NEW THEOLOGIANS: ETHICS IN A DIFFERENT LIGHT

At the present day it is not the formation of new sects, but the decomposition of old ones, that is the conspicuous phenomenon inviting our attention. The latter half of the nineteenth century will be known to the future historian as especially the era of the decomposition of orthodoxies.⁴³

John Fiske

The tradition of the American scholar to which Fiske tried to conform, and the wave of evolutionary thought, especially of the Spencerian variety to which Fiske gave allegiance, were two factors that went into the making of the intellectual climate in which Fiske was born. A third and most important factor to this work was the growing tenor of atheism, the effect of which was religious reform.

The Victorian Era was beset with atheism and all its accompanying problems. With atheism came the implication that without religious faith there would be no sanction for morality. There was a fear that if the hope of immortality was ever lost by the average man, social order would be in danger of collapse.

⁴³ John Fiske, *Excursions of an Evolutionist* (Boston: Houghton, Mifflin and Company, 1899), p. 269. This came from an address entitled, "The True Lesson of Protestantism," which he delivered to a convention of Unitarian clergymen at Princeton, Mass., October 4, 1881.

Religious belief, particularly among the working class, was declining. The roots of this loss of faith are many and complex, and this trend, as it occurred during his youth, was a force in Fiske's development.

In 1830 Charles Lyell (1797-1875) hypothesized the gradual evolution of the earth by physical processes. Along with this new perspective on the age of the earth the notion of gradual change or evolution gained a certain acceptability. This increased attention toward scientific discussions and ideas gives evidence of a growing spirit of scientific rationalism, a growing confidence in the immutability of nature's laws. Science was gradually strengthening the conviction that nature was a self-sustaining entity.⁴⁴

In the early nineteenth century, conflicts which arose between the newer concepts of science and the older ones of religion were resolved through the argument from "design" which saw God's purpose in the facts of science. In looking for design in nature there was a model writers could use which gave arguments for God's providential concern for man. Although published in 1802, Archdecon

⁴⁴"Turnbull's Life Pictures," *North American Review*, LXXXV (July, 1857), p. 246, and H. R. Schetterly, "Philosophy," *Scientific American*, VII (November 15, 1859), p. 72.

William Paley's *Natural Theology* was still widely read in the 1830's. With numerous examples from science, especially anatomy, he showed that God fashioned nature for the service of mankind. Science revealed God's concern. Paley was widely emulated by writers around the country. In fact, because scientists appeared to be unfolding God's presence in the world, it was common to read encouragement to study science.⁴⁵

Some of the conflicts between traditional religion and the new scientific developments were resolved through the argument from "secondary causes" wherein God's decrees were considered separate from the natural law's in operation in the world. Yet the arguments from secondary causes and from design were not able to deal with all the questions raised by science. Knowledge was accumulating rapidly, and with each new idea there came new problems for the sound mind. Walter Houghton says that the new developments carried with them "tendencies toward the subversion of faith."⁴⁶

⁴⁵"Study of Natural History," *North American Review*, XLI (October, 1835), p. 430.

⁴⁶Walter E. Houghton, *The Victorian Frame of Mind: 1830-1870* (New Haven, Conn.: Yale University Press, 1957), p. 59, *passim*.

The doubts that appeared were pointing in one particularly painful direction - toward atheism. Natural Theology, culminating in Paley, saw nature as a manifestation of God's design. But with the publication of Lyell's *Principles of Geology* (1830-33), Robert Chamber's *Vestiges of the Natural History of Creation* (1844), and Darwin's *Origin of Species* (1859), nature came to be looked upon as something other than an example of order and design.

The rise of rational science and the threat of atheism were not the only threats to the old religious beliefs. Some aspects of religions own way of thinking added to the problems created by science. Houghton, for example, refers to the "terrifying world of Victorian Childhood" in which children grew up thinking that they were sinners, "children of Hell."⁴⁷ They were taught that they had come into the world with the blemish of sin and that they would stay that way unless they were "born again" in the church. The religious experience (conversion) was commonplace, yet some could not summon the necessary feelings for such an experience. So they were driven away from traditional religion by such notions.

⁴⁷*Ibid.*, p. 63.

The Scottish Philosopher, essayist, and historian, Thomas Carlyle (1795-1881), whose ideas were influential to a generation of Englishmen and Americans, whom Fiske read as a young man, saw a great need to be freed from the trappings of Christian theology, its traditions and its character. Once this is done, he said, one would be able to escape the only apparent alternatives imposed by the Church, that of accepting everything or nothing, conversion or Hell. Carlyle stopped short of a kind of theism, but there were many who literally showed joy over atheism and the escape from superstition. There was a great relief in getting rid of the popular Puritan form of the old theology, and there was relief from the emotional fears and "intellectual difficulties."⁴⁸

In a recent analysis of nineteenth-century American theology, Michael McCrossin showed that contrary to what one might expect in a rapidly growing, frontier country like America, there was an obvious decline in theology.⁴⁹ The original colonies that took shape in

⁴⁸*Ibid.*, p. 51.

⁴⁹G. Michael McCrossin, "World Views in Conflict: Evolution, Progress, and Christian Tradition in the Thought of John Fiske, Minot Savage and Lyman Abbott" (unpublished Ph.D. dissertation, University of Chicago, 1970), p. 3.

America marked a drastic break with the older ways of Europe. For one thing, they were thoroughly Protestant and Puritan. At least 75 percent of those declaring independence in 1776 were Puritan.⁵⁰ Congregationalism, which was predominant at the time of the Revolution, had suffered a decline by the end of the country's first century of existence.

In 1876 J. L. Diman published an article in *The North American Review* entitled "Religion in America, 1776-1876," that was intended to portray the developments which had occurred in the first 100 years of the nation.⁵¹ One outstanding change occurred in the ranking of various churches by membership. In the 1780's Congregationalism had a considerable lead over the second-ranked Baptists, and in decreasing order, the Church of England, Presbyterian Church, Lutheran Church, German Reformed, and Catholic. In the 1870's the order was rearranged, with the Methodists leading in membership, followed by the Baptists, Presbyterians, Catholics, Congregationalists and Episcopalians. The Congregationalist decline was attributed to a decline in systematic

⁵⁰Sidney E. Ahlstrom, *A Religious History of the American People* (New Haven: Yale University Press, 1972), p. 124.

⁵¹J. L. Diman, "Religion in America, 1776-1876," *The North American Review*, CXXII (January, 1876), pp. 1-47.

theology. The emphasis had shifted from doctrinal matters to practical matters, to the importance of individual sentiment in morality and religion. This change brought with it revivalism.

The "disappearance of serious speculative theology" was, according to McCrossin, the major change in the character of religion in the United States since the Revolution.⁵² New churches were not emphasizing the same things that the older religious leadership had, things like a rigorous religious education. New emphasis was on practical objectives, matters of everyday living - religious feelings and experiences - not on doctrinal beliefs. Confidence in theological speculation was destroyed by the introduction of new methods of Biblical criticism, primarily from Germany.⁵³ David Friedrich Strauss' *Das Leben Jesu* (1834), which appeared in America in 1846, exemplifies the merciless attack on Christian tradition. His approach was that the Jesus of history took such possession of his followers' minds that the idea of "God-manhood" was awakened in the common consciousness. The life of Jesus in the

⁵²McCrossin, "World Views in Conflict," p. 9.

⁵³*Ibid.* p.6.

Bible is just a creative reminiscence of this idea according to the way it was carried through history. All of the Bible story prior to the baptism, especially the miracles, were myths. Strauss emphasized the immutability of natural law and denied the possibility of miracles.

The fundamental character of theology was thus undergoing change and the increasingly emphasized natural laws were laying the foundation for a new world view.⁵⁴ All these developments had a particularly destructive effect in that they tended to attract some of the most capable thinkers, thinkers who might otherwise have been involved in religious speculation. "Theological ideas," says McCrossin, "were no longer of much account. Whereas the history of the early colonial period might almost have been a history of the conflicts and changes in theological positions, a history of America during the nineteenth century need hardly take note of theology."⁵⁵

The theology of New England, where Fiske matured,

⁵⁴John Francis McElligott, "Before Darwin: Religion and Science as Presented in American Magazines, 1850-1860" (unpublished Ph.D. dissertation, New York University, 1973), p. 96.

⁵⁵McCrossin, "World Views in Conflict," p. 9.

has its own complex history during this period. New England began as a "covenanted commonwealth" in which the original form of Calvinism had been modified through the use of the covenant. With the growth of rationalism in the eighteenth century there came the religious response known as the "Great Awakening." Its goal was the restoration of religious devotion, with a deemphasis on covenants. Johnathan Edwards (1703-1758), the American theologian and preacher, wanted to reinterpret the doctrines of Calvin so that they were better fitted to the new feelings of the people.⁵⁶ He instituted the ritual of revival in order to emphasize the emotions that were part of the new attitude toward religion, to emphasize the significance of the individual's religious experience.

Edwards' revivalism was powerful, but he was criticized by both conservatives and liberals - by those who sought a more formal return to Calvinism, and by those seeking more liberal interpretations of doctrine. The liberal side was seeking, among other things, reinterpretation of the Trinity along Unitarian lines. Unitarianism, as it had developed under William Ellery Channing between 1815 and 1825, grew to be the freest

⁵⁶Ahlstrom, *Religious History*, pp. 287-288.

thought in religious matters. Its aim was the reaffirmation of such things as the goodness of the human soul as part of divine nature, the possession of reason as a means of knowing good, the divine fatherhood of God and His creations, God's revelation of Himself, and so on. Concerning the nature of Christ, he was not thought to be divine, but rather a divinely inspired man sent by God as a model. Unitarianism was charged with leaving out the vital elements of Christianity from its doctrine.

Transcendentalism was an aspect of the Romantic Movement in America that developed out of Unitarianism. It was a New England creation that began in 1832 in Boston with an informal group known as the Transcendental Club. Begun by a Unitarian minister, it had as its most famous members, Ralph Waldo Emerson and Theodore Parker. These two "heretics" went farther away from Calvinism. Religion, to them, was an emotional feeling that one has about the nature of God. They sought to build a brotherhood of man with nothing more complex as its foundation than upright conduct. Concepts like the unknowable, and man's divinity as part of nature were not easily expressed and were central to their philosophy.

Man's capabilities are not defined by intelligence, they thought, and if one has faith in the benevolence of the universe, faith in man's role in nature, one could "transcend" reason. The emphasis of Transcendentalism was on the individual and his aspirations and away from ineffectual religious institutions. Emerson was optimistic and he wanted to revive the true spirit of Unitarianism. His philosophy "was at once buoyantly optimistic and rigorously intellectual, self confident and conscientious."⁵⁷ In an address at Harvard in 1837 called "The American Scholar," he urged American intellectuals to "put aside their devotion to things European and seek inspiration in their immediate surroundings. He saw himself as putting 'spiritual powers' against the 'mechanical powers' and mechanical philosophy of his time."⁵⁸

Both Emerson and Parker were seen by conservative Unitarians in the same way Calvinists saw the original Unitarians; the conservatives shut themselves out from

⁵⁷Garraty, *The American Nation*, p. 417.

⁵⁸*Ibid.*

the liberal intellectual movement. McCrossin concludes that "the practical result of the interminable debates . . . was a general weariness with theological speculation and overly fine distinctions, and that thought turned away from the debates."⁵⁹ Unitarianism did not survive the scientific advances of the decade from 1850 to 1860.

The internal struggles going on within the various denominations did not produce a unified Christian front when the threat of Darwinism appeared. In 1874 Charles Hodge launched his book, *What is Darwinism?*, in which he answered the question resoundingly that Darwinism removes design from the universe and is nothing less than *atheism*. Other religionists, however, found Darwinism strengthening their ideas about design. Pfeifer shows that Hodge's American colleagues were not in agreement about the future of theology or the threat of evolution.⁶⁰ Many were receptive and some felt that science and scripture both reveal God.

In general, attitudes toward evolution depended

⁵⁹ McCrossin, "World Views in Conflict," p. 16.

⁶⁰ Edward Justin Pfeifer, "The Reception of Darwinism in the United States, 1859-1880" (unpublished Ph.D. dissertation, Brown University, 1957), p. 111, *passim*.

very much upon to which of two categories one belonged. If one was an academic, evolution was up for debate. The tone of such debates was pretty much defined by two colleagues at Harvard, botanist Asa Gray and zoologist Louis Agassiz. The issues were mainly scientific, and although interpretations of Darwinism were varied and individualized, it was accepted by most American men of science. There was a so-called "American School" which accepted natural selection as a factor which affected evolution, but was inclined to look for "direction" in its interpretation rather than blind chance. Lamarckianism experienced a renewed popularity because of its emphasis upon direction. It was more compatible with religion than the randomness of Darwinism, and above all, it allowed for the improvement of man's intellectual and moral position.

But if one was not an academic, if one was an average citizen, the attitude toward evolution and Darwinism was different. The most serious questions did not involve debatable scientific evidence. Instead they centered upon the question of chance versus design. Evolution threatened to bring about the collapse of traditional religion, and with the new recognition science was experiencing, it had gained the power to do just that.

Science was explaining more and more of the universe with methods that were logical, empirical, and for the most part, unquestionable. As the stature of science grew, God became less and less important in explanations of the difficult-to-explain. Much could be explained without deferring to God at all. Science's appeal to experience clearly posed a threat to religion because it was forcing men to think about the processes of knowledge. What can we know, and how do we know? What constitutes valid knowledge? How should we deal with faith, and how is man's knowledge related to his aspiration? Bolstered by the new found strength of scientific method, evolution brought such questions to the front. For the common man this threat perhaps seemed more severe than to the academic. It was not a matter for debate, to be argued with books and articles. Natural selection shattered the argument from design and contradicted the argument for free will. It was a threat to all that traditional religion stood for and the average man could do nothing to save it.

To combat this threat, men of learning tried to lessen science's appeal to experience by constructing evolutionary theologies. Some concluded that a solution to the antagonism between Darwinism and religion could be found if man was understood to occupy a special place

in the scheme of nature, even if it meant that man's mind is the only superior factor. Although Hodge argued that the general concept of evolution and the story of creation as presented in Scripture were mutually exclusive, more prudent men requested a fair hearing, and argued that Darwinism may indeed be viewed theistically. The overwhelming evidence and method of the theory were enough, as theologians feared, to result in many young men making the choice against faith if that is the only choice they are given. The need for a new religious synthesis was obvious.

Those thinkers, some of them men of religion, who were inclined to give evolution a hearing, found Herbert Spencer's cosmic view more in harmony with religion than Darwin's. Man could be viewed in a different light through Spencer, and it was evident that evolution need not be necessarily equated with Darwinism. Darwinism supplied the mechanism of natural selection which gave a decided scientific character to the already present nineteenth-century tendency to view many phenomena developmentally. Natural selection made developmental explanations legitimate. Spencer, in contrast, supplied an all-embracing view, constructing a survey of all knowledge based upon principles of evolution. The

application of evolutionary concepts to every discipline and every aspect of society became acceptable through Spencer.

It is interesting that Darwin's avoidance of metaphysics and strict scientific explanation were what made his biological interpretations successful. Yet because the speculative "development hypothesis" was widely discussed before Darwin, once evolutionary ideas found success in one area it became acceptable in other areas not necessarily complementary to Darwinism. The success of evolution in biology lent a legitimacy to applications as far and wide as economics and ethics.

One aspect of human nature, central to this thesis, to which evolution was applied, was the ethical sense in man. Scientists and philosophers of our century have, for the most part, grown accustomed to placing thoughts about morals and morality in one compartment, and thoughts about science into another. Our separation of these two types of thinking is so prevalent that, as C. P. Snow has described, there appears to be a conflict between two cultures.⁶¹ The nineteenth-century habit of not separating them, or perhaps looking to science for

⁶¹See C. P. Snow, *The two Cultures: and A Second Look* (Cambridge: The University Press, 1965).

the origins of ethics, now seems unacceptable and misguided. We have accepted as permanent and sound the scientific findings of the Darwinians. We have not, however, accepted their social and philosophical conclusions.

When the *Origin of Species* first appeared, no more vehement opposition came than from the philosophers of morality. Christian philosophers feared that when distinctions between forms of animal life disappeared, so would the claim for God's special favor to man. Literature shows that twenty years after the *Origin* great change had taken place in attitudes about morality. An interesting group of systems of evolutionary ethics growing out of the Darwinian theory, clearly shows the close handling of these two parts of philosophy.

Darwin presented some of his own ideas about the origin and nature of mental faculties like the moral sense. In his chapter on "Instinct" in the *Origin* he says that, "I have nothing to do with the origin of primary mental powers, any more than I have with that of life itself."⁶² He saw fit, as Cuvier had done, to compare instinct with habit. To do so gave "a remark-

⁶²Charles Darwin, *The Origin of Species* (New York: Penguin Books Edition of the first edition, published by John Murray in 1859; published by Penguin Books in 1968), p. 234.

ably accurate notion of the frame of mind under which an instinctive action is performed, but not of its origin."⁶³ He went on, "If we suppose any habitual action to become inherited - and I think it can be shown that this does sometimes happen - then the resemblance between what originally was a habit and an instinct becomes so close as not to be distinguished."⁶⁴

Darwin thought that it would be a serious error to suppose that most of the instincts have been acquired by habit in one generation, and then transmitted by inheritance. But in certain instances instincts could be explained by natural selection's taking advantage of numerous successive, slight modifications of similar instincts. Using behavior in the bee hive as an illustration he says that, natural selection, by small degrees, "led bees to sweep equal spheres with geometric walls of the proper size and strength for larvae, with the greatest possible economy of labor."⁶⁵ He confessed that he was unable to account for the origin of instincts. He spoke of instincts as already

⁶³*Ibid.* p. 235

⁶⁴*Ibid.*

⁶⁵*Ibid.* pp. 250-251.

being in existence, and felt that they probably originated through the preservation of slight variation that were beneficial. Later, in the *Descent of Man*, he referred to instinct as inherited habit.⁶⁶

Darwin saw instinctive action and action that comes out of habit as separate from the influence of pleasure or pain. At times this seems to contradict other statements about the role of pleasure and pain, but in general he did not know the steps by which man gained parental or social feelings. We can only infer what it has been, for the most part, operation through natural selection. The moral sense is an instinct that tells us what to do. Conscience, which includes fear, remorse, acts impulsively, acts without deliberation.⁶⁷ Yet there are some statements that speak of the moral sense as being a product of judgement, not instinct.⁶⁸ Whatever the case, he saw social and moral values as having survival value which would make them survive and advance in society.

⁶⁶Charles Darwin, *The Descent of Man* (London: John Murray, 1901), p. 122.

⁶⁷*Ibid.*, p. 178.

⁶⁸*Ibid.*, pp. 174-178

Darwin's famous defender, Thomas Huxley, also considered morality in the light of evolution. He could not see the reasoning behind conclusions that the moral question was critical to the saving of religion. He was of the view that evolution may teach us not only how moral sentiments came about, it may also show us how evil tendencies came about. At present, he felt, evolution cannot furnish any better reason why, what we call good is preferable to what we call evil.⁶⁹

Herbert Spencer's system also includes ideas about the nature of the moral sense. His philosophy of the origin of ethics begins in *Social Statics* (1851). There he is critical of Utilitarianism. Its general rule, he thought, supposes that there is agreement among mankind as to what the greatest happiness is. Not only is there disagreement about the nature of happiness, there is no agreement as to how to obtain it. Man is not capable of grasping all at once the phenomena of life so as to choose what will bring the greatest happiness.

The utilitarian philosophy was not of a scien-

⁶⁹This was Huxley's Romane's lecture for 1893. See T. H. Huxley and Julian Huxley, *Evolution and Ethics: 1893-1943* (London: The Pilot Press, Ltd., 1947).

tific character since its terms were not universally accepted, and because it accepted the existence of government which bases itself upon imperfection. Spencer did accept the existence of a moral sense which prompts us to feelings and choices, much like parental feeling prompts us to care for our children. But this faculty is not uniform in its judgement, and codes derived from it may not be stable. Every system of morals must answer to this objection.

Spencer felt that the moral sense is a law of nature, and we have no alternative but to obey. Punishment and reward are inevitable, and evil is simply unconformity between the faculty and the action. Man must become more and more adapted to his surroundings, diminishing incongruity, and diminishing evil. When we see evil in society it is an indication that man has not yet become well-adapted to the demands of society. Progress does not come about accidentally, it must occur. It is man's duty to exercise all his faculties. This is freedom, and all men have the right to freedom.

For Spencer the agent of morality is the moral sense. To the freedom to exercise this faculty Spencer adds other freedoms, to own property, to use the earth,

to speech, and so on. Happiness is the end to be reached by man, but the status of morality is different for Spencer than for Mill. With Mill morality simply generalized the results of conduct, and does nothing to direct its course. For Spencer, there is a more developed form of morality. Morality changes and grows with man's experience and development. Experiences of all past generations have produced nervous modifications, which have become the moral sense. This moral sense is an intuition for correct behavior with no apparent basis in personal experience. Altruistic feelings have developed only as quickly as man has developed to a state of peacefulness. Altruism depends upon sympathy, which can only become dominant when our mode of life changes. As society develops, rather than willingly inflicting pain there will be a deliberate pursuit of sympathetic feelings. Altruistic sentiments develop and become habitual.

In *The Data of Ethics* (1874) Spencer says that no idea of a whole can be framed without a nascent idea of the parts that make it up. And no idea of a part can be framed without a nascent idea of some whole of which it is a part. Conduct is a whole and ethics, which is a part, cannot be understood except by under-

standing all of conduct.⁷⁰ We must study the evolution of conduct to understand moral behavior.

All of life is in a continuous struggle for existence and has been for ages. Actions taken by creatures have been at the expense of others. As animals evolved to higher forms it became possible for creatures to act and adjust to their surroundings without preventing others from doing so. The limit of evolution occurs when not only struggle dies out, but when members of society give aid in achieving their end. Ethical behavior is what universal conduct assumes in the last stages of evolution.⁷¹ All groups of organisms have laws for correct living, based upon morphology and environment, which are sets of actions which suit them to their lives for greatest survival. No animal, however, is of the level of sociability as is man, where the welfare of others within society becomes important.

Spencer recognized the fact that moral sentiment is connected with entirely different rules among different peoples, and that this presents difficulty for his asser-

⁷⁰ Herbert Spencer, *The Data of Ethics* (New York: Lovell, Coryell & Company, 1879), pp. 70-71.

⁷¹ *Ibid.*, pp. 13-20.

tion of the existence of a moral sense. It does foreshadow an ultimate state in which there will be absolute peace and complete adjustment to social life, evolutionary progress. Spencer's position was an influential source for Fiske and others. Through the second half of the nineteenth century there appeared many other interesting systems of ethics which were attempts to address the doctrine of evolution.⁷²

William Henry Rolph wrote *Biological Problems* in 1884 in which he questioned the assumption that organic development is a process directed toward an end, namely happiness.⁷³ He concluded that Spencer was right in saying that happiness means, in the end, more pleasure than pain. But this is a state of inequality that is reached not through utility or virtue or religion. These are only relative means, and there is no absolute means.

As for man's final end, even though man has progressed in the ability to shape his own existence,

⁷²For a detailed examination of Ethical systems founded upon evolution see C. M. Williams, *A Review of the Systems of Ethics Founded on the Theory of Evolution* (New York: Macmillan & Co., 1893).

⁷³W. H. Rolph, *Biological Problems*, cited in C. M. Williams, *A Review of Systems of Ethics Founded on the Theory of Evolution* (New York: Macmillan & Co., 1893), pp. 82-107

his position in the animal kingdom is not unique. Like many higher species before him, if he does not continue to adapt he will perish. Morality, as it has developed, does not give man assurance of his continuation. Each advancement has been accompanied by some evil, and modern man has failed to see that he is losing sight of the true nature of the process. Morality as Spencer and Fiske describe it, according to Rolph, is destructive to survival, for traits like forgiveness and mutual aid undermine justice, lessen survival.⁷⁴

Alfred Barratt attempted to establish a basis for the origin of the moral sense in *Physical Ethics: Or the Science of Action* (1869). He wanted to present a series of *a priori* axioms and attempt to verify them through theories and mental phenomena. As animal organization advances with evolution, he says, perception and distinction of sensations increases. We can distinguish four kinds of action: reflex action, purely physical; lower instinctive action, the earliest association of means and ends; higher instinctive actions, greater perception of qualities; and voluntary or intentional action, like that found in man.

⁷⁴*Ibid.*

The end toward which action aims is pleasure. But difficulty arises if we try to define the end further as individual pleasure or pleasure for the greatest number. We interpret the pains and pleasures of others through experience, and we develop the unselfish emotion of sympathy. With wider experience we develop senses of justice, equality, and so on, which are all inherited.⁷⁵

Leslie Stephen, a friend of Spencer's, wrote *The Science of Ethics* (1882) in which he concentrated upon the definitions of right and wrong, concluding that we may never reach a perfect agreement as to what is moral.⁷⁶ Putting the metaphysical questions aside, one can gain knowledge of physical elements and gain scientific knowledge of ethical matters. He attempted to correlate certain instincts with conditions under which they developed by mechanically discussing the action of pain and pleasure.

Stephen said that virtue appears evolutionarily as a development of simpler instincts. On a physical

⁷⁵ See Alfred Barratt, *Physical Ethics: Or the Science of Action* (London: Williams and Norgate, 1869).

⁷⁶ See Leslie Stephen, *The Science of Ethics* (London: Smith, Elder, & Company, 1882).

level, moral behavior involves pain, and the moral man, though self-sacrifice sometimes demands it of him, nevertheless chooses it. Stephen cannot reach a conclusion about how we judge the worthiness of an action or sacrifice. There is no coincidence between virtue and happiness. His conclusion is that a scientific moralist can only deal with observable facts, and cannot go beyond. Evolution implies progress and the removal of some discord, but does not imply harmony or attenuation of evil.

Morality and Darwinism (1871) by Bartolomäus von Carneri argues that modern science made it impossible for philosophy to build upon any foundation other than a scientific one. The physical and psychical are identical. Instinct is like conscious thought in that it is a mental force and exists in degrees in the animal kingdom. He agreed with Claude Bernard that life can be characterized but not defined. Everything in living organisms depends upon particular combinations of particular elements. Ethical behavior is the mark of a certain level of organization. The ethical sense has appeared in man, and will appear in more animals as evolution proceeds. There will finally evolve, as the result of experience, a common will, purpose,

and good.⁷⁷

Carneri envisioned love, public spirit, generosity and the like as the "ethical ideals" of a truly happy man. These are goals by which we shape our actions, not ends to be attained. The ideal has evolved without the actuality. There is no perfect state. Morality is a will to do good which comes in the ethical man as second nature.

These are some of the more prominent nineteenth-century works devoted to the development of evolutionary ethics. They give evidence for a change in direction of inquiry in the years following the *Origin*. The mass of literature on evolution favored the theory, and most all zoological, botanical, anatomical and embryological works gave support to its premises. The study of morals, at first vehemently rejecting evolution for its implications, began to follow in the wake of other disciplines. The study of learning and psychology moved into the circle of evolution. Darwin's *Descent of Man* was essentially a comparative psychology wherein

⁷⁷ See Bartolomäus von Carneri, *Morality and Darwinism* (Wien: W. Bramüller, 1871).

he examined moral behavior. Spencer proposed a moral sense not grounded in utilitarianism. Rolph found moral behavior an impediment to justice and survival. Stephen sought to define moral instinct and determine the conditions under which it appeared. Carneri recognized the potency of scientific explanation after Darwin, and saw morality as being characteristic of a certain level of organization. These writers were looking at mental processes relative to evolutionary theory. They exemplify the shift in emphasis in evolutionary discussion toward man's special mental faculties and moral feelings.

Fiske, as we shall see, was a close follower of Spencer. He was aware of the problems related to the concept of the soul - he did not know its connection with the body or even if thought is a function of the brain. But the alternate view, the atheistic view of evolution, was unthinkable to him. There had to be, in the long evolutionary struggle, the appearance of the "consummate specimen of God's handiwork, the human soul."⁷⁸ His explanation had to be theistic.

⁷⁸John Fiske, *The Destiny of Man* (Boston: Houghton, Mifflin and Company, 1884), p. 32.

As America entered the Civil War, other concerns, political and scientific, began to occupy the minds of Americans. The United States would come out of the war with a new theology, a new way of looking at Christianity. With the broadened use of reason there came a way of looking at things which McCrossin characterizes as "the recognition of a new relation to natural science in the sense that it ignores the supposed antagonism between religion and science All agreed in accepting evolution as true, at least in some sense. All had an optimistic view of the future."⁷⁹ In this final flowering of New England theology Fiske found his niche in science and philosophy. He found what he considered to be the solution to the dilemma over the future foundation of morality. The rationalism of science would not, in his mind, destroy religion. It would instead provide, once and for all, the ultimate understanding of God and morality.

We have tried to depict the primary sources of Fiske's thinking, to characterize some closely related developments in thought, and to account for some of the formative forces influencing the course of his

⁷⁹ McCrossin, "World Views in Conflict," p. 21.

life work. The conditions and forces under consideration were present during Fiske's youth and through many of his productive years. To discover more of what led him to his own individual philosophy of science we must look to his life.

II. BIOGRAPHICAL SKETCH

1842-1859 BOYHOOD: LIBERATION OF THE SPIRIT

To be content with the religious answer - always apt to become a soft pillow to the easy going - is to abandon the scientific problems as insoluble, and there can be no greater impiety than that. It is surrendering our birthright - not for a mess of potage, it is true, but for peace of mind. Therefore man is true to himself when he presses home the question: How has this marvelous system of Animate Nature come to be as it is?¹

J. Arthur Thompson

John Fiske's life can be divided, very conveniently, into three distinct phases. When he was a young man, from 1842 to 1860, he was influenced by his family life and his family's religious background. By 1860 he was prepared for, and left for college. His preparation involved him with ideas that would change the direction of his life. He became familiar with the writings of men like Alexander von Humboldt, Auguste Comte, and Herbert Spencer. The years at Harvard were spent examining these ideas. These years reflect his new vision of truth, his attainment of the goal of finding a unified view of existence. The

¹J. Arthur Thompson, in the first Terry Lectures delivered at Yale, entitled "Concerning Evolution," quoted in George Gaylord Simpson, *The Meaning of Evolution* (New Haven: Yale University Press, 1949), p. 123.

final period, from 1874 on, marks a period of maturing, of refinement of his ideas.²

John Fiske was born in Middletown, Connecticut, on March 30, 1842 to Mary (Fisk Bound) and Edmund Brewster Green. He was baptized Edmund Fisk Green.³ Middletown was home for his mother's family, the Fisks, and they had held respected positions there for many years. Fiske's father, Edmund Brewster Green, the son of a Quaker merchant, came to Middletown to attend Wesleyan University in 1834. He married Mary Bound in 1840, moved to Hartford, and in 1842 their only child, Edmund Fisk Green, was born.

In 1843 John's father moved to New York in hopes of furthering his career in journalism and Whig politics. Green could not support his family, so young John was taken in by his grandmother in Middletown. In 1850 he decided to try his luck in California where the recent discovery of gold seemed to offer unlimited opportunity. Rather than go by wagon, he

²The biographical sketch contained here has been presented at length in other works. See footnote two of the chapter, "Fiske's Inherited Tradition: The American Scholarly Ideal" for biographical works.

³He changed his name to John Fisk in 1855 at the request of his grandmother. When he went to Harvard in 1860 he added an "e" to his name.

decided to go by way of the Isthmus of Panama. In 1852 he contracted cholera and died.

Since Mary Green had gone to New York to help her husband in his career, and then stayed there as a teacher, young John (Edmund) grew up on the home of his grandmother in Middletown. It was a household of older people (his grandparents and his grandfather's daughter by a previous marriage) in which he received an inordinate amount of attention.⁴ He developed an early love for books, more so than for play with other children, and thus came to be thought of as precocious by his elders. His precociousness was slightly exaggerated, but he could read by the age of four, and by the time he was twelve he had read a great deal in history, literature, Latin and Greek.⁵

In 1854 a friend of his father's, a lawyer from New York named Edwin W. Stoughton, proposed to his mother. Much to John's displeasure, they were married in March, 1855.⁶ At his grandmothers request, Edmund's

⁴Milton Berman, *John Fiske: The Evolution of a Popularizer* (Cambridge: Harvard University Press, 1961), p. 8.

⁵John Spencer Clark, *The Life and Letters of John Fiske* (2 vols; New York: Houghton, Mifflin & Company, 1917), I, p. 26.

⁶Berman, *John Fiske*, p. 9.

name was legally changed, in the Superior Court of Connecticut, to John Fisk.⁷ Mr. Stoughton provided funds to send John to Betts Academy, a boarding school in Stamford, Connecticut, to prepare him for Yale College.

John's younger years were filled with religion. He grew up in the atmosphere of New England Calvinism which by the mid-nineteenth century had reached a stage of difficulty. The Calvinist denominations by then had changed in actuality from the verbal position they were advancing. Preachers preached on the helplessness of man in controlling his destiny, and at the same time urged good works that he might gain salvation. John followed the steps of his grandmother and attended the North Congregational Church of Middletown.

Religious conversion, through a personal, willful act, was an important part of religious belief. One of the characteristic tendencies of Calvinistic theology was the idea that God had established a personal covenant of grace with man. True faith involved preparation, dedication and obedience to God's laws. A specific conversion experience became an essential

⁷H. Burnell Pannill, *The religious Faith of John Fiske* (Durham, North Carolina: Duke University Press, 1957), p. 4.

sign of election, and in New England this "conversion" became a requirement for church membership.⁸ At the age of fourteen Fiske experienced a religious conversion, and his religious fervor lasted for about two years. But his enthusiasm dwindled when a new influence entered into his life, a group of men he referred to as "positivists."

Fiske was particularly attracted to Thomas Henry Buckle (1821-1862) and Alexander von Humboldt (1769-1859). Buckle was an historian who viewed history as a process which operates in accordance with certain fixed and universal laws. One could study human events and discover their regularity, and could expect results similar to those shown in natural studies. Fiske read Buckle's *History of Civilization in England* (1857). Von Humboldt, a German scientist and explorer, gave a comprehensive description of the universe in his *Kosmos* (1845-1858), including all of existence from celestial phenomena to the phenomena of earth and of living things. Fiske found these comparatively direct, comprehensive explanations of worldly phenomena more appealing than

⁸Ahlstrom, *Religious History*, p. 132.

the conflicting attitudes experienced in the church. He continued his reading as before, often twelve hours a day, and as with many young men of his position, he assumed an attitude toward all divisions of the Protestant Church of detached contemplation.

Other important factors entered into Fiske's intellectual development in Middletown. John Dudley, the minister of South Congregational Church, supported extremely liberal views for the time. Dudley was familiar with the literature of German Idealism and Transcendentalism in America.⁹ One of Fiske's biographers, John Spencer Clark, refers to Dudley as a "sort of Fichtean Emersonian Transcendentalist who was endeavoring to find points of agreement between the assumptions of Christian theology and the claims of Transcendentalists concerning the innate existence in the consciousness of man of the Divine Immanence that makes for righteousness."¹⁰ Under Dudley's influence Fiske read Hugh Miller's (1802-1856) *Testimony of the Rocks* (1857) and Theodore Parker's (1810-1860) *A Discourse of Matters Pertaining to Religion*

⁹Berman, *John Fiske*, p. 14.

¹⁰Clark, *Life and Letters*, I, p. 110.

(1842). These readings questioned the ideas of his religious upbringing.

George Litch Roberts, a student at Wesleyan University, was another who attracted Fiske. Nothing was too sacred for their discussions and examination, and there was not a subject that could not be weighed by reason. John and Roberts had many common interests from church to music. Roberts introduced Fiske to the "positivists" and together they tried to understand the world. They read books that questioned many of the tenets of his faith, and in 1859 they both read Horace Bushnell's (1802-1876) book *Nature and the Supernatural* (1858), which attacked all questionable elements in current religion.

It was Roberts who, in 1859, gave Fiske the first volume of Thomas Henry Buckle's *History of Civilization in England*. Since it was a book that placed science above metaphysics in the developments of history, and since it so impressed him, he sought to find nature's role in the development of civilization. It stimulated him to look for physical explanations for the universe. Under the influence of these men, Dudley and Roberts, he gradually turned away from the orthodox approach. Looking back at this time in his life he later said, "I

can never forget the feeling of revulsion I experienced when I first brought these dogmas together in my mind as an interrelated whole. I had received them from time to time as elements in the religious faith which I had accepted as Divine, without any question whatever. When, however, in my seventeenth year. I sought to bring my religious views under a rational interpretation, I found it was required that these dogmas should first be posited as the embodiment of all ultimate truth."¹¹ He found that instead these dogmas were based on assumptions, requiring blind faith, and that science and reason were unimportant to their acceptance. He turned to science

With more mature thought, I came to see the great spiritual truth enshrouded in these dogmas; and a wider acquaintance with the philosophy of history, led me to see that the dogmatic coverings of this great truth had been of immense service in its protection and its development while knowledge was slowly being organized through science for its verification in human experience. And now the Christian world is beginning to see that religious and social progress consists mainly in the freeing of this great spiritual truth from the dogmatic wrappings it has outgrown.¹²

In a letter to his mother he said, "Do you not consider Humboldt the greatest man of the 19th century,

¹¹Clark, *Life and Letters*, I, p. 103.

¹²*Ibid.*

and the most erudite that ever lived? Does not the 'Cosmos' exhibit more vast learning than any other uninspired book?"¹³ In 1861, as the Civil War was beginning, he wrote "What's war when a fellow has 'Kosmos' on his shelf, and 'Faust' on his table?"¹⁴ He was beginning to consider himself a positivist.

¹³Ethel F. Fiske, *The Letters of John Fiske* (New York: The MacMillan Company, 1940), p. 21. (Referred to hereinafter as *Letters*.)

¹⁴Letter from John to George Litch Roberts, April, 1861, cited by John Spencer Clark, *Life and Letters*, I, p. 237.

1860-1874 THE NEW FAITH: SPENCER
AND THE DEVELOPMENT OF COSMIC THEISM

In the summer of 1859, after studying with Colton for two years Fiske passed the entrance exam at Yale. But two weeks later he asked his mother if he could go to Harvard instead.¹⁵ His change of mind was not something sudden. Between 1857 and 1859 Fiske had begun to think of himself as a "positivist." It was a tradition for men of his upbringing to attend Yale. He may even have felt that it was necessary to prove his ability to get into Yale, but with his new thinking, Yale became something undesirable, a stronghold of religion. Harvard, on the other hand, had more of a renegade image, a reputation for "infedelism." More importantly, Fiske urged his mother, it was a more difficult school and had more to offer.¹⁶ His mother had fears that John was giving up a chance to go to Yale for a school whose reputation was less than desirable. He wrote convincingly, "It is true that the instruction at Harvard is conducted with less strictness than at Yale. Harvard is a bad place

¹⁵Letter from John to his Mother, (August) 1859. Cited in Ethel Fiske, *Letters*, p. 1.

¹⁶*Ibid.*

for a careless student, but unequalled in facilities for an ambitious one. As for teaching, I don't expect to get much anywhere except what the books give me. As I don't need strictness to make me study I do not see the force of those two arguments against my going to Harvard."¹⁷

He made a move away from the religion of his youth, and his desire to change colleges made this evident. He wanted to get out into the world, not seclude himself in the confines of a "citadel of orthodoxy" like Yale. John studied hard with the hopes of entering Harvard with advanced standing, perhaps as a sophomore, or even a junior. In August, 1860 he passed the entrance exam for sophomores and was admitted to Harvard as a sophomore. In the 1860 college catalogue an "e" was added to Fiske's name, to which his mother objected. John reasoned that it looked more "finished," and besides, nothing could be done to change the catalogue.¹⁸

¹⁷ *Ibid.*

¹⁸ In a letter to his mother of Sept. 10, 1860, he wrote, "About my name or rather the end of it. I think it is too late to alter it for they have begun to print the Catalogues and my name will go down as Fiske in spite of me. Everybody writes it so about here and so I have got used to it. The e has no sound which is the very reason why I might legally take it." See Ethel Fiske, *Letters*, p. 50.

For the rest of his life he spelled his name Fiske.

Cambridge was thrilling to Fiske, for there were outstanding libraries available to him like that of George Ticknor and of Harvard itself. Even more exciting was the faculty of Harvard, men of stature like Asa Gray, Louis Agassiz and James Russell Lowell. And the bookstores were to Fiske like candy to a child.

During his preparatory period for the entrance exam, he came across the notice of Herbert Spencer's proposed system of philosophy which was to come out in installments. To his mother he wrote. "I hope Mr. Stoughton will subscribe. I consider it my duty to mankind as a positivist to subscribe; and if I had \$2,000,000 I would lay \$1,000,000 at Mr. Spencer's feet to help him execute his great work."¹⁹ Evidently by this time Fiske had already heard of the man who would soon become his mentor and life-long friend.

Fiske found academic life at Harvard to be something less than he had expected. Even though Harvard had a reputation for a broad curriculum, he was generally disappointed in the weakness of the programs and courses. The subjects he wanted were not offered, and the curricu-

¹⁹Clark, *Life and Letters*, I, p. 139.

lum was relatively fixed. The sciences had only begun to show up as course offerings. This resulted in his spending a great deal of time studying on his own and cutting classes, for which he encountered disciplinary problems. In his first year of extra readings he concentrated on history and philosophy, and it is here that he began to read Spencer. Spencer's first installments of the proposed series of volumes appeared in late 1860 and early 1861. Fiske was ecstatic with Spencer's reconciliation of science and religion. In order to be able to grasp all of the coming synthesis Fiske quickly set out to read everything Spencer had written. So in July he read *The Principles of Psychology* (1855), and in August he read *Social Statics* (1850).

Perhaps more important than the disappointment over curriculum was his disappointment with Harvard's reputation for "infidelism." It was this reputation that attracted him in the first place. He decided against going to Yale because Yale had all the trappings of the church. It was a disappointment when he found that at Harvard chapel was compulsory.

One important thing Fiske did was form friendships with some of the faculty. He became acquainted with Asa Gray (1810-1888) who was an American advocate of Darwinian

evolution. Later he would write, "I am clear that I owe absolutely nothing to Harvard except the friendships formed while there."²⁰ It is noteworthy that he apparently avoided contact with Louis Agassiz who was the leading opponent of Darwinian evolution.

Fiske encountered some difficulties with the disciplinary system at Harvard. It was not long before he gained the reputation of being "a well-equipped Darwinian, and of holding Philosophic views of a Positivistic character."²¹ He devoted much more time and attention to what was new in science than what was going on in the world around. The Civil War was on and John was somewhat indifferent.

Two things came together to trouble Fiske academically. First of all, when he began making his views on evolution known, the Parietal Committee, an organization whose role was to carry out Harvard's disciplinary regulations, began to keep an eye on Fiske's activities. Secondly, he resented having to attend chapel, and he became involved in a situation which led to a "public

²⁰Manuscript Autobiographical Notes, Henry Huntington Library, cited in Milton Berman, *John Fiske: The Evolution of a Popularizer* (Cambridge: Harvard University Press, 1961), p. 28.

²¹Clark, *Life and Letters*, I, p. 206.

admonitation." In October of his junior year he was observed reading a volume of Auguste Comte in church.²² When the faculty heard of this, already aware of his position on religion, they voted to punish him with a "public admonition."²³ President Cornelius C. Felton was not satisfied with an admonition, he wanted a year's suspension for such an insult. When Fiske was called before him he " . . . frankly stated his disbelief in many of the dogmas of Christian theology, and was equally frank in expressing adherence to what was then termed, for want of a better name, the Positive Philosophy."²⁴

To complicate matters, on October 14, 1861 Fiske published a critical review of Buckle which appeared in the December, 1861 issue of the *National Quarterly Review*. Buckle had argued that progress in man's history is due to growth in man's intellectual capabilities, but man's moral nature does not change. Fiske wrote on behalf of the law of evolution and of progress, and did not want to separate moral truths from intellectual truths. This

²²Harry Burnell Pannill, *The Religious Faith of John Fiske* (Durham, N. C.: Duke University Press, 1957), p.12.

²³Berman, *John Fiske*, p. 33.

²⁴Clark, *Life and Letters*, I, p. 232.

first article shows the strong influence Comte had on him, because he used terminology that is much like Comte's law of the three stages. President Felton had good reason to accuse him of Positivism, even though his allegiance was to Spencer.

Fiske's first article is perhaps more important for another reason. It gives early indication of his major premise for the union of science and religion, namely, that there is moral progress.²⁵ Moral truths are not only inheritable, he thought, but in a Lamarchian way our inheritance becomes altered and man's moral qualities can progress. And it is clear that his premise is not totally Darwinian. Darwin was seen as just one of the writers pursuing the ideas of progress and evolution.

During the first year at Harvard Fiske met Miss Abby Morgan Brooks, and there was no doubt in anyone's mind that Abby was to be his wife. He was soon planning marriage and thinking of how he was going to support a family. Following his graduation in the fall of 1863,

²⁵Edward Livingston Youmans, founder of the *Popular Science Monthly*, found this article very appealing. He sent it to Spencer to give him an idea of how his ideas were depicted in America. Both Spencer and Lewes were anxious to know who wrote the review. See Clark, *Life and Letters*, I, pp.216-217.

Fiske published a second article, in the October issue of the *North American Review*, entitled "The Evolution of Language." Here he used Spencer's idea of social evolution, in the area of linguistics, to show a progressive development of languages. Youman's saw the article and sought Fiske out. He urged Fiske to correspond with Spencer.²⁶ Fiske did begin to correspond with Spencer, and in 1864 Spencer wrote and complemented him for his unique application of the principle of evolution.²⁷ These acts of recognition gave him hopes that he could have a literary career.

But Fiske's admonition hurt his future more than he realized. He had hopes of obtaining a position at Harvard as a tutor after his graduation, but no teaching posts were open to him. After considerable frustration he took his second choice, the choice his mother thought best. In October, 1863 he began the Harvard Law School, and it only took him nine months to stand for the examination and be admitted to the Bar. In September, 1864 he married Abby Brooks and set up his law practice.

From the middle of 1864 until early 1866 he was

²⁶*Ibid.*, p. 221.

²⁷Letter from Spencer to Fiske, March 26, 1864, Henry E. Huntington Library, (HM 13718).

simply existing as a lawyer, unhappy, and according to his letters, still maintaining an active interest in science. In 1866 he made up his mind to pursue the career of a writer. His step-father advised him to quit law for a while and try his hand at reviews. So Fiske and his family moved back to Middletown.

While Fiske was pursuing a career as a lawyer, changes were taking place at Harvard which would not only change the nature of the university, but would affect Fiske's life. In 1865 the State Legislature withdrew from its relationship with Harvard in which it had the role of electing Board of Overseer members. The duty became that of the alumni of the university. This put control in the hands of the younger generation, which had long been seeking reform at Harvard. Fiske was present at the alumni triennial festival to receive a master's degree when the new operation was announced. He decided to take an active role in the reform movement, and in 1867 he wrote an article in the *Atlantic Monthly*. It was entitled "University Reform," and in it he addressed himself to the duties of the university.

Skeptical activity is better than dogmatic torpor; and our motto should be, think the truth as far as possible, but above all things, think. When a university throws its influence into the scale in favor of any party, religious or political, philosophic or aesthetic, it is neglecting its consecrated duty, and

abdicating its high position.²⁸

While attempting to affect reform at Harvard, Fiske was also trying to establish himself as a man of letters and to earn money by his writing. His literary career was rough from the beginning. He was helped out a great deal by Youmans through introductions; the most fruitful was to Manton Marble of the *New York World*. Marble was in the Spencerian circle, and through him Fiske was able to produce several reviews and get them published.

With the struggle to get himself known as a writer, he grew weary of Middletown and its "unenlightened" nature. He gradually became known as one of the leading advocates of reform at Harvard, and in March, 1867, he happily moved back to Cambridge where his ideas had been accepted by such eminent men as Longfellow, Lowell, and Gray.²⁹

The president of Harvard in 1868 was Reverend Thomas Hill. With his resignation, a whole new question was raised, namely, should a member of the clergy be

²⁸John Fiske, "Considerations on University Reform," *Atlantic Monthly*, XIX (April, 1867), p. 452.

²⁹Winston, *John Fiske*, p. 45.

chosen, as had been the long standing tradition, or should tradition be broken. The reformers quickly took up the banner of change and of the two candidates, the Reverend Andrew Peabody and Professor Ephraim Gurney, the reformers wanted the professional educator. Fiske was asked to write an article on the debate, and in the December issue of the *Nation* his editorial entitled "The Presidency of Harvard" appeared in support of Professor Gurney.³⁰ A professor from the Massachusetts Institute of Technology, Charles W. Eliot, who also happened to be an alumnus, wrote two articles which reiterated and strengthened Fiske's point of view.³¹ Much to the surprise of everyone, the two major candidates were passed over and the Harvard Corporation and Board of Overseers picked Eliot to be the new president of Harvard.

Both sides of the dispute were opposed to the choice because to those in favor of a clergyman, any scientist was unacceptable; and to those seeking reform, especially those like Fiske who wanted scientific reform,

³⁰John Fiske, "The Presidency of Harvard," *Nation*, VII (Dec. 31, 1868), p. 548; see Ethel F. Fiske, *Letters*, pp. 180-181.

³¹These articles both appeared in the *Atlantic* in February and March of 1869 under the same title, "The New Education - Its Organization." See George P. Winston, *John Fiske* (New York: Twayne Publishers, 1972), p. 49.

Eliot, a chemistry professor at M.I.T., seemed too much like a technologist. None the less, Eliot's reforms came soon, and seemingly to Fiske's benefit. Part of the plan involved new lectures for the academic year 1869-1870, two of which involved philosophy. Ralph Waldo Emerson was asked to give the lecture on "The Natural History of the Intellect," and Fiske was asked to do the other, "The Positive Philosophy."³²

It is ironic that as a student at Harvard in 1861, he was nearly expelled for reading Comte in chapel and talking to other students about Positivism. Now he was being asked to lecture about science, however, he had long since deserted Comte for Spencer. In fact, he devoted a great deal of effort defending Spencer from the accusation of copying Comte.

Fiske was well accepted, and although he did not like the title because of its identification with Comte, he emphasized the different meanings of the words "Positive Philosophy." His lectures were quite successful, enough to have him reappointed for the next academic year, and to have Youmans encourage him to publish them. The first was published in the November issue of the

³²Pannill, *Religious Faith of Fiske*, p. 18.

New York *World*.³³ Fiske's popularity grew, and he was asked to give the same lectures in Boston and Milwaukee.

Enrollment in the second course of lectures became a problem. Fiske's position became precarious because the Board of Overseers was reluctant to have him teaching anything more than a lectureship. Eliot had nominated Fiske for an instructor position in the history department in addition to the post of lecturer.³⁴ But he was considered too much of a propagandist for Spencerian evolution for the Board, and they were reluctant to have him teach undergraduates. Eliot was forced to change his reforms so that they were more conservative and closer to the older college plan.

Fiske had another problem. Manton Marble began to have second thoughts about the appropriateness of Fiske's articles. Fiske was able to hold the position of acting professor of history for spring term, and he was able to convince Marble that his work would soon expand into a full examination of Spencer's philosophy. But it soon became evident that his future in the literary world

³³See the "Preface" to Fiske, *Outlines of Cosmic Philosophy*, I, p. vii.

³⁴Berman, *John Fiske*, p. 78.

world and at Harvard was insecure. His lectures in other cities had been unsuccessful, and Fiske was running into severe financial problems.

Fiske wanted the position at Harvard very badly, but the Board turned him down. In March Charles Eliot wrote to him and explained the rejection. He said that he had done his best with Mr. Lowell to secure the position, but as founder of the Lowell Institute, he was concerned about Fiske's reputation for infidelity and the limited intellectual freedom of Boston. Lowell felt that no man should be appointed who does not believe in Divine revelation.³⁵

In May, 1872 Eliot and Gurney (appointed Dean under Eliot) gave Fiske an insignificant position in the Harvard Library, and appointed a more conservative man, Henry Adams, to the history position.³⁶ Patrick Hazard concludes that because of Fiske's struggle, which Fiske considered unjust, the future choice of his lecture material would reflect the "area of conflict between traditional Christian values and the emerging values of science, and even

³⁵ Letter from Charles Eliot to John Fiske, March 27, 1872, Ethel Fiske, *Letters*, pp. 211-212.

³⁶ Berman, *John Fiske*, p. 78.

more specifically, his assumption of an increasingly tenderminded approach to the subject."³⁷

The library position was to begin in October, 1872. This gave Fiske the summer to work on publications. Fiske gave a scheduled course of lectures on the Positive Philosophy in Boston in 1873, and was given a check for \$1000 by Mrs. M. A. Edwards of Boston. Mrs. Edwards was anxious for Fiske to complete the book form of his lectures; the money was to help him in any way she could. It so happened that Fiske had, for a long time, wanted to travel to England to consult with Spencer, Huxley and Lewes before writing the book. This money made it possible.

He took a leave of absence from his new position at the library and sailed for England in August. Before departing, he finished two articles, one of which is the first article to contain the general hypothesis that is the central focus of this work. This article was entitled "The Progress from Brute to Man," and contained the argument for moral evolution as a result of the "prolongation of infancy."³⁸ The other article was an attack on Louis

³⁷ Hazard, *John Fiske*, p. 78.

³⁸ John Fiske, "The Progress from Brute to Man," *North American Review*, CXVII (October, 1873), pp. 251-319.

Agassiz's defense of special creation.³⁹

Most writers see this trip to England as a natural point of division in Fiske's life, and I agree. When he returned to America, he was armed with certainty and authority, and he was considered an "acknowledged interpreter of the new philosophy."⁴⁰

³⁹John Fiske, "Agassiz and Darwinism," *Popular Science monthly*, III (October, 1873), pp. 692-705.

⁴⁰Pannill sees Fiske returning home as a disciple of Spencer. See Pannill, *The Religious Faith of Fiske*, p. 21.; George Winston sees Fiske shift from several fields of interest, history, philology, and philosophy, to a concentration on his major life's work. See Winston, *John Fiske*, p. 58.; Hazard sees this trip as Fiske's striving to achieve a reputation. He says Fiske felt that he had to go to Europe to establish himself as a scholar. See Hazard, *John Fiske*, p. 200, *passim*.

1874-1901 AN AMERICAN POPULARIZER
OF SCIENCE, RELIGION AND HISTORY

Disce, ut semper victurus;
Vive, ut cras morturus.⁴¹

Fiske's first trip abroad did indeed prove full of excitement. When he met Spencer, Spencer went out of his way to make Fiske's visit a pleasant one. He arranged meetings between Fiske and the major intellects of the era, including Joseph Dalton Hooker (1817-1911), Thomas Henry Huxley (1825-1895), with whom Fiske developed a very warm friendship, and John Tyndall (1820-1893). He also met Charles Darwin, George Henry Lewes, and Lewes' wife, George Eliot.

These meetings gave Fiske a great deal of new thought, and made it necessary that he revise certain portions of his lectures. In fact, Fiske spent a great deal of his time in Europe working on the manuscript of his book. He had wanted to write a major philosophical work elucidating Spencer's ideas ever since he began

⁴¹These words, found on Fiske's grave marker in Petersham, Massachusetts, read: "Learn, as if you will live forever; Live, as if you will die tomorrow."

lecturing in 1869. He told Manton Marble that he wanted to write a volume that would account for the philosophy of science and its methods.⁴² By 1871 his lectures numbered thirty-five, but these meetings with the men of science made it necessary for Fiske to revise some parts. He added chapters on "Matter and Spirit," "Religion and Adjustment," and "The Critical Attitude of Philosophy."⁴³

Fiske was basically a religious man, even though much of his youth was spent rejecting church doctrines. His turning to science indicates his desire to bring together all knowledge, to explain what religion had failed to explain. His defense of science was so forceful because science, more than anything else, seemed to be able to supply evidence and answers. Men like von Humboldt and Comte appealed to him because they were trying to unify all knowledge. As he matured, between 1860 and 1874, he accepted the doctrine of evolution as a principle that not only had the ability to unify all knowledge, it held the key to understanding man's uniqueness and the true meaning of religion. The *Outlines of*

⁴²Letter from John to Manton Marble, November 2, 1869, cited in Berman, *John Fiske*, p. 92.

⁴³Clark, *Life and Letters*, I, p. 462.

Cosmic Philosophy was the high point of the development of his thoughts in science. It is his philosophy of science and the foundation for all his future thought on science. Subsequent writings were, in essence, the further development of fundamental truths contained in the *Outlines*.

It took Fiske five years to complete his work, which had the full title of *Outlines of Cosmic Philosophy Based on the Doctrine of Evolution, with Criticisms of the Positive Philosophy*.⁴⁴ Spencer did not like the title, particularly the word "cosmic." He felt that "all philosophies whatever may, in a certain sense, be termed 'cosmic,' in as much as all philosophies have had for their subject matter the explanation of the universe or Cosmos."⁴⁵ Spencer preferred the word "Synthetic" which he used in his own *Synthetic Philosophy*. Fiske had his own understanding of these two words, and he interpreted "Cosmic" to be better suited to the purpose of his work.

The term "Cosmos" connotes the orderly succession of phenomena quite forcibly as it denotes the totality of phenomena; and with anything absolute or ontological, with anything save the "Mundus" or orderly world of phenomena, it has nothing whatever to do. So

⁴⁴Clark, *Life and Letters*, I, p. 464.

⁴⁵Fiske, *Outlines*, I, p. ix.

that strictly speaking, no theological system of philosophy can be called "Cosmic" while admitting miracle, special creation, or any other denial of the persistence of force, into its scheme of things; and no ontological system can be called "Cosmic" while professing to deal with existence not included within the phenomenal world. The term, therefore, forcibly distinguishes Mr. Spencer's philosophy from systems which have contained ontological or theological assumptions.⁴⁶

Fiske made every effort to demonstrate his agreement with Spencer's ideas, but his theological viewpoint towards evolution was not characteristic of Spencer. He also went to lengths to show how Spencer differed from the teachings of Comte. Spencer let it be known that these were not matters of concern to him. In a letter of February 2, 1870, he said:

. . . the elements of my general scheme of thought which you have brought into prominence as akin to those of Comte (such as the relativity of knowledge and the deanthropomorphization of men's conceptions), have never been elements that have occupied any conspicuous or distinctive place in my own mind - they have been all along quite secondary to the grand doctrine of evolution, considered as an interpretation of the Cosmos from a purely scientific or physical point of view.⁴⁷

In addition, Fiske's emphasis on the "unknowable" as an argument for theism was not Spencer's intention. Spencer

⁴⁶Fiske, *Outlines*, I. pp. ix-x.

⁴⁷Clark, *Life and Letters*, I. p. 368.

wrote:

. . . I subsequently saw the need for making such preliminary explanation as is now given in Part I (the Unknowable) simply for the purpose of guarding myself against the charge of atheism and materialism, which I foresaw would most likely be made in its absence.⁴⁸

In October, 1874 the *Outlines of Cosmic Philosophy* was published simultaneously in England and America. Its aim was to present Fiske's own ideas as well as Spencer's. His emphasis on religion was greater than it had been in the 1869 lectures from which it was taken, and its reception in England was good. Spencer did not feel that this sort of material fit in the discussion of scientific principles, and when he wrote to Fiske he did not make mention of the religious implications.⁴⁹ But it was because of this emphasis that the *Outlines*, and thus Spencer, had such appeal in America.

Without recounting the entire *Outlines* at this point, it would be useful to characterize its main ideas. Part I, the "Prolegomena," is an examination of the ideas of Spencer, Comte, Lewes, and John Stuart Mill in which Fiske presents what he considered to be the positive philosophy. Spencer's ideas had the final say in case

⁴⁸*Ibid.*

⁴⁹Letter from Spencer to Fiske, December 1, 1874, in Clark, *Life and Letters*, II, pp. 58-59.

of conflict as Fiske attempted to put his philosophy into historical perspective.

Spencer's test for truth, which says that something is true if its negation is inconceivable, is a central idea of Part I. Along with it is the notion of the reactivity of knowledge which says that we do not have knowledge of the absolute, and what knowledge we do have is through experience. The real conflict of knowledge exists only between the imperfect knowledge of one age relative to the more imperfect knowledge of the previous age. We do not know ultimate reality, so for man there is part that is unknowable and part of existence that can be known.

Part II is composed of twenty-two chapters devoted to the laws of progress. It is a "synthesis" of evolutionary ideas derived from Spencer, and it is in this part, as we shall see later, that Fiske produced his own original theory for the moral genesis of man, his infancy theory.

The third and remaining part restates questions of what positivism is and what the right method for its study should be. Fiske's interest in reconciling science and religion is particularly evident in this part. The hostility that exists between religion and science, he says, is only apparent. The progress of man is pointing to a

future golden age, and it is man who is in tune with nature who will be the fittest. It is man who understands the truth that can progress, and his "Cosmic Philosophy" is the foundation for that understanding.

This brief look at the *Outlines* will be expanded in the following chapter; it is enough to say that Fiske did not write as a scientist would, with empirical verification. Much has been said about Fiske's science, or lack of it, and we shall address this question in a later chapter. He wrote, instead, with the goal of reconciling science and religion; so at times the *Outlines* sounds as logical and analytical as a physics text, while at others speculation abounds and he gives very little or no evidence for his conclusions.

The third part of the *Outlines* shows a change from his earlier radicalism. When he had lectured on this material in 1869, there was only one chapter devoted to religion. With the revision of his lectures for this work he increased the number to six. It might be said that he grew more sensitive to the demands of the American audience, because it was always the last segment of his lectures, on religion, that brought the most discussion in America.

With its publication Fiske's life passed a major milestone. He had struggled to find a proper synthesis

of thought, and here, in one work, he finally brought forth the conclusion of his search. Reaction to the *Outlines* varied. The religious press was very critical for his denial of special creation. M. Stuart Phelps of Yale said rather sarcastically:

In the continuous redistribution of matter and motion there has at last been evold, by integration of the homogeneous, the American Apostle of the truth hither to hidden from the eyes of men. A series of states of consciousness (plus something) resident in Cambridge, has worked over a certain amount of sunshine, and has communicated it to other possibly existing series of states of consciousness in the shape of a book entitled Cosmic Philosophy.⁵⁰

There were others who praised Fiske for his clarity of thought and presentation. J. B. Warner of the *Atlantic Monthly* said that Spencerian theory was so clearly explained that most would prefer it to Spencer's own writing.⁵¹ Darwin said that he never really understood Spencer until Fiske translated him.⁵² Part of the letter was so flattering that Fiske included it in the flyleaf of his future works.

⁵⁰M. Stewart Phelps, "Cosmism," *New Englander*, XXXIV (July, 1875), p. 554.

⁵¹J. B. Warner, "Recent Literature," *Atlantic Monthly*, XXXV (May, 1875), p. 616.

⁵²Letter from C. Darwin to Fiske, Dec. 8, 1874. Henry E. Huntington Library, (HM 8263).

You must allow me to thank you for the very great interest with which I have at last slowly read the whole of your work. . . . I never in my life read so lucid an expositor (and therefore thinker) as you are; and I think that I understand nearly the whole, though perhaps less clearly about cosmic theism and causation than other parts. It is hopeless to attempt out of so much to specify what has interested me most, and probably you would not care to hear. It pleased me to find that here and there I had arrived, from my own crude thoughts, at some of the same conclusions with you, though I could seldom or never have given my reasons for such conclusions.⁵³

After 1874 Fiske's life became increasingly busy. He returned to Harvard in the fall to continue his position at the library. In 1876 he put together some essays he had written for the *New York World* and the *Atlantic Monthly*, and published them under the title, *The Unseen World and Other Essays*. This sold relatively well, but he found it difficult to make a living at this because sales of his *Cosmic Philosophy* had been only nine hundred copies in the eighteen months since it was written.⁵⁴ His family was growing, and he had already used up money that he had inherited when his grandmother died. It was not long before he was requesting money

⁵³From the "Important Works" section in *The Idea of God as Affected by Modern Knowledge* (Boston: Houghton, Mifflin & Company, 1866), by John Fiske.

⁵⁴Berman, *John Fiske*, p. 114.

from his mother and stepfather.

The situation for Fiske at Harvard was less than desirable. Berman tells us that when Fiske's sixth and last child was born in August, 1877, they had just begun construction of a three-story home in Cambridge.⁵⁵ Mr. Stoughton had given him the money; the general impression was that John would soon be given a permanent post at Harvard. With favorable commentaries on the *Outlines*, it was assumed that President Eliot would eventually invite Fiske to the faculty. Unfortunately, as we've seen, this never came about, and Fiske had no future at Harvard.⁵⁶

Fiske's interest began to shift to a subject area that seemed to have a rather large following, to American History. He collected materials for future writings, and remained at the Harvard Library until 1878 when he was invited to Old South Church in Boston to give a series of six lectures on American History. His old friend, Professor Gurney, and historian Francis Parkman both advised him to take advantage of the opportunity. So he

⁵⁵Berman, *John Fiske*, p. 118.

⁵⁶*Ibid.* pp. 120-121.

resigned in December and went to Boston.⁵⁷

The lectures in Boston on "America's Place in History" were very successful, and although he had tendered his resignation at the library (effective February, 1878), he still had hopes that his demonstrated ability would encourage Eliot to hire him.⁵⁸ Mrs. Hemenway, who had made the initial arrangements for these lectures, urged John to repeat them in various places in America and abroad. Huxley encouraged him too, and assured him that University College would have a hall that he could use.⁵⁹ He boarded another steamer on May 24, 1879 for what he considered his second home, England.⁶⁰

His letters home were once again full of joy and excitement over meeting important people.⁶¹ Many of his old friends and the new people he met had read the *Outlines*. This gave him great enthusiasm, and he found a

⁵⁷Clark, *Life and Letters*, II, pp. 71-73.

⁵⁸Berman, *John Fiske*, p. 124.

⁵⁹Pannill, *The Religious Faith of Fiske*, p. 29.

⁶⁰Clark, *Life and Letters*, II, pp. 111-112.

⁶¹Letters from John to his wife Abby, June 5, 1879; to his Mother, May 24, 1879, cited in Berman, *John Fiske*, p. 128.

publisher, (he could not find one in America), Macmillan and Company, to publish another volume of essays entitled *Darwinism and Other Essays*.⁶² Darwin met with him at his country residence, and Spencer took him on outings into the countryside. This time, however, Fiske spent more time discussing history and evolution. Spencer liked his approach to history and his "Anglo-American political ideas."⁶³

When he returned to America he had two opportunities awaiting him. He had the lucrative opportunity of starting a lecture tour in America, and he had Huxley's suggestion that he might be invited to address the Royal Institution in the following year.⁶⁴

It seemed as if the turning point had finally come. He could now, perhaps, build a career lecturing and pay off his debts. Although his greatest financial crisis was still to come, he had at least found a field in which he was successful. As a lecturer he held great appeal, and as a historian he was well prepared. In a letter he

⁶²John Fiske, *Darwinism and Other Essays* (London: Macmillan and Co., 1879), (Revised and enlarged edition, Boston: Houghton, Mifflin & Company, 1885).

⁶³Clark, *Life and Letters*, II, p. 153.

⁶⁴Ethel Fiske, *Letters*, p. 411.

wrote to Charles Darwin it appeared as if he had, for the most part, transferred his interest from the theory of evolution to history.

I am unable to follow you in detail as closely as I used to, for year by year I find myself studying more and more nothing but history. But Huxley told me last year that he thought I could do more for the "Doctrine of Evolution" in history than in any other line. To say that all my studies today owe their life to you would be to utter a superfluous complement; for now it goes without saying that the discovery of "Natural Selection" has put the whole future thought of mankind on a new basis.⁶⁵

In 1880 Huxley arranged for three lectures on American politics at the Royal Institution. He also received another invitation from Muir of Scotland asking him if he would be willing to give a series of lectures to the Edinburg Philosophical Institute.⁶⁶ But he went six months without an income and without having a substantial offer in America. E. L. Youmans tried to give Fiske's career a boost by telling the Spencerian readers of the *Popular Science Monthly* that Fiske's lectures were worth the work it might take to arrange them.⁶⁷

The first opportunity came as a three-week engage-

⁶⁵ Ethel Fiske, *Letters*, p. 436.

⁶⁶ *Ibid.*, p. 430; and Clark, *Life and Letters*, II, p. 169.

⁶⁷ E. L. Youmans, *Popular Science Monthly*, XV (October, 1879), p. 560.

ment in Maine and New York. Things did not look promising when only eighteen people showed up at Lewiston, his first stop.⁶⁸ He had to schuttle between Portland, Brunswick, and Lewiston in what was a mentally and physically exhausting itinerary, but he ended up making many new friends and learning more about the methods of successful lecture touring.

Fiske finally went to England and Scotland to deliver the lectures he had agreed upon earlier; the tour was from May 1 to July 26, 1880. This time Abby accompanied him. It was to be their second honeymoon, and he welcomed the change from the frantic trips all over northeastern America. The lectures before the Royal Institution of London and the Edinburg Philosophical Institute were very successful and they added fuel to the fires of hope for a lecturing career. This, plus the fact that the Harvard alumni elected Fiske to the Board of Overseers, he hoped would have an impact on President Eliot's decision to have him on the Faculty.⁶⁹

In the meantime, Fiske had become involved in a

⁶⁸Berman, *John Fiske*, p. 132.

⁶⁹*Ibid.*, p. 130.

conflict with his friend William James. Before leaving on his European tour, James wrote an essay entitled, "Great Men, Great Thoughts, and the Environment," in which he spoke of a limitation on the theory of evolution, attacking Spencer's position.⁷⁰ The literary exchange revolved around the notion that evolutionists ignore the role of individual achievement in history. Fiske felt that the history of what individual great men do does not explain history. In defense of Spencer he wrote "Sociology and Hero-Worship" (*Atlantic Monthly*, XLVII, January, 1881), and "The Philosophy of Persecution" (*North American Review*, CXXII, January, 1881), for he maintained that James should have had more respect for Spencer.

It was in this time period, also, that Fiske became a member of Harvard's "Metaphysical Club," the members of which were among the founders of the new philosophy of Pragmatism.⁷¹ In 1881 Harper and Brothers

⁷⁰Clark, *Life and Letters*, II, pp. 192-193; William James, "Great Men, Great Thoughts, and the Environment," *Atlantic Monthly*, XLIV (October, 1880), pp. 441-459.

⁷¹See Philip P. Wiener's *Evolution and the Founders of Pragmatism* (Philadelphia: University of Pennsylvania Press, 1972) for a detailed discussion of the founding of Pragmatism and for the activities of the Club at Harvard.

requested of him a history of the American people. It was a welcome literary task, and he eagerly began his plans. Unfortunately that year saw some drastic changes in his family. His stepfather had to resign from his ambassadorship to Russia, and in January of 1882 he died. With this, his mother decided to return to Cambridge to build a home that John might someday inherit.⁷² These things had the effect of interrupting his work, and postponing the American history book.

Fiske felt the need to get away, so he embarked on another journey to London, this time without his wife, to cloister himself in the libraries. In 1883 he sailed for his fourth and last visit to England, and after his work was done there, he proposed a tour of the Continent to seek out other publishers who were cooperating with E. L. Youmans in the International Scientific Series.⁷³ But when he arrived in London, the feelings were not the same. He returned home in April and never went to the Continent. Back in Petersham he went to work on his history, and perhaps to write a revised edition of his *Outlines of Cosmic Philosophy*.

⁷²Winston, *John Fiske*, p. 99.

⁷³Berman, *John Fiske*, p. 149.

Both of these projects went beyond anything he had planned. He had a tendency to supply extremely detailed accounts, and to end up with much more than he could possibly use. The result was that he failed to meet publishing deadlines. He had to postpone the book for Harper's, which was due in 1883, and he became involved in severe financial difficulty. Harper's would not pay \$5000 of the agreement because he was not done, and he could not pay a standing loan.⁷⁴ Mr. Stoughton was gone and his mother could no longer bail him out of financial jams. Illness among the children compounded the difficulty.

Fiske was finally able to get enough of an income from guest lectures and from completed chapters on history to survive. *Harper's Monthly* agreed to carry chapters out of the history book in order to advertise it, and this went on through 1882 and 1883. In 1884 he brought together various essays and wrote *Excursions of an Evolutionist*. As always, he hoped that he could somehow raise enough money to clear his debts. But his eternal optimism appeared to be eroded, for this was the first time he had great difficulty in getting financial help. As one of his biographers put it, "Fiske seemed

⁷⁴Berman, *John Fiske*, p. 149.

to have lost his bounce."⁷⁵

Fiske maintained a constant program of lectures and publications until his death in 1901. Much of the material contained in his lectures eventually appeared in his books. However, after 1885 there became evident a shift toward writing as opposed to lecturing.

The pressures ran him down, and after a long struggle with pneumonia, Fiske decided to lecture only when it did not interrupt his writing. Much of his work consisted of bringing together historical ideas. But the stresses of his financial situation tended to make him emphasize emotions more than the solid philosophical reasoning he was used to. The consequence was a new view of religion. As Berman points out, his views in the seventies on the reconciliation of science and religion "impressed only radicals." But in the eighties, he was less radical and he stressed more the emotion than the logic of religion.⁷⁶

The change is evident in an address he was called upon to give at a dinner given for Herbert Spencer while he was on a visit to America. The subject of his talk

⁷⁵Winston, *John Fiske*, p. 100.

⁷⁶Berman, *John Fiske*, p. 157.

was "The Doctrine of Evolution and Religion," the title signifying the union which he had sought earlier in his *Outlines of Cosmic Philosophy*. His wish, he said, was:

. . . to point out . . . that Mr. Spencer's work on the side of religion will be seen to be no less important than his work on the side of science, when once its religious implications shall have been fully and consistently unfolded. . . .

If we look at all the systems or forms of religion of which we have any knowledge, we shall find that they differ in many superficial features. . . . But amid such surface differences we find throughout all known religions two points of substantial agreement. . . . The first of these assertions is the proposition that the things and events of the world do not exist or occur blindly or irrelevantly, but that all, from the beginning to the end of time, and throughout the farthest sweep of illimitable space, are connected together as the orderly manifestations of a divine Power, and that this divine Power is something outside ourselves, and upon it our own existence from moment to moment depends. The second of these assertions is the proposition that men ought to do certain things, and ought to refrain from doing certain other things; and that the reason why some things are wrong to do and other things are right to do is in some mysterious but very real way connected with the existence and nature of this divine Power, which reveals itself in every great and tiny thing. . . .

Having thus seen what is meant by the essential truths of religion, it is very easy to see what the attitude of the doctrine of evolution is toward these essential truths. It asserts and reiterates them both . . . as the widest and deepest truth which the study nature can disclose to us, that there exists a Power to which no limit in time or space is conceivable, and that all the phenomena of the universe, whether they be what we call material or what we call spiritual phenomena, are manifestations of this infinite and eternal Power.

. . . when with Mr. Spencer we study the principles of right living as part and parcel of the whole doctrine of development of life upon earth; when we see that, in an ultimate analysis, that is right which tends to enhance fullness of life, and that is wrong which tends to detract from the fullness of life, - we then see that the distinction between right and wrong is rooted in the deepest foundation of the universe; we see that the very same forces, subtle and exquisite and profound, which brought upon the scene the primal germs of life and caused them to unfold . . . have wrought into the very fibers of the universe those principles of right living which it is man's highest function to put into practice.⁷⁷

Spencer had always avoided discussion of such a religious interpretation of his system, and in some instances his frustration over what he considered misunderstanding of his ideas showed up on his letters. This was particularly evident with his book *First Principles* (1862). In its introduction he felt no need to specify his position with respect to "metaphysico-theological beliefs." Everything was to be interpreted in terms of the redistribution of matter and motion. But this implied a materialism with which Spencer did not wish to be identified. So he went on to explain that our ideas of matter and motion are but symbols of "that which transcends the possibilities of knowledge: and that hence

⁷⁷A speech given at the farewell dinner for Herbert Spencer in New York, November 9, 1882, contained in "Evolution and Religion," Chapter XI in John Fiske, *Excursions of an Evolutionist* (Boston: Houghton, Mifflin and Co., 1899), pp. 296-304.

any explanation of the changes which the cosmos exhibits, still leaves unexplained the *nature* and *origin* of them."⁷⁸ He called this the "Unknowable," and even though he meant it as nothing more than an introduction intended to prevent misinterpretation, it was regarded by many who read the book, including Fiske, as the main idea. "Having inspected the portico," he said, "they turned their backs on the building." In a letter to Youmans of October 8, 1879, shortly after the publication of the *First Principles*, he said:

I was glad that you dwelt upon the great perversion of opinion that has resulted from the strange, almost universal, tendency to take the negative part of the *First Principles* as the characteristic part; ignoring the positive essential part consisting of the theory of evolution. It is a wonderful illustration of human perversity. One never gets over the tendency to suppose that if things were clearly put before the people, they will somehow or other see them; but one ever gets repeated proofs that no matter how conclusive the demonstration, no matter how abundant the illustrations, they will persist in some absurd misapprehension or other.⁷⁹

This farewell dinner was therefore a very important occasion for Fiske, for after Fiske had delivered his lengthy address on the religious system based on Spencer's evolutionary synthesis, Spencer congratulated him and

⁷⁸David Duncan, *Life and Letters of Spencer*, II, p. 334.

⁷⁹Duncan, *Life and Letters*, I, p. 268.

said "Fiske, should you develop to the fullest the ideas you have expressed here this evening, I should regard it as a fitting supplement to my life-work."⁸⁰

It is difficult to determine just how Spencer felt about Fiske's religious emphasis. There is some evidence in another letter that he was sympathetic to Fiske's cause, and by the time of the farewell dinner found little objection to it.⁸¹

Whatever Spencer felt, Fiske surely saw in the divine Power a bright future in which all things would eventually work out for the better. Berman interpreted this attitude to say that "as Fiske experienced the pressures of an extremely difficult personal situation, he turned to his religious beliefs for assurance that the evil he knew was transitory, while the good he could imagine was permanent and real."⁸² His situation did not improve, and as difficulties compounded, he resorted more and more to the Christian ideas of his youth.

⁸⁰Ethel Fiske, *Letters*, p. 478.

⁸¹*Ibid.*, p. 479.

⁸²Berman, *John Fiske*, p. 159.

This new attitude was more fully developed two years later when, in 1884, he was asked to speak before the Concord School of Philosophy of Concord, Massachusetts. This was an organization of mostly theologians who were worried about the implications of modern science. It was founded by the Transcendentalist Bronson Alcott, and some of the speakers who had appeared before the Club were Ralph Waldo Emerson and William Torrey Harris, the St. Louis advocate of American Hegelianism.⁸³

Fiske was asked to speak on "Man's Immortality." His address was a survey of man's origin through evolution, and he concluded that man was the final product of the long progress. He saw man as possessing reason and the ability to know of his own existence, to be aware. This, to him, proved that the process had reached its end because awareness of self is the goal of evolution. Fiske was bringing back the argument from design. There were no steps beyond man in the great chain, and there would be no further progress. His theory of the prolongation of infancy was again emphasized as the key to understanding man's destiny.

⁸³*Ibid.*, p. 162.

The address was published in the following year under Fiske's own title, *The Destiny of Man Viewed in the Light of His Origin*. There were no new ideas that were radically different than what he had said in the *Outlines*. What was different, according to Berman, was his emphasis. "The idea that man was the goal of evolution was implicit in his earlier work, but he had never so definitely pointed to the moral of his conclusion. He had in his *Cosmic Philosophy* spoken of the congruence of his evolutionary faith and the essence of Christianity, but he did not there define his essential Christianity."⁸⁴

The lecture had been successful and Fiske was asked to participate in the 1885 session. He was free to speak on any subject he desired, and he decided "to introduce the discussion of the question of whether pantheism is the legitimate outcome of modern science."⁸⁵ In the address he said that:

Humanity is not a mere local incident in an endless and aimless series of cosmical changes. The events of the universe are not the work of chance, neither are they the outcome of blind necessity. Practically there is a purpose in the world whereof it is our highest

⁸⁴ *Ibid.*

⁸⁵ John Fiske, *The Idea of God as Affected by Modern Knowledge* (Boston: Houghton, Mifflin and Company, 1885), p. v.

duty to learn the lesson. . . . When from the dawn of life we see all things working together toward the evolution of the highest spiritual attributes of man, we know, however the words may stumble in which we try to say it, that God is in the deepest sense a moral Being. The everlasting source of phenomena is none other than the infinite Power that makes for righteousness.⁸⁶

He wrote two more books in the area of religion. In 1899 he wrote *Through Nature to God*, a collection of three addresses, the second of which we shall discuss in a later chapter. The third essay of this series is thought to be his finest work.⁸⁷ It was the final effort in uniting science and religion by showing that evolution was clearly affirming the reality of religion. He argued that religion

. . . has nothing to fear from the advance of scientific discovery, for as these things come to be better understood, it is going to be realized that the days of antagonism between Science and Religion must by and by come to an end. That antagonism has been chiefly due to the fact that religious ideas were until lately allied with the doctrine of special creations. They have therefore needed to be remodeled and considered from new points of view. But we have at length reached a stage where it is becoming daily more apparent that with the deeper study of

⁸⁶*Ibid.*, pp. 166-167.

⁸⁷Pannill, *The Religious Faith of Fiske*, p. 36.

Nature the old strife between faith and knowledge is drawing to a close; and disentangled at last from the ancient slough of despond the Human Mind will breathe a freer air and enjoy a vastly extended horizon.⁸⁸

Fiske was accused by his critics of having changed his position from that stated in his *Outlines of Cosmic Philosophy* to something more akin to pantheism.⁸⁹ In the "Preface" to *The Idea of God* he wrote a lengthy rebuttal to such charges.

Fiske denied that he was a pantheist because his view of God was as a separate divine Power; he did not see God and the universe as one. The data of science functioned to describe how God acted in the universe, but did not attempt to define or describe God. And he tried to show how his position in his more recent works was consistent with the thought contained in the *Outlines*. It was a defense which demanded a bending of the facts, for one of major aims of the *Outlines* was to destroy the orthodox image of God, to remove all human qualities

⁸⁸ John Fiske, *Through Nature to God* (Boston: Houghton, Mifflin and Company, 1899), pp. 193-194.

⁸⁹ Berman describes a speaking engagement at the Nineteenth Century Club of New York at which Chauncy Depew, an orthodox Christian, was a panel member. After Fiske presented a reading from *The Idea of God* Depew accused him of advocating something other than the Bible. This debate became widely known. See Berman, *John Fiske*, p.167.

which man had over the years attributed to him. In essence, what Fiske had done was to "deanthropomorphize" God, to remove the personal character with which man had identified God. Now he was trying, in the light of his recent works, to show that just the opposite is the case, that in the *Outlines* he was actually advocating a personal God.

Berman presents an excellent case for the changes that took place in Fiske's thinking. His conclusion is that "He could not admit them without weakening the belief in his own superior correctness which was his main defense against a world that did not treat him as well as he thought he deserved."⁹⁰ None the less, a gradual transition had taken place, and his philosophy of science took on a tone which was acceptable to many. It became a system based upon emotion rather than logic, and although explanations were still naturalistic, religion rather than science was his focal point.

His emphasis on religion at last brought him recognition, and after evolution became a less heated issue in the eighties, he had a rather wide following. In 1887 he was doing a great deal of writing on American History and

⁹⁰Berman, *John Fiske*, p. 169.

he was in great demand for lectures throughout the country. He was invited to the west and made two tours, one rather long along the Pacific Coast in May and June of 1887, and a second in 1892 during which he was speaker in Astoria, Oregon for the hundredth anniversary of the discovery of the Columbia River.⁹¹

Hopes were that these western travels would aid him in writing a short American History, but they only resulted in expanding his thoughts and making it more difficult to write the kind of history Harper's wanted. The agreement between them was finally cancelled; Henry Houghton, however, was interested in Fiske's literary style and detailed knowledge. They struck an agreement which gave Fiske the salary he needed and the time to lecture when he wanted.⁹²

In his last years he was able to spend more time at home writing. Invitations continued to appear, and in 1892 he was the guest speaker in Boston at the four hundredth anniversary ceremonies of the discovery of America. But his health was poor, and he could not accept most of

⁹¹Clark, *Life and Letters*, II, pp. 439-441.

⁹²*Ibid.*, p. 398.

the invitations.

His last series of lectures took place at the Lowell Institute in Boston in 1901. It was ironic that this should be so because many years before, in 1872, President Eliot of Harvard had suggested that the Institute invite John there as a speaker. The request was refused because their funds were to be used only for lecturers who believed in the literal interpretation of Scriptures.⁹³ Fiske did not fit that description. The opinion of Fiske had altered substantially in the intervening years; Fiske, however, saw it as a vindication of his point of view.⁹⁴

Most of his late addresses were memorials for some historical event. His highest honor was to be his appointment as "representative of the New World" at the 1901 King Alfred Centennial in Winchester England. He began detailed plans for an address that would describe the evolutionary progress that had taken place in English society and in America as its political offspring. But a few months before the celebration he became seriously ill, and on July 4, 1901 he died.

⁹³*Ibid.*, p. 485.

⁹⁴Winston, *John Fiske*, p. 107.

PART II. AN INTUITIVE CLAIM OF RELIGION
EXPLAINED THROUGH EVOLUTION

III. FISKE'S PHILOSOPHY OF SCIENCE: FROM A SUMMARY
OF ALL KNOWLEDGE TO MORAL EVOLUTION

THE LIMITS OF KNOWLEDGE

We have here, not the work of a naturalist or biologist, but rather of a literary writer, a student of history, philosophy, and theology, who, without presuming to speak with authority on matters of physical science, has still acquired an extensive familiarity with the methods upon which sound scientific conclusions are reached and has derived from the various departments of natural knowledge no inconsiderable aid in forming and verifying his theory of things.¹

Popular Science Monthly

The *Outlines of Cosmic Philosophy* was based on lectures presented at Harvard in 1869 and 1871. They started out as nothing more than a criticism of the Positive Philosophy, but with the encouragement of Edward L. Youmans and Manton Marble they were expanded and presented to an enthusiastic public in the *New York World*.² Fiske

¹Written by a reviewer of the *Outlines of Cosmic Philosophy* in *Popular Science Monthly*, VI (January, 1875), p. 367.

²Fiske, *Outlines*, I, p. vii.

enlarged the series to include the new philosophy based on evolution. Although he originally intended it to be a restatement of Herbert Spencer's philosophy, his own loom large throughout the work. In explaining his indebtedness to Mr. Spencer, Fiske prefaced his *Cosmic Philosophy* by acknowledging its foundations:

Without implying that Mr. Spencer should be held responsible for anything that is maintained in the following pages, I believe that the system here expounded is essentially his, and that such supplementary illustrations as I have added are quite in harmony with the fundamental principles which he has laid down.³

The "Prolegomena" of the *Outlines* serves to define the scope and methods of Fiske's "Cosmic Philosophy." After 1870 the notion of the "relativity of knowledge" became a common subject of discussion among philosophers.⁴ Fiske took it as a starting point. First, we can know things only as they exist in relation to our intelligence, not independantly from it. Secondly, the possibilities of thought are not the same as the possibilities of things. Just because we can think of something does not guarantee that it actually exists, and vice versa. For man, knowing something is a matter of classifying it with other things.

³*Ibid.*, p. xi.

⁴Houghton, *The Victorian Frame of Mind*, p. 14.

In Fiske's words, "knowing is classifying" and "cognition is possible only through recognition."⁵ It is the nature of our knowing process.

"Respecting the origin of the universe," he says, "three verbally intelligible hypotheses may be formed. We may say, with the Atheist, that the universe is self-existing; or, with the Pantheist, that it is self-created; or, with the Theist, that it is created by an external agency."⁶ Fiske concludes that the first two encounter problems of causation when we try to comprehend passage from non-existence into actual existence. Our only option is to make the fundamental assumption of an infinite and absolute First Cause. We are compelled by our limited faculties to go beyond these explanations to a Theistic explanation, the "most refined metaphysical philosophy of the day."

Concepts like the First Cause, the Infinite, the Absolute, can be known only if they can be classified. But the nature of our knowing process limits what we can conceive to those things that are caused, finite, and relative. The First Cause cannot be classified with things that are caused. Similarly, the Infinite can not

⁵Fiske, *Outlines*, I, pp. 11-12.

⁶*Ibid.*, p. 15.

be classified or understood like the finite, and the concept of the Absolute, which is one-of-a-kind, cannot be compared with anything else and exists without relation. There is an "eternal wall" that prevents us from knowing things in themselves. This is how our minds are organized. We use the elements of likeness, difference, and relation in all our perceptions. A notion like the Absolute does not provide such elements so it is unknowable to us.

Fiske concludes that this makes both God and the universe incomprehensible.⁷ Our intelligence imposes limits and our senses produce in us different states of consciousness. The scope of science, then, is to deal with particular orders of phenomena. Philosophy differs from science in that it deals with truths which are applicable to not just one order of phenomena but to all orders. Philosophy studies phenomena, not noumena; evolution, not creation; laws, not purposes; and How?, not Why? Science is quantitatively exact knowledge. It differs from common knowledge in complexity and its method of classifying.

⁷*Ibid.*

This does not mean that philosophy is dethroned, but rather it is defined as distinct from science in method, and it leads to greater generalization. Science deals with departments, philosophy is cosmic.

From his ideas of what we can know and what we cannot know, Fiske states that experience can only tell us about relations between phenomena, what they are or have been in the past. Experience cannot tell us that these relations must always be so, or that they will be so in the future. Fiske traces the history of thought on this matter and says that according to Hume's test of truth the only knowledge we can possess consists of a sequence of ideas. Knowledge is restricted to mental states, and that is all we can be certain of. Uniformity of experience is the sole criterion of truth, though this may not be true of the objective order of things.

Kant, he says, distinguished between contingent and necessary truths. Contingent truth comes from uniformity of experience. Uniformity of experience is not sufficient for a necessary truth because it cannot tell us that a certain event *must* always occur. The noumenal, or real world is not an object of sense, but is thought, and the mind supplies the necessity and universality in cognition.

Fiske felt that we are compelled to judge the unknown by the known. This is true of mathematical truths as well as physical truths. Our minds are like registers of our experience, and we can conceive only that which we have experienced. He defines a contingent truth as "one which generalizes the conditions."⁸ A necessary truth is one which "is expressed in a proposition of which the negation is inconceivable."⁹ These notions have been fused together by Spencer who says that whether or not an individual can form a specific conception depends on the experience he has had, and that as one matures and gains experience he may be able to conceive things before inconceivable.

Fiske says that "Mr. Spencer was the first to penetrate to the very core of the experience-philosophy when he perceived that the deepest warrant for the perfect conformity of a given proposition with experience is the unthinkableness of the counter-proposition."¹⁰ We do not experience the noumena, only phenomena, which produce in us a subjective order. We can never know if this objec-

⁸*Ibid.*, p. 58.

⁹*Ibid.*, p. 60.

¹⁰*Ibid.*, pp. 68-69.

tive order agrees or disagrees with the objective order among things. We can believe that this unknown objective order always acts on the mind in the same way it has always acted. We can have no criterion of Absolute Truth.¹¹

We should not be concerned by the incapability of transcending experience. The conceptions of daily life are made valid because we are aware that these conceptions are the way in which the Unknowable affects us. All that is necessary in science is the assurance that we have a subjective order that is persistent. For Fiske, it is as real as the objective order would be if we could know it.

Fiske saw modern philosophy as beginning with George Berkeley (1685-1753), the Irish philosopher. Berkeley denied the noumenon, the absolute existence of something independent of ourselves, of which phenomena are the manifestations. Fiske carefully clarified the common misunderstanding that most thinkers assume of Berkeley, that he denied the external world of phenomena. Berkeley was simply saying that if we cannot know the noumenon, we can not say anything about it. What causes the continually changing states of consciousness we experience is the will

¹¹*Ibid.*, p. 70.

of God. God has predetermined for us the sequence of states of consciousness.¹²

Johann Gottlieb Fichte (1762-1814), the German philosopher, like Berkeley, denied an objective reality and held the sequence of conscious states to be the only reality.¹³ He differed from Berkeley in believing that the sequence is determined by itself. In other words, it depends on the constitution of the mind. Fiske goes on to say:

From this doctrine have lineally descended all the vagaries of modern German Idealism. . . . Its extreme corollaries have been stated by Hegel, who, if I do not misinterpret him, regards the universe as nothing but the self-determined sequence of states of consciousness of an Absolute Intelligence, of which our individual intelligences are partial manifestations.¹⁴

This, to Fiske, is logical suicide, because

. . . we begin, with Kant, by saying that we have no knowledge of the objective order of things; we continue with Fichte, by saying that there is no objective order, save that which the mind creates for itself; and we end with Hegel, by identifying the objective order with the subjective, and maintaining that whatever is true of the latter is also of the former.¹⁵

¹² *Ibid.*, p. 76.

¹³ *Ibid.*, pp. 76-77.

¹⁴ *Ibid.*, p. 77.

¹⁵ *Ibid.*

This is actually saying that the possibilities of thought are identical with the possibilities of things, and Fiske cannot accept it because it goes against the relativity of knowledge - one of his basic assumptions.

Fiske believed that something underlies our changes in consciousness. He reached this conclusion because of the "unthinkableness" of its negation. Absolute existence cannot be identified with either mind or matter. "Without postulating Absolute Being - existence independent of the conditions of the process of knowing - we can frame no theory whatever, either of internal or external phenomena." The arguments of the Idealists and the Skeptics "consist of a series of dependent propositions, no one of which possesses certainty than the single proposition to be disproved."¹⁶ The doctrine of relativity of knowledge, he concludes, affirms the objective existence of an Unknowable Reality, and that all phenomena are its knowable manifestations.

From the acceptance of an Unknowable Reality, Fiske moves to the question of method. Upon which method, subjective or objective, should inquiries be conducted if we wish to reach truth? The subjective rests upon the assump-

¹⁶*Ibid.*, p. 87.

tion that the possibilities of thought are identical with the possibilities of things. It has an *a priori* nature that is founded upon some assumed necessary truths, and "whether employed by the metaphysician or the mythmaker, will be seen to consist in following the lead of a train of associated ideas, without pausing to test the validity of the association by interpreting the ideas in terms of sensible experiences."¹⁷

The objective method starts by verifying its premise, and is not founded upon only the "congruity of its syllogistic processes." Its conclusions are not accepted until they have been evaluated with the phenomena. In Bacon's terms, we substitute the inductive for the deductive method. "A scientific explanation," he said, "is a hypothesis which admits of verification, - it can be either proved or disproved; while a metaphysical explanation is a hypothesis which does not admit verification, - it can neither be proved or disproved."¹⁸ The difference between metaphysics and science is the difference between the subjective and objective methods.

¹⁷*Ibid.*, p. 105.

¹⁸*Ibid.*, p. 127.

Combining his thoughts on method and the relativity of knowledge, he says that because of the very constitution of the thinking process, our problems with causation are due to our inability to conceive absolute beginning or ending. The notion of "sequence" is clearly given in phenomena; and the "invariableness" of sequence is given in our experience of causation, as is the feeling of "necessity." But all these concepts, sequence, invariableness, necessity, only help to describe the process of causation. The process of causation itself is unknowable.

The "Prolegomena" is Fiske's foundation of introductory philosophic truth, from arguments of Bacon, Locke, Hume and Kant, and presented, for the first time, as a coherent whole by Herbert Spencer. He felt it necessary to defend his ideas and those of Spencer from accusations that they were merely imitations of the ideas of Comte. The positivist interpretation he employed is essentially different from Comte's, he says, and the doctrine of causation is more indebted to John Stuart Mill than to Comte. Nor was Comte the first to advocate the use of the objective method. On Comte's description of objective method and evolution, Fiske says that "in his ignorance of psychology, [he] seriously misinterpreted the import of these

truths. . . ."19 He did not interpret the process of deanthropomorphization of primitive philosophy by means of psychological explanation. In his Law of the Three Stages, Comte's generalization of the historic order of development was a revolution in philosophy. But it was an erroneous generalization because, unlike Cosmic Philosophy which recognizes no break in the course of the long development, the Positive Philosophy, when it announced itself as the final phase of the past course of development, ignored what the earlier stages had always taken for granted the existence of God.

Upon these two major points, the ignoring of the existence of God and the inability to advance the psychological explanation for the historic order of development, Fiske distinguished Cosmism for Positivism. He found Comte's classification of the sciences unsatisfactory. Positivism, for him, was the philosophy which rejects ontological speculation.

Fiske relied heavily on Spencer for the ideas of the "Prolegomena." But Spencer's emphasis on these ideas

¹⁹*Ibid.*, p. 167.

was not nearly as heavy in his own works. They were more like introductory statements, meant to define his position before taking up the Law of Evolution. Nearly half of the *Outlines* was devoted to their examination. He obviously saw more in Spencer's philosophy than the Law of Evolution. He advanced the position, which he also interpreted to be Spencer's, that phenomena are knowable manifestations of Unknowable Reality. Neither Idealism nor Positivism had settled the question of the reality of objective existence. He used Spencer's philosophy to deduce what he considered an intuitive attitude about noumena behind phenomena. He added his inherent optimism to the scientific method of Comte and Spencer. He substituted immutable laws for religious revelation, and interpreted Spencer in a way that emphasized the existence purpose. This would permit man to have confidence in the Unknown First Cause. His assertion was from a scientific position, and was therefore not guilty of ontological speculation. It was the foundation for a Cosmic Theism which permitted at least a relation to the Ultimate Being. He was attempting to establish scientific evidence for intuitively held convictions.

THE LAW OF EVOLUTION

Now what does all this drift of scientific opinion during more than two centuries mean? It can, of course, have but one meaning. It means that the world *is* in a process of development, and that gradually, as advancing knowledge has enabled us to take a sufficiently wide view of the world, we have come to see that it is so. The old statical conception of the world created all at once in its present shape was the result of a very narrow experience. . . . Now that our experience has widened, it is outgrown and set aside forever; it is replaced by a dynamical conception of a world in a perpetual process of evolution from one state into another state. . . . We can no more revert to the statical conception than we can turn back the sun in its course. Whatever else the philosophy of future generations may be, it must be some kind of philosophy of evolution.²⁰

John Fiske

The idea of evolution meant different things to followers of Darwin and followers of Spencer. To Darwin, the theory of evolution was a matter of biological law. As Alvar Ellegård says, the theory of Natural Selection "was complete without any supernatural element. It could explain the adaptiveness of evolution without assuming either 'directed' individual variations, or a 'preordained' law of development."²¹

²⁰ John Fiske, *A Century of Science and Other Essays* (Boston: Houghton, Mifflin and Company, 1899), pp. 36-37.

²¹ Alvar Ellegård, *Darwin and the General Reader* (Göteborg: Elanders Boktryckeri Aktiebolag, 1958), p. 17.

Spencer, on the other hand, saw the theory of evolution as a foundation upon which one could construct a whole world view, and he attempted to formulate such a system. He went farther than anyone else to interpret all areas of existence in terms of evolution. Under the tutorage of Spencer, Fiske sought to go beyond the limits Spencer had imposed to unite the findings of science and evolution with a theistic world view.

Systems of thought built upon the theory of evolution were well-received in America soon after the Civil War, and Darwin and Spencer were seen as providers of a new interpretation of the meaning of science. Almost everyone felt obliged to bring his world view into agreement with the findings of science. In the case of evolution, Hofstadter says that "Discoveries of this magnitude shatter old beliefs and philosophies; they suggest (indeed often impose) the necessity of building new ones."²² It will serve us well to digress briefly to try to understand, from Part II of the *Outlines of Cosmic Philosophy*, how Fiske viewed the doctrine of evolution, and how he used it to derive his own special theory on infancy.

²²Hofstadter, *Social Darwinism*, p. 3.

Having stated the history of his philosophic point of view in the *Prolegomena*, and having asked the question of which avenue is best to pursue to reach the widest generalization and the greatest truth, Fiske sets forth his plan for a synthesis of all knowledge. His aim was to bring the findings of science into harmony with the rest of thought, a grand synthesis of social theory, biological theory, evolutionary theory and religion, with Spencer as the key.

Part II of the *Outlines* begins the "Synthesis," and here Fiske examines the process of evolution from elementary matter and simple force and motion, through the process of becoming "heterogeneous," to the final evolution, the evolution of morality. In the chapter of "Matter, Motion, and Force" he says that a synthetic study of the universe must be founded upon an archtypal axiom. At the bottom of the "Abstract-Concrete Sciences," Molar and Molecular Physics and Chemistry, there are the twin theorems that, *Matter is indestructible*, and *Motion is continuous*.²³ But these theorems are not the most fundamental. They have been derived from an axiom that is more basic to physics, the assertion that *Force is persistent*.²⁴

²³Fiske, *Outlines*, I, p. 283.

²⁴*Ibid.*, p. 284.

This more fundamental axiom follows logically from our knowledge of chemistry and physics. For example, in making chemical compounds we know the combining power of each element and we know that there is always an "equality of action and reaction." It means that the combining forces cannot be isolated, cannot begin and end in nothing. Forces cannot disappear without result, and so the axiom that force is persistent is fundamental to physics and "is the deepest truth which analytic science can disclose."²⁵

Physics supplies us with the corrolaries that relations among forces are persistent, and that the direction of motion must be the resultant between the lines of greatest force and of least resistance. But, he says, motion is usually rhythmical, and this is so because "no portion of matter can move uninfluenced by some other portion. . . . Periodicity, rise and fall, recurrence of maxima and minima, - this is the law of all motions whatever, whether exemplified by the star rushing through space, by the leaf that quivers in the breeze, by the stream of blood that courses through the arteries. . . ."²⁶

²⁵*Ibid.*

²⁶*Ibid.*, pp. 300-301.

The complexity of rhythms is best illustrated in biology by ciliar motions, digestive motions, and a whole host of other types of movement. It is the mere coexistence of so many bodies in the universe which "necessitates perpetual rhythm, resulting in continuous redistribution of matter and motion."²⁷ Fiske found a new way of expressing Hereclitus' idea that the phenomena of the universe are in un-ending flux or change.

To go one step further in this quest for the concrete sciences and results, we see that not only does this continual rhythm, brought about by the complexity and immense numbers of bodies in the universe, necessitate a perpetual redistribution of matter and motion, it also results in a continuous alteration between concentration and diffusion. From Spencer he borrows the terms for these eternal processes of aggregation and dissipation; the terms are Evolution and Dissolution. The integration of matter and the accompanying dissipation of motion is Evolution, and the absorption of motion with its accompanying disintegration of matter is called dissolution.

Fiske saw this law of evolution as something akin to, and as important historically as, Newton's theory of

²⁷*Ibid.*, p. 312.

gravitation. It encompassed all phenomena. He made comparisons between the mental qualities of Spencer and Newton.

As in grandeur of conception and relative thoroughness of elaboration, so also in the vastness of its consequences - in the extent of the revolution which it is destined to effect in men's modes of thinking, and in their views of the universe - Mr. Spencer's discovery is on a par with Newton's.²⁸

After looking at many examples of development he concluded that evolution "is an integration of matter and concomitant dissipation of motion, during which matter passes from an indefinite, incoherent homogeneity to a definite, coherent heterogeneity; and during which the retained motion undergoes a parallel transformation."²⁹

Planetary evolution is one notable phenomenon to which Spencer devoted space in his own discussion of evolution. Fiske likewise discusses a nebular hypothesis which he admits, is the "very limit of scientific inference."

It is not necessary that we discuss the sequence of celestial and geological phenomena that formed the earth.

²⁸*Ibid.*, p. 327.

²⁹Quoted from Spencer's *First Principles*, p. 396, in Fiske, *Outlines of Cosmic Philosophy*, I, pp. 350-351.

We need only say that, like the development of the system of planets, the development of the earth was a process of integration of matter and dissipation of motion.

We get a rather modern sounding hint of the origin of life when Fiske explains how "higher and less stable aggregations of molecules which constitute protoplasm were build up in just the same way in which the lower and more stable aggregations of molecules which constitute a single or double salt were built up. Dynamically, the only difference between carbonate of ammonia and protoplasm . . . is the greater molecular complexity and consequent instability of the latter."³⁰

Two hypotheses appear in the discussion of the origin of species. One was framed long ago when men had different ideas about the structure of the earth and the heavens. The other is more modern, framed when men had a much better understanding of the solar system. The two theories are, of course, special creation or evolution ("derivation" is the term Fiske used).

Fiske found no problem discrediting the older hypothesis of special creation, and no problem finding

³⁰*Ibid.*, p. 433.

evidence for the hypothesis of evolution. Special creation, without the language of mythology, requires that the millions of atoms and molecules composing an animal come together, from distant places, in an instant. It does not account for the complexity of structure. This, in Fiske's thinking, cannot be included within the realm of science.

The doctrine of evolution, on the other hand, asserts a slow development, a gradual increasing in complexity through agencies which are everywhere present; "namely, individual variation, adaptation to environmental circumstances, and hereditary transmission of individual peculiarities."³¹ This hypothesis is not at all incompatible with the findings of science. The gradual derivation of species from others is a legitimate presumption in the realm of science.

Fiske presents four arguments or sets of facts which favor the doctrine of evolution; the classification of plants and animals, their embryology, their morphology, and their distribution in time and space.³² The doctrine of special creation fails to explain any of the above

³¹*Ibid.*, p. 442.

³²*Ibid.*, p. 443.

phenomena, and so is rejected.

Part II, Chapter X of the *Outlines* addresses the subject of "Natural Selection." Having accepted the process of evolution as the only explanation for the animate world as we know it, he took the time to explain the Darwinian theory. Fiske's attitude toward Darwin is an interesting one, for he saw Darwin as being neither "the originator of the derivation theory," nor was he just responsible for the doctrine of natural selection as Mivart (1827-1900), the Catholic zoologist, had said. To Fiske, Darwin's accomplishment was twofold. He presented the most powerful arguments for evolution from classification, embryology, morphology, and distribution; and he was first to describe the mechanism for evolution, i.e. natural selection.³³

Natural selection is important to Fiske because, as a mechanism, it conforms to the demands of positive science. It "appeals only to agencies which are still visibly in action."³⁴ His understanding of the mechanism was that,

³³Fiske, *Outlines*, II, pp. 7-8.

³⁴*Ibid.*, p. 8.

. . . the organisms which survive and propagate their kind are those which are best adapted to the conditions in which they live so that we may, by legitimate use of metaphor, personify Nature as a mighty breeder, selecting from each generation those individuals which are the fleetest, strongest, most sagacious, lions with the supplest muscles, moths with the longest antennae, molluscs with the hardest shells . . . until in the course of untold ages, the numberless varieties of organic life have been produced by the same process which man now takes advantage in order to produce variations to suit his own caprices.³⁵

It is a complex theory, says Fiske, and one must consider two major objections to it if he wishes to deal with it intelligently.

The first objection has to do with the scarcity of transitional forms in the sedimentary strata. This need not be alarming because first of all, the "transitional varieties are always likely to have been less numerous in individuals than the well-defined species which they serve to connect;" and secondly, the "geologic eras which have left in the rocks the record of their organic life have been usually the eras in which variation and extinction have been least rapid, and in which accordingly transitional varieties have been least numerous." Thirdly, some transitional forms have been discovered and more are

³⁵*Ibid.*, pp. 12-13.

expected.³⁶

The second objection has to do with the infertility of hybrids. We, as yet, do not understand the change by which related races eventually become infertile, but, according to Fiske, it is a change that is in agreement with what we know about the dependence of the reproductive system upon the rest of the animal. As the organism evolves to meet the environment, the reproductive system also changes, and its capacities change.

Fiske concludes, from his look at phenomena of organic evolution, that natural selection alone will not account for it. He sets forth an outline of agencies responsible for the processes of "equilibration and adjustment." Drawing from his earlier discussion of forces and matter, he views an organism as "a complex aggregate of matter, in which permanent structural and functional differentiations and integrations are rendered possible by the fact that it continually receives about as much motion as it expends."³⁷ Organisms are in a state of equilibrium where every change in external forces is met by a change in internal forces. There is a continuous

³⁶*Ibid.*, p. 43.

³⁷*Ibid.*, p. 64.

internal equilibrium operating within the organism between different parts. Life is a "perpetual balancing of external forces by internal forces."³⁸

Borrowing a phrase from Spencer's *Principles of Psychology*, Fiske says that, "the continuous maintenance of an equilibrium between the organism and its environment is the process in which life essentially consists. Life - including also intelligence as the highest known manifestation of life - is the continuous establishment of relations within the organism, in correspondence with relations existing or arising in the environment."³⁹ This brought Fiske back to some earlier thoughts about Comte. Comte had made strong objection to any science founded upon the observation and comparison of states of consciousness. He felt that psychology must be studied as a part of biology, and only by the methods of biology. Fiske argued, however, that when dealing with internal and external adjustments to the environment, biology limits itself to those outer agents which have actual contact with the organism, and leaves other kinds of inner adjustments to Psychology.⁴⁰

³⁸*Ibid.*, p. 64.

³⁹*Ibid.*, p. 67.

⁴⁰*Ibid.*, p. 96.

Again borrowing from the *Principles of Psychology*, he says that "as soon as the organism, feebly sensitive to a jar of vibration propagated through its medium contracts itself so as to be in less danger from the adjacent source of disturbance, we perceive a nascent form of the life classed as psychical. That is to say, whenever the correspondence exhibits some extension in space or in time, some increase of speciality or complexity, we find we have crossed the boundary between physical life and psychical life."⁴¹

Since the internal adjustments of an organism, adjustments not depending upon any direct impingement by the environment, are the realm of psychology and of psychical life, Fiske moves his inquiry to the composition of the mind. The fundamental process of the mind, he says, is the process of perceiving the quality of various relations. So the complicated process by which an astronomer calculates the distance of a planet depends on the compounding of perceptions of the equality or inequality of relations of position and magnitude. For a naturalist, the reasoning which places animals in a scheme of classification depends on compounding perceptions of likeness

⁴¹*Ibid.*, pp. 96-97.

between groups of relations. From the compounded perceptions of similarity, man carries on the act of classification. Classification is involved in every act of reasoning, and "reasoning or inference is involved in every act of classification."⁴²

The fundamental characteristic common to all psychological processes is the reception of sensations and classification of these sensations according to likeness. This fundamental characteristic of reception of sensations and their classification is performed by educated man, children, savages, and many animals. The psychological process is the same in spite of the varying degrees of complexity.

But having the power to recognize likeness is only having the primordial process necessary for intelligence. Consciousness is, on the other hand, an orderly succession of changes in perception specially arranged. The mind is continually differentiating states, and "since intelligence cannot arise or continue unless particular states of consciousness are continually known as like certain previous states, it follows that there must be a continuous *integration* of states."⁴³ The extent to which these

⁴²*Ibid.*, p. 107.

⁴³*Ibid.*, p. 119.

operations are developed determines the position of an organism evolutionarily. "For clearly, when an intelligence is developing in the midst of a complex environment, the greater number of subjective relations which are adjusted to objective relations, the greater will be the extent to which the differentiation and integration of conscious states will be carried."⁴⁴

How did the first cognition come about? How can intelligence begin at all? Evolution has helped us to understand how such abilities did not just come into being all at once. Primitive living things could only receive few stimuli, and response was reflexive. It involves physical action which accompanies psychical changes, and involves the movement of molecules. The basic unit of mind is a "psychical shock," which is compounded according to the structure of different nerves. Throughout the process of evolution there had been "a fundamental unity of composition . . . from the highest to the lowest."⁴⁵ The amount of intelligence possessed by any one organism, therefore, depends partly on the complexity of the nervous system and the degree of

⁴⁴*Ibid.*, p. 131.

⁴⁵*Ibid.*, p. 161.

nervous system cephalization.

In the lower organisms there is a simpler nervous system with very little tendency toward continuous development, whereas, with the higher organisms there is a continual tendency toward formation of new "transit-lines." The distinctly automatic character of the lower animals is gradually lost to more complex consciousness. "The number and direction of these transit-lines in any brain is due to the cooperation of innumerable ancestral and individual experiences."⁴⁶

Locke was wrong when he said that the mind of the infant was a *tabula rasa*. It is instead, says Fiske, a complex mass of nerve-tissue possessing certain potential and nutritive tendencies. And Kant was wrong for assuming that there is intuitive knowledge not due to experience, for innate ideas are really only tendencies developed over countless generations, not firm ideas until they are developed. But Fiske saw value in Locke's assertion that all knowledge is ultimately derived from experience, and in his recognition that the brain had certain tendencies. "The Doctrine of Evolution harmonizes these two seemingly-opposite views, by showing us that in learning we are merely acquiring latent capacities of reproducing ideas;

⁴⁶*Ibid.*, p. 161.

and that beneath these capacities lie more or less powerful nutritive tendencies, which are transmissible from parent to child."⁴⁷

Fiske reaches the point, in the chapter entitled "Sociology and Free-will," where the notion of "law" encounters difficulty. That is, can we frame any sort of theory about human actions? Are volitions caused or are they not? The causation theory, for most men, was identified with fatalism, and they rejected it. For Fiske the question of free will was a relatively easy one to answer. "From whatever scientific standpoint we contemplate the doctrine of the lawlessness of volition, we find that its plausibleness depends solely on tricks of language." We personify Will as an entity which makes distinct acts; and to Will we attribute a meaningless word, "freedom," to mean "the process whereby feeling initiates action." Another is to assume that motives are entities outside a person, and that Will is influenced by them.⁴⁸

These tricks of language deceive us when talking about will. To understand volition properly, we must realize that a person is the sum of his conscious states.

⁴⁷*Ibid.*, p. 161.

⁴⁸*Ibid.*, p. 188.

It is the person who determines the acts of will. "Since liberty of choice means nothing if it does not mean the power to exert volition in the direction indicated by the strongest group of motives; and since all control over character is impossible unless desires and volitions occur in a determinate order of sequence; it is the doctrine of lawlessness and not the causationist doctrine which is incompatible with liberty and destructive of responsibility."⁴⁹ He concludes that "whether we contemplate volitions themselves, or compare their effects, whether we resort to the testimony or psychology of to the testimony of history, we are equally compelled to admit that law is coextensive with all orders of phenomena and with every species of change."⁵⁰

Social changes conform, as do physical changes in organisms, to the law of evolution. And the evolution of society, like the evolution of life, conforms to the universal law of evolution which Herbert Spencer discovered. Fiske's whole philosophy has been building up to the discussion of the evolution of society, for it is with the appearance of moral behavior in society that we see an

⁴⁹*Ibid.*, pp. 188-189

⁵⁰*Ibid.*, p. 189.

unparalleled change in evolution. Social progress brings a change toward psychical development, away from physical development. Essentially, social progress is the integration of small and simple communities into larger communities that are of higher orders of organization. But there is also the "more and more complete subordination of the physical forces which tend to maintain isolation, to the psychical forces which tend to maintain aggregation." Social progress is a product of intellectual and moral adaptations, and is determined by steadily increasing heterogeneity in the environment. "In these respects the prime features of social progress are the prime features of evolution in general."⁵¹

In Part I and most of Part II Fiske laid the groundwork for his view of evolution. He eloquently restated those Spencerian concepts that bear upon the evolution of the mind of man. To solve the problem of how intelligence began at all, Fiske envisioned mental life as being composed of separate, unconscious elements which are compounded to different degrees in various levels of animal life. He was building up to the appearance of higher faculties.

This was his argument for the law of evolution as

⁵¹*Ibid.*, p. 209.

a universal truth. It was the first truth having application to everything in the universe, and was the first such generalization, thanks to Spencer, to be constructed and presented according to the objective method of science. But with his criticism of special creation and his de-anthropomorphization of God, this application of evolution to mental faculties of man opened Fiske to the charge of atheism. And since even cognition is subject to slow evolution, he was also open to charges of determinism.

Fiske's optimism dominates here as elsewhere. He did not see determinism in the universal law of evolution. Nor did he foresee the possibility of degeneration. We will see that as he built upon this law as it relates to man he could see only progress and good. Pessimism never occurred to him, and he presented arguments that allowed conflicting ideas such as free will and determinism to be overcome. We will next examine his greatest originality, his interpretation of the consequences of evolution for the morality of man.

THE PROLONGATION OF INFANCY:
RELIGION AND SCIENCE RECONCILED

The creature's career is no longer exclusively determined by heredity. There is a period after birth when its character can be slightly modified by what happens to it after birth, that is, by its experience as an individual. It becomes educable. . . . Horses and dogs, bears and elephants, parrots and monkeys, are all teachable to some extent, and we have even heard of a learned pig. Of learned asses there has been no lack in the world.⁵²

John Fiske

In the *Descent of Man* Darwin said that since man was a product of natural selection, everything including his mental abilities and spiritual qualities should have been derived from rudiments present in lower animals.⁵³ The vogue of evolution gave new perspective to the question of the origins of conscience.

Before publication of the *Origin* there were two major attitudes toward the origin of moral behavior. Utilitarians were of the opinion that morality is nothing more than the means of obtaining happiness. Jeremy

⁵²John Fiske, *Excursions of an Evolutionist* (Boston: Houghton, Mifflin and Company, 1899), p. 313.

⁵³See chapter III in Charles Darwin, *The Descent of Man* (London: John Murray, 1901), pp. 98-147.

Bentham (1748-1832) felt that the test of moral conduct was the greatest happiness of the greatest number. Utilitarianism reached its highest form in the *Logic* (1843) of John Stuart Mill (1805-1873) and in the theological utilitarianism of William Paley's (1743-1805) notion that virtue is seeking happiness in obedience to the will of God. Moral actions were those that were useful - those that brought the greatest satisfaction. Right and wrong were determined by personal and social effects. Right and wrong were outside of the test for truth, and were made by factors outside of the individual.

Their opponents were the Intuitionists who felt that the determiner of man's morality was something inside each individual, a conscience, an intuition which did not depend upon intelligence or experience. Bishop Joseph Butler (1692-1752) is the most distinguished in a line of English and Scottish philosophers who grounded morality in conscience, a reflective faculty that can discern the moral nature of actions. It was inherited from God, and was not a force operating from outside. Intuitionists argued that one could observe a sense of right or wrong in young children who obviously had little or no experience, and could not base moral decisions on utility.

Utilitarians disagree, saying that children learned general moral attitudes from their parents. And no less important is the fact that what we call conscience varies within the same individual throughout his life. External influences determine what is useful, and therefore what is right; these things change.

Human evolution in the post-Darwinian period was not always considered in terms of morphological features, comparing man to lower primates. Rather, man was viewed in broader psychological terms, emphasizing the evolution of the mind. Darwin had focused upon the differing mental capacities of organisms in so far as they demonstrated graduations in the animal kingdom, but his theory stimulated other scientists, sociologists, economists, to examine evolution as it was thought to occur in every aspect of human institutions. Institutions like marriage and the family were examined in hopes of determining their origins and the stages of development through which they had passed.

The common assumption was that evolution was not a process confined to the organic level, but occurred at the cultural and mental levels. After Darwin, the social and psychological components of human phylogeny received increased attention. Spencerian evolution had wide appeal,

pursuing all aspects of development, because it reconciled the two pre-Darwinian positions saying that the sense of morality was indeed latent within man, unrelated to experience, and that moral determinations were based, to a large degree, upon utility.

But evolution had raised the question of whether man's possession of special mental attributes provided some objection to his having evolved from lower animals. Two main qualities that had always been regarded as distinguishing man from all others were the power to reason abstractly, and the sense of morality. Does man really differ absolutely by possessing a soul? Darwinism and its successors had cast a shadow over the nature of man, and even though men like Spencer were speaking of the progress and ultimate perfection of man, there was a widespread concern over the loss of traditional morality.

Two opposing attitudes developed; one emphasized the brutality in the struggle for existence, where "might is right" and the unfit simply perish; the other spoke of freedom, humanitarianism, cooperation and progress. In his *Data of Ethics* (1879) Spencer appeared to be reconciling these difficulties. E. L. Youmans heralded the end of the problem and the answers so many had been seeking. It was to be found in the culmination of a comprehensive plan, on which Spencer had been working for thirty-seven

years, "reorganizing the sciences, and . . . creating a new philosophy of nature."⁵⁴

Youmans says that in his youth Spencer found himself interested in the study of ethics and society. Spencer early concluded that "the basis of morality, as currently accepted, is unsatisfactory - lacks scientific validity."⁵⁵ Spencer had said:

Give us a guide, cry men to the philosopher.
We should escape from these miseries in which
we are entangled. A better state is ever present
to our imaginations, and we yearn after it; but
all our efforts to realize it are fruitless. We
are weary of perpetual failures: tell us by
what rule we may attain our desire.⁵⁶

Peel tells us that the "fundamental purpose of Spencer's life work was to provide a scientific morality; the ethics was the culmination."⁵⁷

Spencer recognized the principle that the accumulation of fundamental changes is based on heredity, and that mental and moral faculties were part of what was inherited. Ideas evolved, and as hereditary factors, they were part of

⁵⁴Edward Livingston Youmans, "Spencer's Evolution Philosophy," *North American Review*, CXXIX (October, 1879), pp. 398-403.

⁵⁵*Ibid.*

⁵⁶Spencer, *Social Statics*, p. 1.

⁵⁷Peel, *Herbert Spencer*, p. 84.

racial intelligence and moral sentiments. With this knowledge he was going to reconcile "the conflicting schools of intuitionism and utilitarianism in mental and moral philosophy."⁵⁸

Many, none the less, felt that Spencer's *Ethics* did not solve the dilemma of morality. For one thing, the concept of the "Unknowable" as a limit beyond which speculation becomes illusive tended to rule out a great deal of the sphere of valid knowledge, and was ranked as negative and destructive. A common sentiment about Spencer was that the answer was not in his ideas and it was something they would have to wait for. What then should be done about the present? On what basis should one make ethical decisions while waiting for Spencer or someone else to develop a new ethics. Would the moral code of Christianity remain unaffected, or would a new wave of evolutionary evidence mean the destruction of the Christian faith?

These questions prompted Goldwin Smith to write, "It may be that morality is now about to disengage itself finally from religion, and to find a new basis in science; but in the past it has rested on religious belief, and the

⁵⁸Youmans, "Spencer's Evolution," p. 394.

collapse of religious belief has accordingly been always followed by a sort of moral interregnum."⁵⁹ Smith expressed the great concern in the nation for the apparent futility common in the world:

In the minds of some men who combine great depth of character with powerful and scientific intellect the religious sentiment . . . appears as a sentiment to have grown stronger than ever. Here, perhaps, is something which whispers that the succession of attempts to connect the soul and life of man with the soul and life of the universe, which we call religions, and which have upborne the great types of character, the great civilizations, the great efforts of humanity, are not destined to end in futility and final failure. But at present, if a man of this class admits you to the recesses of his thoughts, you find there nothing definite, nothing communicable, nothing which will serve the purposes of humanity at large; some make-shift drawn from personal study or experience, some mixture, perhaps, of Christian ethics with ancient philosophy, a plank of the theological wreck which will barely hold two.⁶⁰

Smith clearly called attention to the moral crisis coming out of the evolution debate, which would more than likely be accompanied by political and social crises. The questions were obvious. How do we prevent societies from accepting the dictum that "might makes right?"

⁵⁹Goldwin Smith, "The Prospect of a Moral Interregnum," *Atlantic Monthly*, XLIV (November, 1879), p. 630.

⁶⁰*Ibid.*, p. 636.

Another concerned writer, Francis Bowen of Harvard, tried to show that Darwinism was only reviving nearly forgotten Malthusian notions which were wrong then and are wrong now. Malthusianism became popular in England, not just because it refuted the revolutionary doctrines of men like Godwin and the French Jacobins, but because it seemed to 'relieve the rich from any responsibility for the sufferings of the poor, and from any obligation to contribute to their support.'⁶¹ Bowen found numerous contradictions to the ideas of Malthus. He found the "bounties of nature" to be "practically inexhaustible," and that in the ability to increase food supply, "the only limit to the quantity of sustenance which any nation is able to procure . . . is the amount of wealth which it is capable of producing."⁶² In addition, "Universally the law is that the numbers of the poor increase most rapidly, of the middle classes more slowly, and of the upper or wealthier ones either not at all, or so slowly as to hardly be perceptible."⁶³ So those supposedly least fitted are most fertile, and the

⁶¹Francis Bowen, "Malthusianism, Darwinism, and Pessimism," *North American Review*, CXXIX (November, 1879). p. 450.

⁶²*Ibid.*, pp. 452-453.

⁶³*Ibid.*, p. 454.

whole social process contradicts Malthus and Darwin. The current wave of Darwinism was serving only to once again stir up this pessimistic view of the world.

Fiske recognized these difficulties, especially the dilemma for the Christian. He believed that he could resolve the moral dilemma if he could simply show how that particular characteristic which sets man apart from the world came about *through* evolution. We come to the thrust of this dissertation, the principle contained in the *Outlines of Cosmic Philosophy*, to which his biographers and critics only briefly refer, the principle of the prolongation of infancy.

Fiske thought of it as the cornerstone of his philosophy. Hofstadter indicates that through this principle he "attempted to give the higher ethical impulses a direct root in the evolutionary process."⁶⁴ Further, according to Pannill, Fiske "sought to show that the evolutionary interpretation of history substantiated man's convictions of progress and the possibility of the Kingdom of God on earth," and that "he tried to establish, through an evolutionary interpretation of the stages of conscious-

⁶⁴Hofstadter, *Social Darwinism*, p. 94.

ness of man, the basis for an adequate theism."⁶⁵ The prolongation of infancy would not only explain how man became a social being, it would tie the concept of morality, and therefore religion, to the process of evolution.

Josiah Royce (1855-1916), the American philosopher from Harvard, wrote an introduction to the 1902 edition of the *Outlines* in which he spoke of Fiske as one of those thinkers who were active during a time when there was a tremendous interest in the development of life, and that Fiske would have pursued the study of existence if Spencer and Darwin had never lived. His description of Fiske was that his major attention was "given to the problems of human development, - to the laws of history, to the evolution of doctrine, and to religious issues. It is also exemplified by his own principle contribution to evolutionary theory, *viz.* the doctrine of the significance of the prolongation of the period of infancy as a factor in the evolution of mankind."⁶⁶

⁶⁵Pannill, *The Religious Faith of Fiske*, p. ix.

⁶⁶Fiske's writings were published in 1902 in a collection entitled *The writings of John Fiske*, DeLuxe Edition, 24 vols. Cambridge, Mass.: Riverside Press, 1902, and Josiah Royce wrote the introduction to *Outlines of Cosmic Philosophy*, Vol. XIII, pp. xl-xli.

This doctrine is the only claim Fiske ever made to originality in science. In the "Preface" to the *Outlines*, Fiske says, "The following chapters on the Genesis of Man, along with considerable expository and critical matter, contain a theory as to the part taken by the prolongation of human infancy in originating social evolution, which is entirely new in all its features. With the exception of numerous minor suggestions scattered here and there throughout the work, these are the only parts of the constructive matter which I can claim my own."⁶⁷ The only additional original material, he says, comes with his arguments for the reconciliation of science and religion. "The rest of the new critical matter, as before hinted, occurs in Part III., where it is attempted to show that the hostility between science and religion, about which so much is talked and written, is purely a chimera of the imagination."⁶⁸ Fiske thus made clear his indebtedness to Spencer, and his own claim to originality was set forth.

What exactly were his ideas, and how did he arrive at his particular solution to the dilemma? As a young man preparing for college, he became interested in the

⁶⁷Fiske, *Outlines*, I, p. viii.

⁶⁸*Ibid.*, pp. xi-xii.

nature and origins of moral behavior. As we saw earlier, one of the books he read was Buckle's *History of Civilization in England*. It contained a philosophy of history which was able to answer his intellectual demands; it explained occurrences in history by means of physical law.

When Fiske went to Harvard, Spencer captured his interest, and he began to look at Buckle's ideas more critically. Buckle had said that mental laws are divided into moral laws and intellectual laws. Moral laws were unchanging while intellectual laws changed with time. Buckle could not identify any change having occurred in man's faculties, probably because any change that might have taken place was so far in the past as to be undetectable, so he invented what he called the "march of the mind" as the agent for progress in history.

Fiske did not agree that moral truths do not change. Virtue is inherited, he thought, and inheritance of mental qualities changes by use and disuse. This was something he got from Spencer's *Social Statics*. He wrote an article called "Mr. Buckle's Fallacies" criticizing the whole idea. He said that when one deals with history and with the complex civilizations of Europe, simple physical

causation does not suffice.⁶⁹ For the rest of his career he would continue to look at the question of change in morality.

It was not long before he began to think of a suitable alternative way of looking at the subject of morals. He had the idea that the extended learning period in man is linked directly to the process of evolution, and that the possession of a moral nature was due to this longer period of dependency. It came to him because of something he had read in Alfred Russel Wallace's (1823-1913) 1859 book on the Malay Archipelago.⁷⁰ Fiske says that "in the spring of 1871, when Darwin's 'Descent of Man' came out, just about the same time I happened to be reading Wallace's account of his experiences in the Malay Archipelago, and how at one time he caught a female orang-outang with a newborn baby, and the mother died, and Wallace brought up the baby orang-outang by hand." He says, "this baby orang-outang had a kind of infancy which was a great deal longer than that of a cow or a sheep, but it was nothing

⁶⁹Fiske wrote "Mr. Buckle's Fallacies" when he was nineteen years old, and published it in the March *National Quarterly Review* of 1862. It is included in his book, *Darwinism and Other Essays*, pp. 143-207.

⁷⁰John Fiske, *Outlines*, II, footnote p. 343, and in *Excursions of an Evolutionist*, p. 313, and in *A Century of Science*, Chapter IV.

compared to human infancy in length."⁷¹ The baby orang-outang could not do the things animals of less intelligence can do when first born, yet its period of dependence was shorter than man's.

Wallace had made the suggestion that natural selection, in working toward the genesis of man, began to take a new path in making psychical changes instead of physical changes.⁷² Fiske seized upon the idea and developed it for man. "And while I was reading of that I thought, Dear Me! if there is any one thing in which the human race is signally distinguished from other mammals, it is in the enormous duration of their infancy; but it is a point that I do not recollect ever seeing any naturalist so much as allude to."⁷³ He happened to be studying psychology at the time, particularly the organization of experiences, "the way in which conscious intelligent action can pass down into quasi-automatic action, and the generation of instincts and various allied questions." He asked, "Can it be that the increase of intelligence in an animal, if carried beyond a certain point, must necessarily result in

⁷¹Fiske, *A century of Science*, p. 105.

⁷²*Ibid.*, p. 112.

⁷³*Ibid.*, p. 106.

prolongation of the period of infancy, - must necessarily result in the birth of a mammal at a less developed stage, leaving something to be done, leaving a good deal to be done, after birth?"⁷⁴

After thinking more about the nature of morality and of the mental faculties, he presented his thoughts on the subject for the first time in an article he wrote for the *North American Review*. He called it "The Progress from Brute to Man."⁷⁵ Shortly afterwards he began work on the *Outlines of Cosmic Philosophy*, in which he incorporated the general thesis throughout the work, and concentrated upon it in chapters XXI (The Genesis of Man Intellectually) and XXII (The Genesis of Man Morally).

Throughout the parts of the *Outlines* discussed in the previous section, Fiske pointed ahead to the coming discussion of his major argument. In Part I, where he advances the main points of Spencer's philosophy, he scatters here and there hints of the importance of infancy. In the discussion of "The Scope of Philosophy" in chapter II, he says that,

⁷⁴*Ibid.*

⁷⁵"The Progress from Brute to Man," *North American Review*, CXVII (October, 1873) p. 299. Part II, Chapters XXI and XXII of the *Outlines* contain its essence.

Coming lastly to man, but little illustration will be needed to show that his acquisition of knowledge is in like manner the progressive establishment of distinctions. The supremely important knowledge which we acquire during early infancy consists in the mental grouping of objects according to their various properties; in the gradual recognition of distinctions between hardness and softness, sweetness and acidity, rigidity and elasticity, roughness and smoothness. . . . Later in life, our intellectual education consists still in the progressive grouping of experiences.⁷⁶

Here Fiske is including infancy as an important factor in his argument about the nature of philosophy. In defining knowledge as a "classification of experiences" he ranks animals according to their abilities to distinguish among the phenomena of their surroundings. Simple animals are capable of only the simplest distinctions. Man, on the other hand, is capable of great accuracy in discrimination. It is something we are capable of because of the longer period spent in infancy acquiring knowledge of distinctions.⁷⁷

In the discussion of the universality of causation in the chapter, "The Test of Truth," Fiske says that if the universality of causation is an inherent belief necessitated by the constitution of the human mind, we should

⁷⁶Fiske, *Outlines*, I, pp. 28-29.

⁷⁷*Ibid.*, p. 28.

find this belief to be universal. But, "it is hardly necessary to say that this is not the case. Children, savages, and other persons with undeveloped powers of reasoning believe in particular acts of causation, but not in the universality of causation - a concept which is too abstract for their crude intelligence to grasp."⁷⁸ He is directing attention to nature of infancy and to the emergence of the abstract characters of the mind.

When he carefully developed the concepts of noumenon and phenomenon, he asserted that we are unable to know the Absolute, only the relative. What we have is relative truth. The key to the question of how to deal with the problems of relative truth is left to a future chapter on the evolution of intelligence.

When in a future chapter, the exposition of the Doctrine of Evolution shall have advanced so far that we may profitably consider the nature of the process by which intelligence has arisen, we shall be enabled to carry much farther the reconciliation, here dimly foreshadowed, between the great opposing theories of the experimentalists and the intuitionists. . . . It will be shown that the Doctrine of Evolution affords the means of reconciling the psychology of Locke and Hume with the psychology of Leibnitz and Kant, not by only half-way measures of compromise, but by fusing them together in a synthesis deeper and more comprehensive than either of them singly has succeeded in making.⁷⁹

⁷⁸*Ibid.*, pp. 53-54.

⁷⁹*Ibid.*, pp. 72-73.

Although the bulk of volume one is devoted to reiterating Spencer's ideas and emphasizing those points which he thought needed emphasizing, Fiske has been leading up to his full argument for the important role of infancy.

In chapter XXI, "The Genesis of Man, Intellectually," he recognizes the chief difficulty for the acceptance of the Doctrine of Evolution to be that higher and lower forms of intelligence are related. But, he argues, the critics of the development theory have the wrong perspective. They tend to look only at extremes of intelligence, to think of modern man only in terms of "upright, cultivated, and well bred people," and to wonder how they could have descended from "mere brutes." It was because of ideas such as this, says Fiske, that the Catholic zoologist, St. George Mivart persisted in his opposition to Darwin. "This perspective is overcome if, instead of comparing a European man's brain with that of a chimpanzee, we compare an Australian aborigines's brain with that of a chimpanzee. The similarity is much more evident, and the situation is different." The important thing we would notice right away is that "in structural complexity the European man surpasses the Australian more than the Australian surpasses the chimpanzee."⁸⁰

⁸⁰Fiske, *Outlines*, II, p. 287.

Not only do man and brute seem to differ greatly in intellect and aesthetic sense, they also differ considerable in their capability of progress. Different races of men seem to have differing abilities to progress, and if one goes back in time the progressiveness of races diminishes. "No previous century ever saw anything approaching to the increase in social complexity which has been wrought in America and Europe since 1789. . . . How rapid the changes in philosophic thinking since the time of the *Encyclopédistes*, in comparison with the slow though important changes which occurred between the epoch of Aristotle and the epoch of Descartes!"⁸¹

What Fiske wanted to illustrate was the true way to view the evolution of man. Just as it is in the universal process of going from the state of homogeneity to a state of heterogeneity, where the more heterogeneous an aggregate becomes the more rapidly must differentiation go on; so it is with the process of evolution, "which at first goes on with comparative slowness, must, owing to the multiplication of effects, go on with increasing rapidity."⁸²

⁸¹*Ibid.*, pp. 290-291

⁸²*Ibid.*, p. 292.

Social evolution is "a new order of evolution" in that it is a quite complicated type of intellectual change. In man's past, part of the struggle for survival included the formation, at some point, of comparatively stable groups. This was slow at first, but keeping with the nature of the evolutionary process it more recently operated with increasing rapidity. Remaining Spencerian, he says that this would result with some final stage of equilibrium. It is a new order because it is impossible to attempt to understand man, as he exists in the modern world, by general laws of organic evolution. Any evolutionary explanation involving man must include consideration not only of physical structures like the hand or the eye, but should more than any other factor, consider that which separates man from all other animals, his psychological difference.

"The all-important contrast, therefore . . . is not between man and other primates, extinct and contemporary, but between civilized and primitive man."⁸³ This contrast shows the tremendous intellectual advantage made by civilized man. Even though Australian man is "zoologically" of the same genus, he is inferior in progress and is further

⁸³*Ibid.*, p. 294.

removed from European man than he is from the gibbon or gorilla. "We may represent primitive man as an animal in whom, physical and psychical changes having hither to proceeded *pari passu*, intelligence had at length arrived at a point where variations in it would sooner be seized on by natural selection than variations in physical structure."⁸⁴ To Fiske's way of thinking, "the progress of mankind was like a geometric progression."⁸⁵ It is with the beginning of recorded history that we see the "large numbers," the greater amount of psychical achievement than in all the years of pre-glacial man.

This "gradual but increasingly rapid intellectual progress" is "regarded as a growing correspondence between the human mind and its environment."⁸⁶ In examining the great differences in mental capacity between animals, primitive men, and modern men, mental operations were seen to be fundamentally the same; there is a grouping of objects and their relations according to similarity, and experiences are "classified." From ideas developed in

⁸⁴*Ibid.*, p. 295.

⁸⁵*Ibid.*, p. 296.

⁸⁶Fiske, *Outlines*, II, p. 297.

chapter two, Fiske arrived at the conclusion that science is nothing but an extension of ordinary knowledge, or common sense. "Higher orders of knowledge" seem to be more remote, more general, more abstract in their definition of knowledge than the "lower orders."⁸⁷ For psychical differentiation this meant that "as we advance through the animal kingdom from the lowest to the highest forms, this correspondence between the mind and the environment extends to relations which are continually more remote in space and time, more clearly defined, but at the same time more general. . . ."⁸⁸

The review of the progress of intelligence ends with human intelligence, "which is determined by social conditions." In the later stages of this progress the determining conditions are the increase in size and heterogeneity of the social environment. With respect to space and time, some animals may have a better correspondence in space than man does; but even this is a result of the surroundings civilized man operates in. His perception of space surpasses the savage, especially with the aid of scientific knowledge.

⁸⁷Fiske, *Outlines*, I, pp. 33-38.

⁸⁸Fiske, *Outlines*, II, p. 298.

With respect to time, the "extension of the correspondence in time is a much more conspicuous and more distinctly human phenomenon."⁸⁹ Adjustments to the future attain a higher order development only in the human race. "In no other respect is civilized man more strikingly distinguished from the barbarian than in his power to adapt his conduct to future events. . . ."⁹⁰

Other increases in specialization and complexity are indicative of the intellectual progress of man. Fiske regards this as a "process of adjustment of inner to outer relations," and concludes that "in all the most essential features of this progress there is a wider difference between the civilized man and the lowest savage than between the savage and the ape." The qualities that we consider to absolutely distinguish us from animals have been slowly acquired through long ages of social evolution, "and are shared only to a quite insignificant extent by the lowest contemporary races of humanity."⁹¹

But all of these qualities are not in themselves what makes man intellectually superior to the savage. The

⁸⁹*Ibid.*, p. 301.

⁹⁰*Ibid.*, p. 303.

⁹¹*Ibid.*, p. 311.

intellectual superiority is summed up in man's "superior power of representing that which is not present in his senses, . . . to reproduce copies of his own vanished states of consciousness."⁹²

These conclusions can all be connected in actual physical structure, in the size and complexity of the cerebrum. "The cerebrum is the organ especially set apart for the compounding and recompounding of impressions that are not immediately sensory. . . . The progress to higher representativeness ought to be accompanied by a well-marked growth of the cerebrum relative to other parts of the nervous system."⁹³ This hypothesis is confirmed anatomically by measurements of cranial capacity. Fiske says that there seems to be a minimum of brain substance that is associated with changes in physical structure. Up to a point both the brain and the body seem to be equally subject to the influences of evolution, to natural selection. When the brain reaches a certain size and complexity, the rest of the body does not seem to be influenced as much by natural selection. The changes that occur under such a condition seem to be confined to the brain

⁹²*Ibid.*, p. 312.

⁹³*Ibid.*, p. 316.

itself, primarily with the cerebrum. There seems to be a point at which there is no turning back, a critical point in cranial capacity after which natural selection begins to act primarily upon psychical development.

The explanation for what that point is comes, according to Fiske, from Mr. Wallace. Wallace said that when there are environmental changes, inferior animals respond mostly by physical changes. So natural selection deals with modification of body structures. But when animals appear with superior intelligence, natural selection will operate on variations in intelligence. Environmental changes can be met by "intelligent contrivances," and so anatomy and external appearance may vary little through long periods of time, but the structure of the cerebrum may change rapidly.

This is the key to the comparison of man and ape. Physically, anatomically they differ very little as compared to cerebral structure. "Coupled with what we know concerning the immense antiquity of the human race, Mr. Wallace's brilliant suggestion goes far to bridge over the interval, which formerly seemed so impractical, between brute and man."⁹⁴

⁹⁴Fiske, *Outlines*, II, p. 319.

The length of time in which man has been able to record his own history is minute compared to the length of time he has existed. Fiske concludes that much of his time was spent acquiring his superior intelligence which is his distinguishing characteristic. More interestingly, Fiske concludes that "no race of organisms can in the future be produced through the agency of natural selection and direct adaptation, which shall be zoologically distinct from, and superior to, the human race." Since the same forces that have been modifying lower species for a long time have been modifying man directly, and to a great extent in intelligence, and only slightly indirectly in physical makeup, "it follows that mankind is destined to advance during future ages in psychical attributes, but is likely to undergo only slight changes in outward appearance."⁹⁵

The reason why man will not become something else is because intellectual and moral relations keep him in equilibrium with the physical environment. When the environment changes, man will change intellectually and morally. In man's future we see "not physical modification, but CIVILIZATION." The obvious question, once we

⁹⁵*Ibid.*, p. 321.

hear Fiske's conclusion that psychological evolution is the reason why man will remain the same in the future, is how did moral feelings, which are at the heart of man's social behavior, come into being. In the "Genesis of Man, Morally," Fiske offers his novel explanation for moral feelings. He was convinced that the moral sense was not ultimate, rather it was something derived from "slowly organized experiences of pleasures and pains."⁹⁶ The response of very primitive animals as compared to higher animals is a matter of reflex actions versus conscious agreeable or disagreeable states. In either case, "there is a seeking of that which is beneficial to the organism, and a shunning of that which is injurious."⁹⁷

"We may surmise," he says, "that as soon as any animal's psychological life becomes sufficiently complex to be attended by distinct states of consciousness, the presence of that which is beneficial is accompanied by a pleasurable feeling which leads to seeking of it, while the presence of that which is injurious is accompanied by a painful feeling which leads to shunning of it."⁹⁸ There

⁹⁶*Ibid.* p. 327.

⁹⁷*Ibid.* p. 329.

⁹⁸Fiske, *Outlines*, II, p. 330.

arises an equilibration, not always the same in terms of excess or deficiency in each function. To maintain the best or most comfortable life, there is a balance between excess and deficiency, and this is "kept up only by natural selection or direct equilibration."

A group of animals possessing a function which is operating in excess "is quickly reduced by natural selection, because, owing to the universal slaughter, the highest completeness of life possible to a given grade of organization is required for the mere maintenance of life."⁹⁹ With man this is not always so, because in civilized life certain functions may operate in excess and natural selection is powerless to change it. This is because "mankind has so many other functions, besides the excessive ones, which enable it to subsist and achieve progress in spite of them, that their reduction to the normal standard is left for the slow process of equilibration."

Direct equilibration is very complicated, especially among progressive races. "A new set of readjustments needs to be made before the old ones are completed; and the result is that there are always a number of

⁹⁹*Ibid.*, p. 334.

functions somewhat out of balance." Things such as overwork can bring imbalance to the usual equilibrium between pleasure and pain because certain functions are overtaxed. "The task of maintaining the correspondence with environmenting relations, which in the course of organic evolution has been entrusted more and more largely to the nervous system, and which in the course of social evolution has been thrown more and more upon the cerebrum, has during the past hundred years been thrown on the cerebrum to a formidable extent."¹⁰⁰

Under the conditions of social evolution, natural selection acts less and less to correct functional excesses, and they are left to direct equilibration. With the pace of modern society, he says, maladjustments will occur because direct equilibration is slow. But, for our understanding of the nature of morality, this does not alter the fact that "pleasures are the incentives to life-supporting acts, and pains are the deterrents from life-destroying acts."¹⁰¹

But so far this is nothing more than a hedonistic approach. The notions of Right and Wrong had to be dis-

¹⁰⁰ *Ibid.*, pp. 335-336.

¹⁰¹ Fiske, *Outlines*, II, p. 337.

tinguished from pleasure and pain, and this involves the well-being of the community. The utilitarian theory deals only with the life of the individual. "While the actions deemed pleasurable are those which conduce to the fullness of life of the individual, the deemed right are those which conduce to the fullness of life of the Community."¹⁰² Conduct which we call moral is the "disinterested service" of the community, and what we call immoral is "selfish preference of the individual" to those which are beneficial to Humanity.

We do not deliberately and consciously reason out each action. Rather, we have in our psychical structure "a moral sense which is as quickly hurt by wrong-doing or the idea of wrong-doing as our tactile sense is hurt by stinging."¹⁰³ Here Fiske proposes an answer to the question, How did social evolution originate? It originated when families, temporarily organized among all the higher gregarious mammals, became in the case of the highest mammal permanently organized.¹⁰⁴

When the variation in intelligence became so great

¹⁰²*Ibid.*, p. 338.

¹⁰³*Ibid.*, p. 339.

¹⁰⁴*Ibid.*, p. 340.

that they were more important than variation in physical structure, natural selection began to act on the intellect. It acted on intelligence to the exclusion of physical structure. "In the response to outer relations by psychical changes, which almost completely subordinate physical changes, we have the germ of civilization."¹⁰⁵

Although many mammals are gregarious, Fiske saw their gregariousness as a device for mutual protection. This behavior differs from social behavior in that there are no definite family relationships, "except during the brief and intermittent periods in which there are helpless offspring to be protected."¹⁰⁶ He does not agree with Darwin's suggestion that men were originally a very mild race, unable to defend themselves as individuals, which combined in groups for protection. This was hardly enough, says Fiske, to explain the difference between social behavior and gregariousness. And evidence does not indicate that our ancestors were really that gentle, but rather ferocious tribes competing for positions of dominance. "While recognizing, therefore, the value of Mr. Darwin's suggestion, so far as it goes, I believe that

¹⁰⁵*Ibid.*

¹⁰⁶*Ibid.*, p. 341.

the true explanation lies much further beneath the surface,"¹⁰⁷

In the chapter on "The Evolution of the Mind" Fiske discusses the parallel that exists between the development of the nervous system and of the mind. The greater intelligence of a particular organism is related to the complexity of the nervous system, and this involves the appearance of a longer period of physical development in terms of nervous system organization. The more complex the intelligence, the more organization that occurs after birth. "Thus there arise the phenomena of infancy, which are nonexistent among those animals whose psychical actions are purely reflex and instinctive. Infancy, psychologically considered, is the period during which the nerve-connections and correlative ideal associations necessary for self-maintenance are becoming permanently established."¹⁰⁸ It is a phenomenon which becomes longer and longer as the intelligence increases. In man it's much longer than other mammals, and for civilized man it is much longer than for the savage.

¹⁰⁷Fiske, *Outlines*, II, p. 341.

¹⁰⁸*Ibid.*, p. 342.

This change from short to much longer infancy occurred over a great period of time. Its appearance is related to the appearance of parental affection. The greater amount of parental care is associated with prolonged infancy, and "in general the duration of the feelings which insure the protection of the offspring is determined by the duration of infancy."¹⁰⁹

Natural selection worked in this area as elsewhere, very gradually increasing intelligence, and at the same slow rate, gradually prolonging infancy and increasing parental care. Modern man is the conclusion of this process because today parental affection persists throughout life. Here is Fiske's explanation of how animals evolved from a gregarious behavior to social behavior. Infancy has become lengthened, accompanied by the development of intelligence and the necessary increase in parental care. This requires only the assumption of the uniformity of nature. He realized that for the creationist this argument is meaningless. But for the evolutionist, it seemed a necessary argument.

"Thus we cross the chasm which divides animality from humanity, gregariousness from sociality, hedonism from morality, the sense of pleasure and pain from the

¹⁰⁹*Ibid.*, p. 343.

sense of right and wrong."¹¹⁰ He found the means to understand and explain the roots of morality. As man increased in intelligence the ability to reproduce in one's own mind the pains and pleasures of another, i.e. the quality of sympathy, was developed and strengthened. Eventually man went beyond simply protecting others of his own kind from danger, he shared common interests and desires, fears and things repugnant.

With the capacity for sympathy, as man evolved, the transition from individual to complex family integration took place. Members of a clan began to impose limits upon actions which were good for or bad for the clan. Approval would be shown for behavior, such as bravery, which generated "pleasurable states" in the clan. The responses of the clan became strongly associated in the minds of young, establishing approval or disapproval of things. Those things which are beneficial to the group meet approval, those things injurious meet disapproval. In these ways, he says, "the establishment of permanent family relationships generates new incentives to action, unknown in the previous epoch of mere gregariousness, which must often, and in some instances habitually, over-

¹¹⁰*Ibid.*, p. 346.

rule the mere animal incentives comprised in personal pleasures and pains. The good of the individual must begin to yield to the good of the community."¹¹¹

That feeling which we refer to as conscience, arises from the feelings of regret and remorse. There is a point at which moral character appears, a point in time when intelligence had evolved to have a memory of past deeds. Beyond the stage of development man may at times give in to feelings of anger and revenge which might go against the feelings of the tribe. The pleasures gained by such actions are generally small and short-lived; but those sanctions of the social organization are strong and long-lasting. Men developed the feelings of dissatisfaction and remorse.

Intelligence then progressed to a point where man developed curiosity about the world around him, about causes. He began to think in myths, the earliest kind of philosophy. He began to attribute natural phenomena to the wills of a large number of different agencies. Probably at first these agencies were the ghosts of ancestors of the tribe, and then eventually were more generalized into the early deities of polytheism. In more modern times

¹¹¹*Ibid.*, p. 348.

they were united into one deity and there arose a theory of hell as a place where those committing unacceptable actions go to be punished.

Man, then, has two sets of feelings, the one set being feelings of pleasure and pain, which "are purely egoistic or self-regarding feelings." The other set, which is the foundation for the social, moral sense, contains the "ego-altruistic" feelings which "concern the happiness of the individual in so far as it depends upon the feelings with which his fellow-creatures regard him."¹¹² The feeling that goes with some social act, like an act of generosity, is a mixture of these two groups of feelings. What an individual feels when he performs a beneficial act is approval of others and personal pleasure.

Only one more factor need be considered to complete our discussion of the origin of moral sense according to Fiske, that is, the tremendous increase in sympathy due to continued societal interaction. Fiske says that in communities the "opportunities for the exercise of altruistic feelings have been necessarily increased in number and frequency of occurrence, while the occasions requiring the exercise of anti-social feelings have become less

¹¹²Fiske, *Outlines*, II, p. 352.

frequent, so that the former set of feelings have become strengthened by use, while the latter have become relatively weakened by disuse."¹¹³

This high ability of sympathy in man was accompanied by a greater development of "representativeness," i.e. the ability to have complex sympathetic feelings. One cannot have a sympathetic feeling, for example, if he has not had the personal experience for that type of feeling. "To this expansion of the power of sympathetically representing feelings detached from the incidents of particular cases, until the sphere of its existence has become even wider than the human race, and includes all sentient existence, is due our instinctive abhorrence of actions which the organically registered experience of mankind has associated with pain and evil, and our instinctive approval of actions similarly associated with pleasure and increased fullness of life."¹¹⁴ Man's sympathetic feelings have been extended over wider and wider areas generating "an abstract moral sense."

The pleasure-pain set of feelings is no longer necessary. Utilitarianism seems crude, says Fiske, when

¹¹³*Ibid.*, p. 353.

¹¹⁴*Ibid.*, p. 355.

we look at high intelligence, for there is likely to arise with high intelligence a "deliberate pursuit of moral excellence." Man does not act merely by utility. This "latest and highest product of social evolution . . . becomes possible only when the moral sense is extremely developed."

At this high stage of development man reflects back upon himself, and things which are injurious to oneself come to be considered immoral. "Here we approach the limits at which morality shades off into religion" because "religion views the individual in his relations to the Infinite Power manifested in the universe of causally connected phenomena, as Morality views him in relation to his fellow creatures. To violate the decrees of Nature comes to be considered a sin . . . for to him whose mental habits have been nurtured by scientific studies, the principles of action prescribed by the need for harmonizing inner with outer relations are in the truest sense, the decrees of God."¹¹⁵

Fiske tried to show that the process by which infancy originated and became lengthened was due to an increasing intelligence, and was in turn the cause of the

¹¹⁵*Ibid.*, p. 357.

appearance of social relations and ethical feelings. The prolongation of infancy not only produced a social and ethical behavior in man, it was indirectly responsible for the intellectual and moral supremacy of man. He felt that he could "bridge the gulf which seems, on a superficial view, for ever to divide the human from the brute world."¹¹⁶ He gave meaning to the period of helplessness in infancy, and the old monition, "Except ye be as babes, ye cannot enter the kingdom of heaven," was given a different meaning - "that unless we had been as babes, the ethical phenomena which give all its significance to the phrase 'kingdom of heaven' would have been non-existent for us."

By means of the doctrine of evolution, he explained such things as "self sacrifice" and "devotion." Without that "the phenomena of social life would have been omitted from the history of the world, and with them the phenomena of ethics and religion."¹¹⁷ A prolonged infancy made possible the appearance of morality; it is the means by which man acquired the beliefs of religion; and, it is in agreement with the laws of science and evolution. Unity was achieved!

¹¹⁶*Ibid.*, p. 363.

¹¹⁷*Ibid*

IV. EMENDING THE ARGUMENT FOR UNITY

THE UNSEEN WORLD

Philosophy, as I shall understand the word, is something intermediate between theology and science. Like theology, it consists of speculations on matters as to which definite knowledge has so far been unascertainable; but like science, it appeals to human reason rather than to authority. . . . But between theology and science there is a No Man's Land . . . this No Man's Land is Philosophy.¹

BERTRAND RUSSELL

Spencer, as we have seen, was not in sympathy with the theological speculations contained in the *Outlines of Cosmic Philosophy*. And, for the most part, religious writers viewed these speculations with distain. But a critic with foresight wrote a prophetic description of Fiske's future work in the *North American Review*.² The reviewer noted that while Fiske's discussion of the Spencerian Philosophy gave no solid answers to the many questions it raised, there was something new and promising there. He said that Spencer's Philosophy would not satisfy

¹Bertrand Russell, *The History of Western Philosophy* (New York: Simon and Schuster, 1945), p. xiii.

²"Fiske's *Outlines of Cosmic Philosophy*," *North American Review*, CXX (January, 1875), p. 204.

an inquisitive mind like Fiske's for long, and that Fiske would soon be surpassing it by his own merit.

This impression came particularly from the third part of the *Outlines* where Fiske reconsidered the major theological questions raised in the "Prolegomena." Most of the comment and criticism of Fiske came because of the propositions contained herein. He stresses the general agreement of his ideas with common religious concepts, and reduced the abrasiveness shown earlier toward orthodox beliefs. There is concern for the turmoil going on in the minds of a good many people who did not understand the findings of science.

But when he confronted the problem of theism, he continued to reject any religious notion of a God as a person. He also rejected the notion of a God separate from and outside of the universe, since this only served to emphasize the separateness of science and religion. He wanted to show that science and religion are not really in conflict, but are aspects of the same universe. Holding on to this difficult position about the nature of God forced him to defend himself against the charges of being either a pantheist, or worse, a materialist.

Fiske never had the opportunity to go back to analyze, and perhaps to expand on the ideas presented in the

Outlines. Financial pressures and a need to meet criticisms led him to write a series of small books, made up of essays, which were devoted to defending and restating the ideas of his philosophy rather than reworking them. It is convenient at this point to examine these works as they relate to the defense of his theism, and therefore to the possible modification of his infancy theory.

There is evidence, in these subsequent works on his religious philosophy, that his emphasis gradually changed to a position more in agreement with orthodox Christianity. Berman concludes that changes in Fiske's way of life affected his religious orientation, and that as his personal problems increased during the 1880's, he turned to religion for its emotional rather than its philosophical values.³ Berman sees evidence of this change appearing first in a series of articles Fiske contributed to the *North American Review* in the early 1880's, especially "The Historic Genesis of Protestantism" and "The True Meaning of Protestantism."⁴ In these essays he was still "deducing religious principles from non-religious studies," but he did so in a respectful manner which was pleasing to

³ Milton Berman, *John Fiske*, p. 157.

⁴ *Ibid.*, p. 158.

his religious readers.

In 1876, in an essay entitled "The Unseen World," he argued for a view of the world which transcends phenomena, and admits the possibility of immortality. In contrast to the rational groundwork laid in the *Outlines*, here Fiske presented the idea that we should work to develop psychical faculties rather than develop senses used in empirical science. He said that,

It is not only possible, but in the very highest degree probable, that there are many things in heaven, if not on earth, which are undreamed of in our philosophy. Since our ability to conceive anything is limited by the extent of our experience, and since human experience is very far from being infinite, it follows that there may be, and in all probability is, an immense region of existence in every way as real as the region which we know, yet concerning which we cannot form the faintest rudiment of conception. Any hypothesis relating to such a region of existence is not only not disproved by the total failure of evidence in its favor, but the total failure of evidence does not raise even the slightest *prima facie* presumption against its validity.⁵

He repeated his earlier ideas about the philosopher George Berkeley that, "What we call material phenomena are really the products of conscious cooperation with some Unknown Power (not material) existing beyond the consciousness."⁶

⁵John Fiske, *The Unseen World and Other Essays*, (Boston: Houghton, Mifflin and Company, 1876), p. 48.

⁶*Ibid.*, p. 51.

What we admit is not that nothing exists outside of consciousness, but that there is a Power independent of our consciousness that causes what we call the perception of matter. We do not consider the Power material. So we are led to the inference that what we call the material universe is but the manifestation of infinite Deity to our finite minds.⁷

The common man is trapped by his inability to express these ideas or to possess the symbols necessary to understand them. But, "The human mind, however 'scientific' its training, must often recoil from the conclusion that this is all; and there are moments when one passionately feels that this cannot be all."⁸

The Unseen World presents one of the strongest cases for the argument that Fiske changed his basic attitude. His earlier argument against anthropomorphic theism through the methods of science seem to have been replaced by anthropomorphic ideas based on faith.

The reasonableness of the universe is at least as far above our comprehension as the purposes of man surpass the understanding of the dog. Believing, however, though as a simple act of trust, that the

⁷*Ibid.*, p. 52.

⁸*Ibid.*, p. 58.

end will crown the work, we may rise superior to the question which has here concerned us, and exclaim, in the supreme language of faith, "Though he slay me, yet will I trust in him."⁹

One of his biographers argues that his inner thought does not really change, and that what Fiske is really saying is that science portrays only what is known, and that what is beyond science requires an act of faith.¹⁰ However, when one reads the following passage from *The Unseen World* it is obvious that at least the basic aim of Fiske's writing has taken a drastic change in direction.

On warm June mornings in green country lanes, with sweet pine-odours wafted in the breeze which sighs through the branches, and cloud-shadows flitting over far-off blue mountains, while little birds sing their love songs, and golden-haired children weave garlands of wild roses; or when in the solemn twilight we listen to wondrous harmonies of Beethoven and Chopin that stir the heart like voices from an unseen world; at such times one feels that the profoundest answer which science can give to our questionings is but a superficial answer after all. At these moments, when the world seems fullest of beauty, one feels most strongly that it is but the harginger of something else, - that the ceaseless play of phenomena is no mere sport of Titans, but an orderly scene with its reason for existing, its "One divine far-off event
To which the whole creation moves."¹¹

⁹*Ibid.*

¹⁰Winston, *John Fiske*, p. 76.

¹¹Fiske, *The Unseen World*, pp. 56-57.

"The Unseen World" is the main essay of the book, but it contains no passages that have to do with the prolongation of infancy theory. The book does contain another essay that deserves mention because it deals with scientific attitude and lends further insight into his changing belief. In the essay Fiske comments upon a recently published book entitled the *History of the Conflict between Religion and Science*, by John William Draper.¹²

"At the bottom of changing theological beliefs," he said, "there lies something which men perennially value, and for the sake of which they cling to the beliefs as long as possible." What men value is a matter of conduct, a goodness and higher life "than the mere satisfaction of individual desires." In the human race there is a "spiritual aspiration," an "emotional tendency" which is religion. "Viewed in this light, religion is not only something that mankind is never likely to get rid of, but it is incomparably the most noble as well as the most useful attribute of humanity."¹³

¹²John William Draper, *History of the Conflict between Religion and Science* (New York: D. Appleton & Company, 1875).

¹³Fiske, *The Unseen World*, p. 143.

It is obvious that he was at least emphasizing religion in a different way. He no longer emphasized the "Unknowable" and just left it at that. He went beyond to speak of "spiritual aspiration," trying to know more about the "unseen world" through emotional development.

THE DESTINY OF MAN

The Darwinian Theory, properly understood, replaces as much teleology as it destroys.¹⁴

It is with reason that the modern mind sees its Golden Age in the distant future, as the ancient mind saw it in the forgotten past.¹⁵

JOHN FISKE

In 1884 Fiske wrote another essay which not only gives further evidence of his change in thought, it also sheds light on changes in his view toward the prolongation of infancy. Going one step beyond his advocacy in *The Unseen World* of a world which transcends phenomena, in *The Destiny of Man Viewed in the Light of His Origin* (1884) Fiske argues for the transcendence of man's finite existence. Throughout Fiske's work there runs the belief that we must look to the process of evolution to understand the cosmos, and that what we see as the final end is the ultimate perfection of man. The Darwinian theory is the most reliable scientific knowledge we have, and with it we can establish the beliefs with which we started. This theory,

¹⁴John Fiske, *The Destiny of Man Viewed in the Light of His Origin* (Boston: Houghton, Mifflin & Company, 1884), p. 113.

¹⁵John Fiske, *Outlines of Cosmic Philosophy* (2 vols., Boston: Houghton, Mifflin & Company, 1874), II, p. 403.

he says, "properly understood, replaces as much teleology as it destroys." Further,

I believe that the promise with which I started has now been amply redeemed. I believe that it has been fully shown that so far from degrading Humanity, or putting it on a level with the animal world in general, the doctrine of evolution shows us distinctly for the first time how the creation and the perfection of man is the goal toward which Nature's work has been tending from the first. We can now see clearly that our new knowledge enlarges tenfold the significance of human life, and makes it seem more than ever the chief object of Divine care, the consummate fruition of that creative energy which is manifested throughout the knowable universe.¹⁶

Fiske was certain that his type of theism would deliver the true meaning of all in the universe, and it was because of this theory of the prolonged period of infancy that we *could* know the meaning. The prolonged period of plasticity, "entailing a vast increase in teachableness and versatility, has contributed to the further enlargement of the cerebral surface."¹⁷ This has enabled us to comprehend the direction in which man, as a whole, is moving.

One can sense greater emphasis on religious meaning and the freer use of religious terminology than could be found in the *Outlines*.

¹⁶Fiske, *The Destiny of Man*, p. 107.

¹⁷*Ibid.*, p. 54.

In looking to the future, free of war and crime and disease, he says that the needs of man will become more spiritual. Faith in such a future brings inspiration, and this inspiration "sustains one in the work of life, when one would otherwise loose heart." Although its processes are slow and there is an enormous waste of life, he is certain that evolution's "direction has been the goal here pointed out; and the case may be fitly summed up in the statement that whereas in its rude beginnings the psychical life was but an appendage of the body, in fully developed Humanity the body is but the vehicle of the soul."¹⁸ The basic premise of the infancy theory has remained unchanged; the emphasis, however, has shifted from finding a mechanism by which we can unify knowledge to advancing a faith in the future.

As for the consistency of his theism, "The Destiny of Man" was an address before the Concord School of Philosophy on the question of immortality and the origins of man. A number of reviews interpreted this as a definite change in attitude for Fiske, but a year later, at a second address before the Concord School he presented a

¹⁸Fiske, *Destiny of Man*, pp. 64-65.

lengthy defense to clear up the misunderstanding.¹⁹ He said that when *The Destiny of Man* was published, he was surprised to find it considered by many to be a radical change in attitude. He argued that it was based entirely upon arguments that appeared in his *Outlines* and in the *Unseen World*.

In the *Destiny* he spoke more of the higher aspirations of man; he still used the process of evolution as the basis for his statements. He made a close comparison of his theism with orthodox Christian thought and felt that what he was doing was simply restating the teachings of Christ in a modern way. For my own part, he said, I believe in "the immortality of the soul, not in the sense in which I accept the demonstratable truths of science, but as a supreme act of faith in the reasonableness of God's work." He looked at the mind, not as a coming together of material particles, but as a "divine effluence."

Speaking for myself, I can see no insuperable difficulty in the notion that at some period in the evolution of Humanity this divine spark may have acquired sufficient concentration and steadiness to survive the wreck of material forms and endure forever. Such a growing wonder seems to me no more than the fit climax

¹⁹ John Fiske, *The Idea of God as Affected by Modern Knowledge* (Boston: Houghton, Mifflin & Company, 1885) pp. v-xxxii.

to a creative work that has been ineffably beautiful and marvelous in all its myriad stages. . . . The future is lighted for us with the radiant colours of hope. Strife and sorrow shall disappear. Peace and love shall reign supreme. The dream of poets, the lesson of priest and prophet, the inspiration of the great musician, is confirmed in the light of modern knowledge. . . , we may look forward to a time when in the truest sense the kingdom of this world shall become the kingdom of Christ, and He shall reign for ever and ever, king of kings and lord of lords.²⁰

Referring back to these ideas expressed in *The Destiny of Man* and arguing that his basic attitude had not changed, Fiske said that "it would be little to my credit, however, had my views of the doctrine of evolution and its implications undergone no development or enlargement since the publication of 'Cosmic Philosophy.'" To think about such a subject for ten years without having any new thoughts about it would be, in his mind, unworthy of philosophy. He attributed the changes to his realization of the shortcomings in the *Outlines*, and the two Concord lectures were meant to remedy them. Yet, he maintained, the changes were not fundamental. The basic nature of the Cosmic Philosophy was essentially the same; only a new chapter showing how evolution, as God's creative work, replaces man's central position in the universe.²¹

²⁰Fiske, *Destiny of Man*, pp. 117-119.

²¹Fiske, *The Idea of God*, pp. xix-xx.

Earlier, Fiske had insisted that teleological arguments were useless in science, so they were rejected. Now he is arguing for a view of evolution in which evolution actually displayed a "tendency." Man was the ultimate goal, the final product. His idea that evolution had ceased to affect physical characters in man and affected only mental attributes became an attempt "to rehabilitate the argument from design in a more sophisticated form."²² And where he used the infancy theory in the *Outlines* to show the origin of the family, of morality, society and religion, he was now arguing teleologically to say that "religion was the final goal of social evolution and that the exalted position religion occupied in the evolutionary scheme proved its importance and truth."²³

A turnabout is evident. He emphasizes the mechanism in the prolongation of infancy in a different way, and places greater emphasis upon the miraculous and on the secure hope of Christianity. Encouraging faith in the process that will ultimately bring spiritual life because it is inspiring and because it helps man to deal with everyday life, is using religious sentiments which he was reluctant to use in the *Outlines*.

²²Berman, *John Fiske*, p. 161.

²³*Ibid.*

THE IDEA OF GOD

By what name, then, shall we call this animated principle of the universe, this eternal source of phenomena? . . . The problem is a hard one, but here we suddenly get powerful help from the doctrine of evolution, and especially from that part of it known as the Darwinian theory.²⁴

JOHN FISKE

The Idea of God as Affected by Modern Knowledge (1885) was Fiske's second Concord address, and was in large part devoted to defending his consistency. Fiske makes no significant remarks on the infancy theory in this essay, but the essay shows his need to defend his earlier theistic assertions. He begins by saying that we can contemplate the universe in one of three ways: we can see the world of phenomena as sufficient unto itself, with no underlying unity, tendency, or law; we can see that phenomena around us are unintelligible unless seen with an underlying unity, but no a personal or anthropomorphic being, with no progression toward any goal; or we can see the universe as a manifestation of an Omnipresent Energy, anthropomorphic and personal, which moves toward a goal. This last choice is his, but he says that we can only

²⁴Fiske, *The Idea of God*, pp. 151 and 157.

slightly describe the tendency. It is a type of theism where the Omnipresent Energy of God.

Throughout history man has had a very difficult time trying to define the idea of God. Fiske says that we have a conception of a personal God. With Augustine we conceived a God as a being influenced by human purposes. Modern science conflicts with this concept of God.

Before Darwinism the Bridgewater Treatises, using the argument from design, consecrated science to the service of theology, and theology adopted the methods of science. Natural Theology sought to explain the classification and morphology of plants and animals as the thoughts of the Creator. The Darwinian theory of natural selection overthrew the argument from design when it pointed to its major weakness, the seeming cruelty and slaughter. Yet, he says, when we understand the true accomplishment of evolution, especially as thought by Spencer, we will see that it only places different demands upon the concept of design. It replaces its teleology with a different teleology.

What the evolution of Spencer demands of the argument from design is that the simile of the watch be replaced with the simile of the flower. Paley's simile of the watch is no longer valid, for the universe is not a

machine. The universe is an organism, with an indwelling principle of life. "It was not made, but it has grown." The laws of nature have evolved with the forms that manifest them, and harmony is a natural product.

Fiske says that this change in conception is the greatest revolution that has ever taken place in man's thinking. But what about the problem of deanthropomorphization that was so heavily stressed in the *Outlines*? Every theism, he says, has the problem of deanthropomorphization. Going one step further than in *The Destiny of Man*, in which the hope was to transcend phenomena, Fiske calls for an idea of God which transcends the anthropomorphism common to religion.

No religious creed that man has ever devised can be made to harmonize in all its features with modern knowledge. All such creeds were constructed with reference to theories of the universe which are now utterly and hopelessly discredited. How, then, it is asked, amid the general wreck of old beliefs, can we hope that the religious attitude in which from time immemorial we have been wont to contemplate the universe can any longer be maintained? Is not the belief in God perhaps a dream of the childhood of our race, like the belief in elves and bogarts which once was no less universal? and is not modern science fast destroying the one as it has already destroyed the other?²⁵

Fiske tried to answer these questions. In the "Corollaries" of the *Outlines of Cosmic Philosophy*, where

²⁵*Ibid.*, pp. 59-60.

he examined the questions of theism presented in the "Prolegomena," he said that "The case is the same with the belief in miracles, or the physical intervention of the Deity in human affairs. To the theologian such intervention is *a priori* so probable that he needs but slight historic testimony to make him believe it. To the scientific thinker it is *a priori* so improbable that no amount of historic testimony, such as can be produced, suffices to make him entertain the hypothesis for an instant."²⁶ His conclusion was that,

. . . as soon as we seek to go beyond the process of evolution disclosed by science, and posit an external Agency which is in the slightest degree anthropomorphic, we are obliged either to supplement and limit this Agency by a second one that is diabolic, or else include elements of diabolism in the character of the first Agency itself.²⁷

The second one is blasphemy and the first one has us judging the Deity by human standards.

We cannot make unwarranted assumptions, he said, and "Until our knowledge becomes coextensive with the entire world of phenomena, questions like these must remain unanswered."

We are therefore forced to conclude that the process of deanthropomorphization which has from the first

²⁶Fiske, *Outlines*, II, pp. 379-380.

²⁷*Ibid.*, p. 407

characterized the history of philosophic development must still continue to go on; until the Intelligent Will postulated by the modern theologian shall have shared the fate of the earlier and more imperfect symbols whereby finite man has tried to realize that which must ever transcend his powers of conception.²⁸

Yet Fiske goes contrary to these ideas in *The Idea of God* where he says that "God is in the deepest sense a moral being."²⁹ Is this not evaluating God by human standards? This is not a warranted assumption according to the standards of the *Outlines*. The distinction is a very dim and difficult one to make, because in his theory of the origins of morality through the prolongation of infancy, morality arose as a result of the process of evolution. In *The Destiny of Man* it was due to a "divine spark" that "acquired sufficient concentration and steadiness to survive. . . ." In *The Idea of God* his growing sense of religion has led him to speak more of God in the usual religious phraseology. This is particularly evident toward the end where he says, "Thou canst not by searching find him out; yet put thy trust in Him, and against thee the gates of Hell shall not prevail; for there is neither wisdom nor understanding for counsel against the Eternal."³⁰

²⁸*Ibid.*, p. 410.

²⁹Fiske, *The Idea of God*, p. 167.

³⁰*Ibid.*

THROUGH NATURE OF GOD

Evolution is God's way of doing things.³¹

JOHN FISKE

The final defense of his religious-scientific ideas was published in 1899 in *Through Nature to God*, and, as Pannill points out, by this time there had been considerable change in his attitudes since writing the *Outlines*.³² One of Fiske's critics, G. Michael McCrossin, says that to stress change in Fiske's ideas throughout his writing career is extreme. He reinforces this with Fiske's own words from *The Idea of God* in which he claims that these later works are clarifications of his thoughts rather than a change, and that if one interprets it as a change it is only because he has not read the *Outlines of Cosmic Philosophy* with care.³³

³¹Cited in *Evolution and Religion: The Conflict Between Science and Theology in Modern America*; ed. by Gail Kennedy (Boston: D. C. Heath and Co., 1957), p. xiv.

³²See H. B. Pannill, *The Religious Faith of John Fiske* (Durham: Duke University Press, 1951), Chapter four, "The Cosmic God."

³³G. Michael McCrossin, "World Views in Conflict: Evolution, Progress, and Christian Tradition in the Thought of John Fiske, Minot Savage, and Lyman Abbott" (unpublished Ph.D. dissertation, University of Chicago, 1970), p. 54.

But the evidence that there is at least a change in emphasis is substantiated. Fiske had long maintained that the source of all phenomena was God. Frequently he used terms like "Divine Will," or "Divine Power" to represent the force behind the universe, but the importance of the ethical dilemma led Fiske to be more and more abstract about the nature of God. He spoke of the way primitive religion envisioned God, as "quasi-human," and says that "from our modern Monotheism such accidents of humanity are eliminated." Yet, in the same sentence he says, "but the notion of a kinship between God and man remains, and is rightly left to be essential to theism."³⁴ He argues that if we take away the human element from our notion of God, we have no notion of God, and theism disappears. We cannot have a theism if we use some epithet like "Force," or "Power," or "Energy," the very terms he has been using to describe God.

Fiske believed that if he redefined two terms his change in emphasis would not appear inconsistent.³⁵ He redefined "anthropomorphism" to exclude man's higher ethical attributes. It seemed more acceptable to think of

³⁴Fiske, *Through Nature to God*, p. 166.

³⁵Pannill, *The Religious Faith of Fiske*, p. 168.

God in terms of ethics and of psychical powers. Part of this redefinition came from man's "intuitive awareness of Deity," and the only way he could admit these intuitions into the system was to redefine.³⁶

The other term that was redefined was "design." In the *Outlines* the concept of design or purpose was an unjustified attributing of human concepts of God. It was being anthropomorphic. Fiske changed his feelings about what kinds of purpose were acceptable and what kinds were not. Purpose emanating from within the process, or the process itself, was acceptable. This is God's purpose because he is immanent in the process. The assumption was, says Pannill, that in the light of the new teleology, the development of man's higher attributes was the clue to the meaning of the process, and hence to the nature of the Being revealed in the process.³⁷

Using man's mental and ethical development to describe God is pure metaphysics. It is important to note how Fiske emphasized deanthropomorphization, but found it necessary to speak anthropomorphically later. But, even with the evidence of inconsistency that the essay presents,

³⁶*Ibid.*

³⁷*Ibid.*, p. 169.

the book *Through Nature to God* is even more significant for our purposes because it is here that the prolongation of infancy theory has its final elucidation and refinement. The second address contained in the book is entitled "The Cosmic Roots of Love and Self-Sacrifice," and is an argument for the origins of morality in the form of a response to T. H. Huxley.

In 1893 Thomas Huxley presented the Romanes Lecture in which he said that he could not find evidence for a code of morality anywhere in existence. He said that,

. . . the influence of the cosmic process on the evolution of society is the greater the more rudimentary its civilization. Social progress means checking of the cosmic process at every step and the substitution for it of another, which may be called the ethical process. . . . The practice of that which is ethically best - what we call goodness or virtue - involves a course of conduct which, in all respects, is opposed to that which leads to success in the cosmic struggle for existence.³⁸

In other words, Huxley not only did not see the process of evolution as having a significant role in more advanced civilizations, he considered the ethical process to be in opposition to and in constant conflict with the natural process. Things like love and self-sacrifice are courses

³⁸Thomas Henry Huxley, "Evolution and Ethics," The Romanes Lecture of 1893, in T. H. Huxley and Julian Huxley, *Evolution and Ethics: 1893-1943* (London: The Pilot Press Ltd., 1947), pp. 81-82.

of conduct which are not factors in the cosmic process, and operate, rather, in despite of it. Moral sentiments may have evolved, but no more than immoral sentiments.

"There is so far no sanction for the one as for the other."

"The Cosmic Roots of Love and Self-Sacrifice" is Fiske's reply to Huxley in which he restates ideas found in *The Destiny of Man*, and says that "I think it can be shown that the principles of morality have their roots in the deepest foundations of the universe, that the cosmic process is ethical in the profoundest sense. . . ." ³⁹

When we look at the cosmic process, we find hatred, strife, famine and death as factors furnishing conditions. "The principle of natural selection is in one respect intensely Calvinistic; it elects the one and damns the ninety and nine." He felt that the survival of the fittest is not always survival of the best, and sometimes being better fit means a degeneration of type. We accept the existence of these things "as part of the machinery of God's providence."⁴⁰

If we look only at the struggle in nature we tend to think of a "Blind Force rather than a Beneficent Wisdom

³⁹Fiske, *Through Nature to God*, p. 79.

⁴⁰*Ibid.*, pp. 66-69.

at the source of things." But natural selection is only part of the process; to natural selection, virtue and vice, beauty and ugliness are all alike. In the cosmic process there are other agencies than natural selection, and struggle is not the whole story. The theory of evolution has had areas where no satisfactory theory has been developed. While physical variations can be used to explain much about the characteristics of organisms, little can be said about the existence of man. Here Fiske reiterates the essential data of his infancy theory, from Wallace's clue to the appearance of the mind of civilized man. He once again advances the idea that in God's creation a new departure arose with the selection of psychical variations, and the neglect of physical variations. This important idea is illustrated by the immense difference between man and ape as compared to the difference between ape and lower form. The striking difference is:

. . . *first*, the greater progressiveness of man, the widening of the interval by which one generation may vary from its predecessor; *secondly*, the definite grouping in societies based on more or less permanent family relationships, instead of the infinite grouping in miscellaneous herds or packs; *thirdly*, the possession of articulate speech; *fourthly*, the enormous increase in duration of infancy, or the period when parental care is needed.⁴¹

⁴¹*Ibid.*, pp. 86-87.

This last fact, he says, is the fundamental one, and the others are all derivative. And as he maintained in the *Outlines*, an adequate cause for this increased duration is the increase in intelligence. The increased duration allows the "gradual registration" of experiences with the higher nerve-centers. If a creature's intelligence is low, and experiences are very limited, all the registration of experiences is effected on the nerve-centers before birth. They enter the world precocious. But a creature of high intelligence requires that the registration of its complex experience take place after birth.

With the appearance of man the rate of progress became rapid. He was able to learn much more in a shorter period of time, enhancing the rate of progress, and as intelligence increased, the "plastic period" of life became lengthened to accommodate the capacity. This, in turn, further increased capacity, and so on. The result was the development of highly individualized intelligences.

Ethical behavior, as maintained in the *Outlines*, appeared the moment when man learned that the survival to the clan or community depends upon the quality of cooperation.

. . . the moment a man's voluntary actions are determined by conscious or unconscious reference to a standard outside of himself and his selfish motives,

he has entered the world of ethics, he has begun to live in a moral atmosphere.⁴²

With his new religious emphasis, Fiske felt it necessary to add to this theory the possession of religious sentiment and religious ideas. At the close of the chapter on the "Genesis of Man, Morally" of the *Outlines*, he hinted that "religion views the individual in his relations to the Infinite Power manifested in a universe of causally connected phenomena, as Morality views him in relation to his fellow-creatures."⁴³ If we violate the laws of nature we commit a sin and feel remorse. The principles of action conducive to right living are part of the universe. If we conform in our lives to the decrees of nature, we are living morally.

There are some things that are neither moral or immoral, but are nevertheless right or wrong. One example is overeating, which is hardly immoral from a hedonistic point of view, but from a religious viewpoint it is wrong and sinful. The point being that the highest principle of action for hedonism is personal selfishness. Religion disagrees with this notion saying that man does not have a right to do what he wants, but has duties toward himself as to others.

⁴²*Ibid.*, pp. 104-105.

⁴³Fiske, *Outlines*, II, p. 357.

Religion, therefore, extends the rules of right and wrong primarily derived from the relations of the individual to the community, until they cover even the self-regarding actions of the individual.⁴⁴

In the *Outlines* the religious sense was based primarily upon aspiration "after the complete fullness of life; and any thought or act, any sin of omission or commission, inconsistent with such aspiration, awakens the painful consciousness of shortcoming, without any reference to those lower considerations of pleasure and pain of which alone hedonism takes cognizance."⁴⁵ As with the rest of his later essays, however, this essay on the prolongation of infancy shows a decided change in emphasis. Spiritual perfection, he says, is the true goal of evolution, the divine end that was involved in the beginning. Contrary to what Huxley says, if you take the ethical meaning from the universe, nothing remains.

Thus while the Earth Spirit goes on, unceasing, yet unceasing, weaving in the loom of Time the visible garment of God, we begin to see that even what look like failures and blemishes have been from the outset involved in the accomplishment of the all-wise and all-holy purpose, the perfecting of the spiritual man in the likeness of his Heavenly Father.⁴⁶

⁴⁴*Ibid.*, p. 466.

⁴⁵*Ibid.*

⁴⁶Fiske, *Through Nature to God*, p. 115.

To go beyond the notion that evolution has become psychological rather than physical, Fiske says that we must follow the progress of civilization. What civilization has shown us is that man is "becoming more and more clearly the image of God, exercising creative attributes, transforming his physical environment. . . ." ⁴⁷ Fiske has re-defined teleology to allow acceptance of purpose, purpose which comes from God's cosmic process itself. Man's development thus gives meaning to the process and at the same time tells us of the nature of God as He is revealed through the process.

Below the surface din and clashing of the struggle for life we hear the undertone of the deep ethical purpose. . . , its volume swelled by every victory of right over wrong, till in the fullness of time, in God's own time, it shall burst forth in the triumphant chorus of Humanity purified and redeemed. ⁴⁸

We have gone on this circuitous digression in order to show that the infancy theory was part of a grand scheme which underwent modification, if not in substance, at least in what was stressed. We see that Fiske gradually shifted from a position of stressing the "unknowable" elements of existence and a "deanthropomorphization" of

⁴⁷*Ibid.*, 127.

⁴⁸*Ibid.*, p. 130.

God, to a call for renewed faith in the teachings of Christ. It is, in most cases, a subtle change in the use of religious phraseology and in the calling to emotional aspirations. These essays were, as Pannill says, "in a real sense the final reconciliation of his evolutionary views with his religious convictions."⁴⁹

⁴⁹Pannill, *The Religious Faith of Fiske*, p. 28.

V. CONCLUSION

THE CASE FOR THE PROLONGATION OF INFANCY
AS A MEANS OF ACHIEVING UNITY

But then arises the doubt, can the mind of man, which has, as I fully believe, been developed from a mind as low as that possessed by the lowest animal, be trusted when it draws such grand conclusions?¹

CHARLES DARWIN

As a religious thinker, Fiske was indebted to Immanuel Kant for his emphasis on the importance of practical reason in knowledge about religion.² His "Unknowable" was much like Kant's "thing-in-itself." Fiske altered the concept by asserting that God is knowable through phenomena. As man advances and adjusts to the environment, the unknowable becomes less unknowable. Fiske took Kant's argument for the existence of God, "combined it rather uncritically with Schleiermacher's concept of religious feeling, and, employing the idea of adjustment which the studies of evolution gave him, he emerged with a theory of religious knowledge, a basis for ethics,

¹In Nora Barlow, *The Autobiography of Charles Darwin: 1809-1882* (New York: W. W. Norton & Co., Inc., 1958), p. 93.

²Pannill, *The Religious Faith of Fiske*, p. 232.

and an assurance of immortality."³

The *Outlines of Cosmic Philosophy* was Fiske's great achievement in the philosophy of science; his later philosophic writings were essentially reaffirmations and elaborations on what he had said there. We have seen change in his theism, the significance of which is not agreed upon by his biographers and critics. The evidence does point toward a gradual change, an evolution if you will, in Fiske's own ideas about God. His emphasis changed and his notions about teleology are inconsistent; his certainty about the important role of a prolonged infancy never changed. But was Fiske as original in his theory as he proclaimed? Did his theory unite science and religion? And most important of all, is it possible to found an ethic upon evolution?

In the April 13, 1922 issue of *The Journal of Philosophy*, Wesley Raymond Wells wrote an article entitled "An Historical Anticipation of John Fiske's Theory Regarding the Value of Infancy."⁴ Wells did not question Fiske's

³*Ibid.*

⁴Wesley Raymond Wells, "An Historical Anticipation of John Fiske's Theory Regarding the Value of Infancy," *The Journal of Philosophy*, XIX (April, 1922), p. 208.

independence from other sources for the development of his theory. Instead, his object was to point out an obscure essay written about forty years before Fiske's first book. Its author was an anonymous writer identified only as V. F.; the essay appeared in a volume called *The Friends Annual: or Aurora Borealis*; it was published in England in 1834 by the Society of Friends (Quakers); and it was entitled "On the Helpless State of Infancy."

Written before evolution became an issue, its purpose was to show the foresight of the Almighty in creating this time for human development. Wells admits that Fiske had a different purpose in the *Outlines*. Fiske, says Wells, was trying to "support the evolutionary theory by showing the significance of a lengthened infancy as a factor in bridging the gap between brute and man, and to account for the evolution of human intelligence and morals."⁵ He went on to say that what Fiske was really doing was, "justifying the ways of God to man and looking for God's actions in the process of evolution."⁶ One particular passage from the *Friends Annual* said,

This helpless condition, then, in which it hath pleased our Maker that we should be introduced in the present state, exhibits many marks of

⁵ *Ibid.*

⁶ *Ibid.*

benovolent and wise design. . . . It ought to be regarded with thankfulness, as necessary to the formation of that strong and durable affection between parent and child, which is one distinguishing feature of the human race, and a mark of its superior character.⁷

Wells found this and other ideas "strikingly similar to those contained in Fiske's *Excursions of an Evolutionist*. He noted in particular chapter XII, "The Meaning of Infancy," in which Fiske says,

But with our half-human forefathers it is not difficult to see how infancy extending over several years must have tended gradually to strengthen the relations of the children to the mother, and eventually to both parents, and thus give rise to the permanent organization of the family.⁸

He concluded that the circulation of *The Friend's Annual* was so insignificant that Fiske probably never saw it, but that Fiske was not original.

There is other evidence that Fiske's infancy theory had been anticipated. In an article entitled "The Length of Human Infancy in Eighteenth-Century Thought," Arthur O. Lovejoy says that "the same observations concerning the significance of longer infancy of the human animal were

⁷*The Friends Annual*, pp. 154-155, quoted in Wesley Raymond Wells, "An Historical Anticipation of John Fiske's Theory Regarding the Value of Infancy," *Journal of Philosophy*, XIX (April, 1922), p. 209.

⁸John Fiske, *Excursions of an Evolutionist* (Boston: Houghton Mifflin and Company, 1899), p. 316.

among the familiar commonplaces of eighteenth-century thought."⁹ His argument stems first from Alexander Pope's (1688-1744) poem *Essay on Man* (1733) in which Pope discusses the early stages of human society.

Thus bird and beast their common charge attend,
The mothers nurse it and the sires defend;
The young dismissed to wander earth or air,
There stops the instinct and there ends the care. . . .
A longer care man's helpless kind demands;
That longer care contracts more lasting bands. . . .
Still as one brood, and as another rose,
These natural love maintained, habitual those.
The last scarce ripened into perfect man
Saw helpless him from whom their life began.¹⁰

Lovejoy saw a parallel between Pope's lines,

Still as one brood, and as another rose,
These natural love maintained, habitual those.

and Fiske's statement from the chapter in the *Outlines* on the "Genesis of Man, Morally" that "When at last the association is so long kept up that the older children are growing mature while the young still need protection, the family relations begin to become permanent."¹¹ Pope saw, as Fiske did, that the longer infancy of man was the reason for the appearance of the family.

⁹ Arthur O. Lovejoy, "The Length of Human Infancy in Eighteenth-Century Thought," *Journal of Philosophy*, XIX (July 6, 1922), p. 381.

¹⁰ Alexander Pope, "Essay on Man," quoted in Lovejoy, "The Length of Human Infancy," pp. 381-382.

¹¹ Fiske, *Outlines*, II, p. 344.

It is not enough that Pope seemingly anticipates Fiske; Pope's ideas were apparently produced by someone else, by Viscount Bolingbroke (Henry St. John) (1678-1751) in *Fragments or Minutes of Essays* (1752). According to Lovejoy this work influenced Pope's ideas.¹² Bolingbroke saw a long infancy as a valuable period in which educational forces can impinge upon the receptive mind.

Yet even this was preceeded. John Locke (1632-1704) in his essay "Concerning Civil Government" said:

For the end of conjunction between male and female not barely procreation, but the continuation of the species, this conjunction betwixt male and female ought to last, even after procreation, so long as is necessary to the nourishment and support of the young ones, who are to be sustained by those who got them until they are able to shift and provide for themselves. . . . And herein, I think, lies the chief, if not the only reason, why the male and female in mankind are tied to a longer conjunction than other creatures, *viz.*, because the female is capable of conceiving, and, *de facto*, is with child again, and brings forth too a new birth, long before the former is out of dependency for support upon its parents' help and able to shift for himself . . . the father, who is bound to take care of those he hath begot, is under an obligation to continue in conjugal society with the same woman longer than other creatures, whose young, being able to subsist of themselves before the time of procreation returns again, the conjugal bond dissolves itself. . . . Wherein one cannot but admire the wisdom of the great Creator who . . . hath made it necessary that society of man and wife should be more lasting than that of male and female

¹²Lovejoy, "The Length of Human Infancy," pp. 382-383.

among other creatures, so that their industry might be encouraged, and their interest better united, to make provision and lay up goods for their common issue.¹³

Fiske's theory of the prolongation of infancy in man and its role in the formation of society was clearly foreshadowed by almost two centuries. It was an idea familiar in the eighteenth century. None the less, Fiske saw it as a new concept. He said, "In this line of inquiry, which, so far as I know, has never yet been noticed by any of the able writers who have dealt with the origin of the human race, it seems to me that we have a clue to the solution of the entire problem. In this new suggestion as to the causes and effects of the prolonged infancy in man, I believe we have a suggestion as fruitful as the one which we owe to Mr. Wallace."¹⁴ He truly thought that no one had ever approached the phenomenon of infancy in man in the way that he had, and that no one had ever seen in it the solution to the dilemma over the source of morality.

¹³ John Locke, "An Essay Concerning the True Original Extent and End of Civil Government," in *Great Books of the Western World* vol. 35, ed. Robert Maynard Hutchins (Chicago: Encyclopedia Britannica, Inc., 1952), pp. 42-43.

¹⁴ Fiske, *Outlines*, II. p. 362.

Did Fiske's infancy theory do for science and religion what he hoped it would? He hoped it would give our higher ethical sentiments a direct source in the evolutionary process. To a number of men of religion Fiske's theory was welcome. A good illustration of such a response can be found in the two-volume work of James Martineau entitled *A Study of Religion* (1887).¹⁵ In the preface he says,

I cannot better introduce my readers to the main purport of these volumes, than by relating a conversational criticism by an eminent English Positivist, on a no less eminent American representative of the Spencerian system of thought. Friendly relations had grown between them, when Professor Fiske, of Harvard, was in this country; - relations none the less cordial from the tacit assumption, supposed to be warranted by his 'Cosmic Philosophy,' of their common rejection of religious beliefs. On the appearance, in 1884, of his interesting Address to the Concord School of Philosophy, entitled 'The Destiny of Man in the Light of his Origin,' a report of his argument, contained in a private letter, was read to his English friend; who listened attentively enough till it came out that the Professor found, in the psychical evolution of man, an intimation of individual immortality; but then broke in with the exclamation, - 'What? John Fiske say that? Well; it only proves, what I have always maintained, that you cannot make the slightest concession to metaphysics, without ending in theology!'¹⁶

¹⁵James Martineau, *A Study of Religion: Its Sources and Contents* (Oxford: Clarendon Press, 1900). This work was written in 1887.

¹⁶*Ibid.*, I, p. ix.

Martineau interpreted this as a fortunate criticism of Fiske, for it was his view that if you do indeed allow yourself to think about the origin and the end of things, you will have to believe in God and in immortality. Man and other animals might appear to be separate creations, Martineau argues, and this is how our reasoning went before the *Origin of Species*. The *Origin* showed "family affinities of the human race," but the obvious gulf between the brute and the spiritual life was, nevertheless, pronounced. Martineau was, as others were, grateful to Fiske for the idea of the "'predominance of psychical life,' which will powerfully reinforce our plea for great hopes."¹⁷

Religious leaders were searching for some way to deal with the mental superiority of man over other animals. Perhaps equally as important was the search for proof of immortality. Fiske's theory supported the distinct nature of mind and body, and opened the way for belief in immortality.

In a book entitled *The Evolution of Man and Christianity*, Reverend Howard MacQueary wrote:

Granting that sensation, consciousness, will, thought, emotion, - i.e., mental phenomena - the essential constituents of the mind - are immaterial

¹⁷*Ibid.*, II, p. 325.

entities, we may proceed at once to argue with Bishop Butler, that death cannot affect these, since it affects only material things, such as *flesh*, skin, bones, etc. . . . It is a grand triumph for Theology to have scientific demonstration of the fact that man is something else than a bundle of matter and material forces.¹⁸

Looking at the hard evidence which evolution contributes to the question of immortality, MacQueary said that from the beginning there has been a "twofold development, *viz.*, a development of material *forms* and a development of immaterial *forces*."

The first has resulted in the human frame, which is a completion of the evolutionary movement from a physical point of view. . . . The popular idea that, if Evolution is true, man should develop into a higher animal, is, on Evolution-principles, absurd, since by the very supposition man is the realized idea of the process of development.¹⁹

MacQueary drew upon Fiske's *Destiny of Man*:

"Upon the Darwinian theory," says Professor Fiske, "it is impossible that any creature zoologically distinct from man, and superior to him, should ever at any future time exist upon earth. . . . According to Darwinism, the creation of man is still the goal toward which Nature tends from the beginning."²⁰

Fiske's eloquence and reason restored the feeling of security for many. In the *Destiny of Man* he said:

¹⁸ Howard MacQueary, *The Evolution of Man and Christianity* (New York: D. Appleton and Company, 1890), pp. 382-383.

¹⁹ *Ibid.*, p. 383.

²⁰ *Ibid.*

The question, then, is reduced to this: are man's highest spiritual qualities, into the production of which all this creative energy has gone, to disappear with the rest? Has all this work been done for nothing? . . . For ought the science can tell us, it may be so, but I can see no good reason for believing any such thing. On such a view the riddle of the universe becomes a riddle without meaning. Why, then, are we any more called upon to throw away our belief in the permanence of the spiritual element in Man than we are called upon to throw away our belief in the constancy of Nature? . . . For my own part, therefore, I believe in the immortality of the soul, not in the sense in which I accept the demonstrable truths of science, but as a supreme act of faith in the reasonableness of God's work.²¹

His confidence gave great comfort and hope. The prolongation of infancy accounted not only for the acculturation of man, it marked a new beginning in spirituality and morality which served to separate man from beast, and gave evidence for the immortality of the soul.

But not all opinion was friendly. Segments of society other than the popular readers and those religionists who found comfort in Fiske were not receptive. Frothingham says that Fiske was loved and respected as a speaker and was much in demand, but as a thinker he exerted little influence.²²

²¹Fiske, *Destiny of Man*, pp. 114-116.

²²Paul Revere Frothingham, *All These* (Cambridge, Massachusetts: Harvard University Press, 1927), pp. 56-57.

From the outset Fiske made the assumption that the ethical nature of man is rooted in the evolutionary process. As an account of ethical nature founded upon evolution, Fiske explained that natural selection had long ago begun to operate differently in man than in lower animals. In lower animals any weakness or poor adjustment to the environment is quickly acted upon by natural selection. Not so in man where superior mental powers allow him to survive even though he may be unfit physically. Mutual aid was one such means of surviving while being unfit in other ways. C. M. Williams agreed with the idea that the action of natural selection upon man has long been essentially diminished through the operation of social conditions.²³ But what results is not the development of a higher ethical sentiment. Instead the wicked flourish. Vice is only slowly diminished because man has so many other qualities besides bad ones that it lingers in spite of them.

This was a different way of looking at evolution. Williams was saying that evolution had lost its effectiveness on man, not because it had begun to operate on psychical qualities, but because social conditions have

²³C. M. Williams, *A Review of the Systems of Ethics Founded in the Theory of Evolution* (New York: Macmillan & Co., 1893), p.80.

diminished its effectiveness altogether. She was inclined to think that morality would naturally decline outside the evolutionary process.

J. G. Schurman, a philosophy professor at Cornell and pupil of Martineau, leveled a strong criticism against ethical systems based on Darwinism. Darwinian theory, he said, consists of two constituent elements, the struggle for existence, and the survival of the fittest. "The former connects it historically and logically with Malthusianism, and may be considered as an application of the famous doctrine of population to the whole organic world."²⁴ The other element, survival of the fittest, was taken from Utilitarianism. Fiske's theory of the prolongation of infancy argues that certain kinds of behavior arose to insure the protection of offspring. It is an argument for the utility of a kind of behavior, and for the selection of that behavior because of its utility. Schurman's criticism of this kind of utilitarian-based evolutionary ethics and sociology is that "natural selection rests upon a biological utilitarianism, which may be egoistic or communistic, but which cannot be universalistic."²⁵ He says:

²⁴J. G. Schurman, *The Ethical Import of Darwinism* (New York: Charles Scribner's Sons, 1893), p. 116.

²⁵*Ibid.*, p. 118.

The biological theory borrowed the notion of utility from empirical morals; but we must now confess the loan has been so successfully invested that there is some ground for believing the proceeds suffice, not only to wipe out the obligation, but even to make ethics the debtor to biology. In demonstrating the evolution of plants and animals . . . through the preservation and accumulation of modifications useful for survival in the struggle for life, biology has led up to an ethical theory which places the governing principle of human conduction utility.²⁶

Schurman objected to the conclusion that morality was produced by the natural selection process. This reduces moral faculties to the rank of natural phenomena. It makes consciousness a mere "accessory aspect of the human automaton," and intelligence merely "the modifications produced in the nervous and muscular systems from action and reaction between the organism and its environment."²⁷ So even before man had the capacity for consciousness, his actions must have been adapted to the environment, and, as Schurman wrote, when consciousness did emerge it was consciousness of the adaptations already possessed through blind evolution. The only function consciousness could have would be to recognize things that had utility.²⁸

²⁶*Ibid.*, pp. 122-123.

²⁷*Ibid.*, pp. 141-143.

²⁸*Ibid.*, pp. 154-155.

Does not the evolutionary doctrine of heredity imply that man is what his ancestry has made him, and so abrogate our belief in the freedom of the human will? . . . If morality is merely a formulation of the practices which, accidentally hit upon by some group of animals, made the group coherent, and thus enabled it to vanquish rival groups with different practices, would it not seem merely accidental that justice and truthfulness are virtues, and not injustice and lying?²⁹

To Schurman this implied that morality is not grounded in the nature of things, but is simply due to the circumstances that man's ancestors were in. He did not want to deny that morals are socially useful, or that heredity supplies us with the materials for character. The subject was not being considered properly, by examining the historical facts alone, apart from evolution. Fiske's understanding of morality was incorrect. "As was inevitable from the lack of a positive science of ethics, founded upon the actualities of history and of life, it was prejudged by theoretical moralists according to the speculative standpoints which they happen to occupy."³⁰

²⁹*Ibid.*, pp. 154-155.

³⁰*Ibid.*, p. 205. Schurman went on to examine some of the diversity of ethical thought that had not been caught up in the theory of evolution. He concluded that there are basically two main types; the hedonistic type which sees pleasure as the chief end in life, a relative way of looking at things, and the intuitionist view which assumes goodness, an absolute way of viewing things. His preference was not for any sort of comparative or relative study, looking at the morals of savages or Christians, but rather an inductive inquiry into what has always been considered right or wrong everywhere, a kind of intuitionist statistics. See chapter four, "The Development of Moral Ideals and Institutions, with Special Reference to the Family."

Fiske defined the mind as that which intercourse with the environment has made it, and defined our indestructible beliefs as the registry of that intercourse. The indestructible beliefs are necessarily true because they are the only expression of our experience. For example, if we were to try to imagine nitrogen supporting combustion, we would be obliged to suppress the conception we have of nitrogen and replace it with something outside our experience. In the *Outlines* he erected a canon of truth concerning necessary truths and the impossibility of their negation. He also justified the choice of a theistic explanation because in his mind, the assumption of an absolute and infinite First Cause was the only intelligible hypothesis.

Borden Parker Bowne, Professor of Philosophy at Boston University, disagreed with the premise, and more importantly, was critical of trying to ground morality in nature through such a premise. He said that if we subject the mind to necessity, conclusions then drawn are not acts of the mind, but are just occurrences in the mind, results of preceding mental states. "Nothing, then, depends on reason, but only on physical or mental states; and these, for all we know, might become anything whatever with the result of changing the conclusion to any other whatever."³¹

³¹Borden Parker Bowne, *The Philosophy of Theism* (New York: Harper & Brothers, 1887), p. 113.

A belief, under such conditions, does not depend upon its rationality, but only on the relative strength of the corresponding antecedents. If we speak in terms of cause and effect, the distinctions of truth and error are meaningless. To have rationality there must be freedom; when this is the case truth and error become significant. The rational mind must not be controlled by its states, but must control them. If it cannot stand apart from ideas, test them, and resist influence, beliefs sink into effects, and the distinction of rational and irrational, truth and error, vanishes.³²

The bearing of this upon theism is plain. There can be no rationality, and hence, no knowledge, upon any system of necessity. . . . We conclude . . . that if the trustworthiness of reason is to be maintained, it can only be on a theistic basis; and since this trustworthiness is a presupposition of all science and philosophy, we must say that God, as free and intelligent, is the postulate of both science and philosophy. If these are possible, it can be only on a theistic basis.³³

This criticism showed Fiske's inconsistency, and weakened his argument for the unity of science and religion. He had assumed a First Cause, and accepted the conclusions of science as necessary truths. This contra-

³²*Ibid.*, p.114.

³³*Ibid.*, pp. 116-117.

dictory situation of at one time claiming free reason and at another time claiming necessary truths is impossible position for a theist.

These were but some of the criticisms that confronted Fiske's type of theistic conclusion. Earlier expressions of the same ideas were criticized and these criticisms are equally damaging. One that could conform to this conclusion came from Jean Jacques Rousseau (1712-1778). In his *Discourse on the Origin of Inequality* (1775), Rousseau questioned the infancy theory presented by Locke. His criticism, which holds for Fiske as well, was that if the central concern is how the social family originated, what we *must* account for is the practice of the male living with the female during the nine-month gestation. If the male is not living with the female then, why help her after birth? Why would he rear a child that may not be his? Rousseau said that Locke forgot about the long gestation period, taking for granted that the family exists. The dependent infant would not bring the parents together; they must have been together for some other reason.³⁴

³⁴See Arthur O. Lovejoy's article, "The Length of Human Infancy," for discussion of this point.

Lovejoy, says that this criticism is even more important when leveled against a later theory like Fiske's because by then it was common zoological knowledge that other animals besides man possess families. Fiske knew very little about the other possible reasons for the formation of family units by higher animals other than man. In the chapter on the "Genesis of Man, Morally," he says,

[if] the primordial unit of society, by the manifold compounding of which great tribes and nations have come into existence, was the aboriginal family group, with its nascently ethical relationships between the members, how shall we explain the genesis of these family groups, which have nothing strictly answering to the, either among non-human primates or among other gregarious animals?³⁵

Fiske did not recognize the complex social structure present in the animal world. His knowledge of family groups among lower animals was superficial at best. Instead, he interpreted the social nature of man to be one of a kind, existing with a divine purpose, and operating according to biologically grounded laws of evolution.

The critical question for Fiske's infancy theory is, can a system explaining the origin of ethics be founded upon a *biological* theory of evolution? Is the process

³⁵Fiske, *Outlines*, II, p. 360.

operating in biological development relevant to the process operating in moral development?

Before Darwin, when the concept of evolution was an issue that seemed to be under control, different interpretations of it surfaced in biology and social theory. Auguste Comte, the philosopher toward whom Fiske directed much of his youthful criticism, was a major figure in the origins of sociology and social evolution. In his theory of the evolving stages of civilization he saw the relevance of biology only in its ability to shed light upon the early development of the race. With that, the evolution of biology and of social theory parted ways. The source for Comte's famous law of the three stages was not biology. As Greene points out, his inspiration came from Condorcet, Hume and Saint-Simon.³⁶

He did not believe in organic evolution. He did draw from biology to describe human nature as primarily affective and innately social. The harmony seen within society is much like the harmony found in the activities

³⁶John C. Greene, "Biology and Social Theory in the Nineteenth Century: Auguste Comte and Herbert Spencer," contained in Marshall Clagett (ed.), *Critical Problems in the History of Science* (Madison: University of Wisconsin Press, 1969), pp. 422-424.

of various tissues and organs. He was interested in how each generation influenced the next in the movement toward an equilibrium. Comte's evolution was the intellectual development of humanity, the attainment of scientific method.

Herbert Spencer, on the other hand, saw biology providing a model for social theory. He grounded his system for the progress of humanity in the science of biology. His explanation for historical change in society was biological in character, taking into account such factors as self-preservation, fertility, morphological development in different societies, and so on. He applied the "development hypothesis" to psychology and sociology, and was assured that the normal course of evolution was forward progress.

With Spencer we see, for the first time, the union of organic, biological evolution with the notion of social evolution. Social progress was a product of competition between individuals and between races. He developed a *laissez-faire* political philosophy, advocating non-interference by government so that competition would be free to bring forth the best. He drew many analogies between biological and social progress. Greene points out that the main stimulus to speculation about social evolution

came from the conviction that early man was scarcely distinguishable from lower animals. The development man has undergone historically was according to natural law.

The concept of natural selection became a widely used explanatory force, but could it operate outside biology? In two of the most sensitive victorian subjects, ethics and religion, natural selection created the most difficult questions. Those in favor of and those opposed to evolution came to these areas to find evidence for support of their views, and it was soon obvious that evolution could be used to support almost any attitude. For example, it could be argued that God used natural selection as His way of operating in the world. It could also be argued that when we look at man's social nature, we see natural selection as the mechanism which elevated man from the survival ethic associated with Darwinism.

Evolution seemed to point to animal instinct as the source from which human morality developed. Morality could be explained, if one chose to, as having adaptive value in coping with the environment. This was Fiske's choice, but ethical behavior's origins cannot be deduced from a theory of evolution. It does not follow deductively from biological evolutionary theory that simple survival could be the test by which moral life can be formed. And looking to the origins of moral codes is not sufficient to

judge the significance of the codes.

Fiske's was one of many initial responses to Darwinism. He was not the first to apply the methods of science to moral behavior. Like most, to give credence to his explanation he gave certain initial conditions which were not appropriate assumptions for the conclusion reached. The notion that there was a moment during evolutionary history when "spirit" was added to living things is a completely arbitrary theological postulate. His premises were not known to be true, and his conclusion did not logically follow from them. The worth of a proposed explanation should depend at least on whether its premises are compatible with established fact. There should be strong support from evidence other than the observational data upon which the explanation is based. If such restrictions are not adopted, "any instancial explicandum can be 'explained' with the help of any arbitrarily selected universal premise and an appropriately constructed initial condition."³⁷

One can also argue that it is improper to use statements which are part of a comprehensive scientific theory,

³⁷See C. G. Hempel and Paul Oppenheim, "Studies in the Logic of Explanation," *Philosophy of Science* vol. 15 (1948), pp. 135-178, cited in E. Nagle, *The Structure of Science* (New York: Harcourt, Brace: World, Inc., 1961), p. 44.

like Darwinism, as explicit premises for unrelated scientific explanation. The evolution of the Darwinian theory is based upon "genetic explanations."³⁸ This type of explanation sets forth the sequence of events through which, and the means by which the living world has been transformed from one form to another. As an explanation it contains a large number of explanatory premises which lend evidence to the past history of living systems, and which may contain developmental laws that have their own independent inductive evidence.

As a deductive model, Darwinian evolution does not offer premises which lead to necessary conclusions, but which instead give probabilistic explanation. The particular aspect of evolution which Fiske interpreted to be its culmination, the moral sense in man, does not lend itself to the Darwinian deductive model. As Fiske presented it, its premises were not based upon independent inductive evidence, but rather on faith. The thing he wished to explain, moral nature, as well as his premises, are ostensibly based on faith rather than invariable regularities. The assumption cannot be asserted with

³⁸See E. Nagel, *The Structure of Science* (New York: Harcourt, Brace & World, Inc., 1961), p. 25.

strict universality. What Fiske tried to account for was an individual historical occurrence, and not a deductive consequence of the premises he set up to explain it.

His system imposed limitations on what we know about God, and he was forced to describe God in terms of a force. This was an intellectual creation that had no physical reality. This force that was necessary to Fiske was a psychical construct - outside the realm of science. The evidence presented in the mass of evolutionary data gave no reason for Fiske's *a priori* claim. And the explanation for the origin of ethics was an extension of a powerful scientific theory to an area where it is misplaced.³⁹ Moral behavior is not explained by the fact that we developed through natural selection with a disposition toward moralizing. As Grene sees it, the ethical problem is not how ethical standards came into being, nor is it the seeming parallel development of biological systems and ethical systems. The problem is, rather, what are ethical norms?⁴⁰

³⁹Marjorie Grene, "Darwin and Philosophy," in *Boston Studies in the Philosophy of Science*, vol. XXIII (Boston: D. Reidel Publishing Company, 1974), p. 197.

⁴⁰*Ibid.*, p. 197.

Ethical norms are human constructs, but it is difficult to explain exactly what we are claiming when we define a norm. Evolution can tell us nothing of the nature of moral values. It can tell us nothing of how they originate or develop. Careful distinction must be made between the explanation of an ethical theory on philosophical grounds, how it is inherent in a culture and received historically, and the development of organisms that accept them. Just because we can imagine a parallel development between an ethical theory and a development theory does not justify assuming that one is responsible for the other.

We must be careful when we read purposiveness into Darwinian causation that we distinguish between cultural continuity and genetic continuity. Certain kinds of social behavior may have survival value but is that sufficient as it is in the biological context? How can we judge a particular norm to be better than another? We cannot, as Fiske did, apply the methods of Darwinism in the biological realm, to ethical development in the epistemological realm. Natural selection, according to Grene, is an explanatory principle for the cause and effect relationship we see between organisms and environment. The origin of morality is a problem involving what constitutes knowledge. There is continuity between our perception and

behavior in living things; at least there is plenty of evidence to believe that nature will conform to our explanation. This is not the case when we accept a metaphysical contingency.

The forces Fiske attributed to the development of his philosophy were *a priori* claims, and he did not see how his ideas were inherent in the culture and tradition of his century. He was not aware of how his theory was self-imposed and received historically. How it was a development of the language, norms, environment. To confuse the development and nature of values with their appearance in the biological development of man is to misunderstand the strategy of evolution and human nature.

Spencer and Fiske were both certain that social phenomena were grounded in biological science, and Fiske's system, like Spencer's failed because of it. Biological evolution gave evidence that the course taken by animal life may not have always been steadily upward. Some animals became extinct. The connection between a biological theory of evolution and a social theory of evolution was not a necessary nor a natural one as Fiske had assumed.

The early part of this century saw a general disappearance of this philosophy. But there have persisted to this day attempts to show evidence for similar theories.

Some twentieth-century biologists attempting to deal with man's evolution have tended to emphasize the special nature of man and his cultural development, rather than to emphasize natural selection as Fiske did. This is due, perhaps, to the moral reluctance to pursue the question of differences among races. The emphasis has been upon mechanisms of cultural evolution, emphasizing the communication of culture by learning. The genetic mechanism for transmitting traits from one generation to the next is different from the mechanisms governing communication of culture from one generation to the next. Some, like Julian Huxley, have tried to suggest similarities between the two kinds of development. The most modern, thorough, and controversial study of altruism as a product of natural selection comes from Edward O. Wilson in his *Sociobiology*.⁴¹ His feeling is that, whether the social sciences can truly be "biologized" into the kind of modern synthesis that has entirely reshaped taxonomy and ecology remains to be seen. He thinks it can. The biggest obstacles for dealing with the transmission of cultural traits are trying to define improvement and determining how selections are

⁴¹See Edward O. Wilson, *Sociobiology: A New Synthesis* (Cambridge, Mass: Belknap Press of Harvard University Press, 1975).

executed. What occurs in different societies is not always the same. Sometimes progress does not occur, and there does not always appear to be a necessary connection between what happens in the development of society and the development of biological species.

Fiske wanted to make sense of our inner moral feelings. In the late nineteenth century, this could only be accomplished in the light of science. But attempts to subject such things as moral intuition, appreciation of beauty, and so on, to the methods and formulations of science usually "end in explaining them away." Greene says that when we attempt to explain such things scientifically, "science itself then becomes unintelligible. A scientist is a person seeking insight into the harmony of things. The harmony and the human spirit seeking to comprehend it are there first. They are prescientific."⁴² To insist on explaining spiritual realities in terms of science runs the risk that these inner feelings might be nothing more than "holdovers from man's animal past."⁴³ Darwin and Spencer ended in doubting the reality of the

⁴²John C. Greene, *Darwin and the Modern World View* (New York: Mentor Books, 1963), p. 116.

⁴³*Ibid.*

spirit. Fiske never did. His major life's work resulted in his being unable to unify science and religion through the study of moral origins. He could only call to faith, and to the hope that "as these things come to be better understood, it is going to be realized that the day of antagonism between Science and Religion must by and by come to an end."⁴⁴

Fiske settled very little in either theology or philosophy. His system was not capable of withstanding rigorous scrutiny or of renewing the institutional life of churches. He, like Darwin, could not explain the phenomena of altruistic behavior in terms of natural selection. He had to resort to theological explanations. Today altruistic behavior is interpreted in population-genetical terms, and through the application of a benefit/cost calculus much like that of game theory. Altruistic behavior in such animals as social insects turns out to be the highly probable outcome of selective processes.⁴⁵ It is a controversial area still, but is now purely Darwinian with natural selection the only concept in the debate.

⁴⁴Fiske, *Through Nature to God*, p. 193.

⁴⁵Marjorie Grene, *The Understanding of Nature*, Volume XXIII *Boston Studies in the Philosophy of Science* (Boston: D. Reidel Publishing Co., 1974), p. 191

After Darwin Natural Theology was unacceptable because Darwinism argued for the derivation of laws of nature from within nature, not for evidence of a Creator. Beyond the laws of nature and physical verification there is only assumption and *a priori* argument. God lies beyond empirical evidence, the source of natural laws lies beyond empirical evidence, and, for those who tried to create an ethical system based upon evolution, the source of ethical behavior lies beyond empirical evidence. Fiske was offering proof for the unprovable.

The question naturally follows - if Fiske's system, centered upon the ethical origins of man, was so fraught with weakness, why then was he held in such high esteem during his life?

SATISFYING A CULTURAL NEED

Mr. Fiske has long held rank as one of the most profound and exact of American thinkers, and this little monograph [*The Destiny of Man* (1884)] will serve to extend that deserved fame among a class of readers who are not ordinarily interested in the literature of science. Mr. Fiske's book is, in a word, a plea for faith in the immortality of man, based on the doctrine of evolution. With a superb command of all the knowledge bearing upon the philosophy of Darwinism, to which he himself has been a noteworthy contributor, Mr. Fiske sums up in eloquent periods the process of evolutionary creation from the origin of infancy to the beginnings of industrial and political development which have made human society what it is today; and then looking into the future, he foretells how natural selection . . . shall attain its perfect work.⁴⁶

BOSTON TRAVELLER

This endorsement for the *Destiny of Man* gives good indication of what the average American thought of Fiske in the 1880's. Contemporary reactions certainly indicate that the *Outlines* created a good deal of interest. One can imagine the spectrum of thought and reaction about such an important philosophy. At one extreme of opinion were the religious leaders and the religious press who were unable to accept his flat rejection of special creation and his redefinition of the nature of God. Although he went to great lengths to argue against his being con-

⁴⁶Endorsement for the *Destiny of Man* in the list of "Important Books" described in John Fiske, *The Idea of God* (Boston: Houghton, Mifflin and Company, 1885).

sidered pantheistic, to religionists the distinctions he made were not all clear.

At the other end of the spectrum of opinion were those who found Fiske the most lucid writer in America, the scientific interpreter of religion. Darwin endorsed him for his clarity and for having made Spencer understandable. The publisher Henry Holt said that Fiske "contributed one generalization to our knowledge of biologic evolution, and that is a good deal for any man to do: many have attained fame for less. It was a generalization so important that Darwin regretted not having developed it himself."⁴⁷ Popular writer Elbert Hubbard, in one of his "Visits to the Homes of Great Scientists," glorified Fiske as a child prodigy. He said that there were three great scientific discoveries for which Fiske was responsible; the idea that the beak of a pigeon increases according to the length of its feet, the rule that a white tomcat that has blue eyes has to be deaf, and that the degree of mental development present in a particular type of animal was dependent upon the length of its infancy.⁴⁸

⁴⁷Henry Holt, *Garrulities of an Octogenarian Editor* (Boston: Houghton, Mifflin and Company, 1923), pp. 328-329.

⁴⁸Elbert Hubbard, "John Fiske," *Little Journeys to the Homes of Great Scientists*, XXII (December, 1905), pp. 144-146.

The typical review considered this last discovery an important contribution to the doctrine of evolution. Most reviews of the *Outlines* considered the infancy theory its most important concept.

This work of Mr. Fiske's may be not unfairly designated the most important contribution yet made by America to philosophical literature. . . . His theory of the influence of prolonged infancy upon social development (Part II., Chap. xxii) entitles Mr. Fiske's work to be considered a distinctly important contribution to the theory of the origin of species, and of the origin of man in particular.⁴⁹

ACADEMY (London)

His most important suggestion, that of the influence of the long period of feeble adolescence upon man's social development, is, we think, a permanent contribution to the development theory.⁵⁰

NATION (New York)

The philosophic works by Fiske that appeared in the years following publication of the *Outlines* show that people were responding to his ideas. For the most part, he was reacting to what he considered misunderstanding of his ideas. But Winston points out that it is

⁴⁹Endorcement for the *Outlines of Cosmic Philosophy* in the list of "Important Books" in John Fiske, *The Idea of God* (Boston: Houghton, Mifflin and Company, 1885).

⁵⁰*Ibid.*

doubtful a publisher would have risked bringing out such a heterogeneous assemblage of books unless there had been "a fairly good Fiske market."⁵¹

During his life, Fiske's image changed from that of an "infidel" at Harvard to one of a respected scholar and religious thinker. During the 1880's and 1890's a majority of the American religious leadership was praising his theological emphasis. His addresses were usually repeated many times, and Clark tells us that "never did they fail to bring forth expressions of deeply aroused thought."⁵² Many people expressed profound gratitude for the help he gave in "enabling them to see that the doctrine of evolution calls for a higher conception of God, a nobler conception of man and his place in the cosmic universe, than is presented in the current theologies."⁵³ And so many clergymen of different denominations said that they agreed with Fiske for the most part, "that at times he was inclined to think he must be preaching an

⁵¹George P. Winston, *John Fiske* (New York: Twayne Publishers, 1972), p. 9.

⁵²Clark, *Life and Letters*, II, p. 473.

⁵³*Ibid.*

oldfashioned doctrine."⁵⁴

But Fiske never had the opportunity to pursue a literary career with ease and without financial worry. He lost his chance to be on the faculty at Harvard, something he wanted dearly. The kind of recognition he really wanted was not to be found on the lecture circuit, and he found that, for him, the life of an American scholar was difficult and disappointing.

In 1894 he was finally given some of the recognition he had longed for most of his life. In June of that year the University of Pennsylvania conferred upon him the degrees of M.A., L.L.B., and Litt.D. From Harvard he received the degrees of Litt.D. and L.L.D. He was scheduled to receive the degree of L.L.D. from Yale in 1901 but died before it was conferred.⁵⁵ When Fiske died, on July 4, 1901, many Americans said that the nation had lost a great thinker and extraordinary man. He was only 59 years old, heightening the sense of loss. The well-known editor Henry Holt said that it was "singularly pathetic that his premature death should have cut him off from the investigations which have seemed to many leading minds to point to a verification - even to have

⁵⁴*Ibid.*, p. 474.

⁵⁵*Ibid.*, pp. 448 and 503.

reached a verification, of the greatest as well as the widest intuition of the ages."⁵⁶ His published works were widely known, and his lectures, delivered throughout the nation, had brought him fame.

Notice of his death appeared in newspapers throughout the nation, and magazines had not only praise for his work, but predicted a great future demand for his written word. The *American Historical Review* called him America's most popular historical writer.⁵⁷ And he was described everywhere as a boy prodigy who had mastered many languages and read widely before he went to college. It was generally thought that he had been instrumental in promoting the acceptance and understanding of the doctrine of evolution in America. Some saw his contribution to religion as the distinguishing mark of his life.

But there were those who viewed these eloquent tributes as symptoms of the feeling of loss, but inaccurate in their claims. These were men who thought Fiske "was neither a profound scholar nor an original thinker."⁵⁸

⁵⁶Holt, *Garrulities of an Octogenarian Editor*, p. 339.

⁵⁷*American Historical Review*, VII (October, 1901), p. 178.

⁵⁸James Truslow Adams, "John Fiske," *Dictionary of American Biography*, VI (New York: Charles Scribner's Sons, 1931), pp. 422-423.

Shortly after his death, his popularity quickly faded. The typical scholarly evaluation of Fiske's accomplishments found him to be a "popularizer" in history, and nothing more than an "interpreter" in science. He was able to relate the thoughts of science more clearly than most scientists, but his original contributions were insignificant.

Why did Fiske, with his *a priori* infancy theory for the origins of moral behavior and his Spencerian, cosmic view enjoy such popularity during his life? Why did the demand for his words come to an end so soon after he died? And why did he never have a significant appeal abroad? The answer is to be found in the nature of the era and in the position Fiske occupied.

The history of philosophy in the latter half of the nineteenth century and first three decades of the twentieth century, as Grene says, is the history of the destiny of Kant's critical system.⁵⁹ Kant's critique had limited our theorizing to phenomena only, only the appearances of sense. But he also held the view that

⁵⁹Marjorie Grene, "Darwin and Philosophy," in *The Understanding of Nature*, volume XXIII of *Boston Studies in the Philosophy of Science* (Boston: D. Reidel Publishing Co., 1974), p. 192.

man can also know (non-theoretically) the sense of morality. Developments in nineteenth-century thought tended to separate the "sense-based theoretical" from the "intuitive practical," leaving a scientific tradition which made the causal explanation universal, but concluded that we can never penetrate beyond the phenomenal to the thing in itself. At the same time, she says, Romanticism stressed will. It was either machine and phenomena, or will.⁶⁰

Darwinism fit into both sides of the dichotomy. "On the science-oriented side, there was in England the popular developmental theory of Spencer," and "in Germany there was the mechanistic monism of Haeckel, whose simple doctrine was certainly swallowed whole, along with Spencer and Darwin, by the educated middle class in America."⁶¹ With the liberalization in thought that had taken place in American religion, one man's ideas in scientific evolution soon overshadowed others, Spencer's.

Where Darwin had concerned himself with the biological realm, Spencer created an entire system based on the principle of evolution. Spencer addressed himself to all phenomena, and his impact upon American development

⁶⁰*Ibid.*

⁶¹*Ibid.*, p. 193.

was profound. The common man was more likely to read and be influenced by Spencer than by Darwin. Where Darwin appealed more to the rigorous intellect, Spencer appealed to the multitudes. His system appeared to hold the key to the future, and much of Fiske's popularity with the average American was due to his vigorous promotion of Spencer.

Fiske's life reflects the evolving relationship between nineteenth-century science and culture. Darwinism had become, to use Kuhn's terminology, the paradigm for science, if not for much of society. Just as Newtonian mechanics had altered the previous century's conception of the universe, Darwinism permanently changed the way man looked at permanence. Of course there are differences. Newton's concept of a law-bound universe was in physics, and after German Romanticism the concept of the organism replaced the concept of the machine. Biology was used more as a model than was physics. And Darwinism probably had a greater dominance than did Newtonian mechanics because of the commonly used terms in which it was couched. The average man had greater familiarity with plants and animals than with mechanical

workings of the universe.⁶² The point is that Victorian culture had become saturated with science, and in particular, with evolution.

This new relationship between science and culture put traditional religion in a state of fear for its survival. If every bit of evidence gathered from fossil beds had the potential to undermine the fabric of Christianity, either science had to go or religion had to change. Fiske exemplifies the need, felt strongly by many American theologians, to free religion of its mystical and metaphysical elements. He set out to devise a theism that was as logical as science, and hopefully as empirical. The threat to religion which came from science's firm foundation in experience led the religionists to appeal to experience. If religion could offer as firm and reliable an explanation for its beliefs as science could, the threat would disappear.

Fiske constructed an evolutionary theology which rejected the traditional call to faith and appealed to empirical evidence. He interpreted evolution as having a religious goal, and he carefully interpreted all his

⁶²Cynthia Russett, *Darwin in America: The Intellectual Response 1865-1912* (San Francisco: W. H. Freeman and Company, 1976), pp. 18-19.

explanations in scientific terminology. This appeal to the method of science reflects the growing respect men had for science. It was the method of Darwinism that influenced Fiske more than the content. The thrust of evolutionary theory was toward beginnings and toward the processes by which things develop. This, more than the materials of Darwinism, is what Fiske saw as the essence of evolution.

Fiske's position was unique for the acceptance of Darwinism in America because he was mindful of the academic disputes that were brewing over evolution. He accepted, in part, the neo-Lamarckianism prevalent among American scientists. He was also aware of the concerns of the common culture. Outside the academic arena men were concerned with religion and morality. His theory, that there is a soul, and even though man's ancestry is in the animal world, his mental development places him in a higher position in nature, satisfied many troubled men. He reflects the need in America among those whose faith had been shaken to give scientific credence to religious beliefs, and to join the success of science with the beliefs of religion.

Fiske also exemplifies the liberalizing influence on American religious thought that was a major effect of Darwinism. His type of theology, based on evolutionary

concepts, not only softened the doctrines of Puritanism, it gave evolution a role in the development of morality. He reflects the effect evolutionary theory had of directing religious inquiry away from metaphysical speculation toward a more empirically based explanation. He also shows the replacement of the weakened argument from design with a reliance on strong personal convictions, such as the conviction that mankind has a moral sense. This new religious appeal to science, coupled with overwhelming optimism and confidence in what the future had in store gave Fiske wide popular appeal.

In the very difficult and strenuous intellectual transition from a view of the universe in which God was a loving father, lawgiver, and creator of design, to a Darwinian universe in which struggle and chance were dominating forces, Fiske performed the very important function of making it easier. His system gave hope and his language soothed the fears. Even though his explanation was not the final solution to the struggle, he gave the innate spiritual aspirations of the common man a new life. Where others had concluded that science had nothing at all to say about religion, "Fiske made religion the evolutionary fruit of science."⁶³

⁶³Russett, *Darwin in America*, p. 48.

So even though Fiske's system of evolutionary ethics was doomed to failure, it filled a need. Christianity was suffering criticism and doubt. Evolution's effect was probably greater than it might otherwise have been, and the influence of theologians was probably less than it might have been. As science gained in status, religious thinkers tried to gain "scientific" proof for its unprovable assumptions. Science had its own assumptions, and it too sought proofs; but as the world seemed to every day be better understood through the principles of science, the claims of science gained respectability. Science became the measure.

John Fiske met the needs of his age through his skill at popularization. He could restate another man's ideas in more easily understood terms and a precise use of the language. He provided a way for men to keep their cherished faiths in a period when the concept of the world was undergoing change. Most important of all, he gave his generation ideas that allowed them to accommodate intellectual advances. It was an effective contribution toward shaping a dominant American view of the nineteenth century. Hubbard said that "John Fiske made the science of Darwin and Wallace palatable to orthodox theology, and it is to the earnest and eloquent words of Fiske that we

owe it that evolution is taught everywhere in public schools and even in sectarian colleges in America."⁶⁴

Holt, looking back to the Fiske lectures of some twenty years before, said that Fiske had accomplished "more than any man before him, through deductions from the law of evolution, toward putting this most important of institutions upon the basis of established knowledge. . . . He was in advance of his compeers in his own department: for he did not hesitate, as Darwin, Spencer, and Huxley did, to deal with the intuitions of his time."⁶⁵

Twenty years after Fiske's death, John Buckham, writing in the *Harvard Theological Review*, included Fiske among American theists who had warded off the threat of the materialistic interpretation of evolution. He said that two of Fiske's lectures, later essays, "The Destiny of Man," and "The Idea of God" were alone enough to justify the existence of the Concord School of Philosophy.⁶⁶

Another book from the early twenties entitled *American Thought from Puritanism to Pragmatism and Beyond* recognized Fiske's accomplishment. Woodbridge Riley says that Fiske was able to take the rather desirable but

⁶⁴Hubbard, "John Fiske," p. 146.

⁶⁵Holt, *Garrulities*, p. 339.

⁶⁶John Wright Buckham, "American Theists," *The Harvard Theological Review*, XIV (1921), p. 274.

poorly defined Spencerian "unknowable" and translate it into a satisfying principle of religion. He found Fiske's use of intuitive principles rather than external mechanical mechanisms valuable in the introduction of a more creative evolution.⁶⁷

Over the years, the attitude toward Fiske's accomplishment has varied according to the prevailing interest. Immediately after his death, as we've seen, there was a great feeling of loss, but scholars soon began to point out his shortcomings. By the late twenties and early thirtys, interest in Fiske had diminished to the point of his being included in anthologies only as a footnote.⁶⁸ By the mid-thirties, however, Fiske's philosophical works began to receive renewed interest from writers who were interested in his philosophical strategy.⁶⁹

⁶⁷Woodbridge Riley, *American Thought from Puritanism to Pragmatism and Beyond* (New York: Henry Holt & Co., 1923), p. 215.

⁶⁸Harvey Gates Townsend, *Philosophical Ideas in the United States* (New York: American Book Co., 1934), p. 114.

⁶⁹See Paul Russell Anderson and Max Harold Fisch, *Philosophy in America: From the Puritans to James* (New York: D. Appleton-Century, 1939), pp. 371-381, for an early analysis of Fiske's theism and how it was thought to make evolution acceptable.

In the early forties Richard Hofstadter wrote his *Social Darwinism and American Thought* (1944) in which he attempted to interpret the influence of Fiske's and other's ideas on the average reader. This thesis was that both Spencer and Fiske had broad appeal to the average readers because they were untrained in philosophy and could not see the inconsistencies. Fiske's concern over that destiny of man and the history of races were of literary interest in the forties. Following the trend of Hofstadter, but being critical of him, in 1949 Philip P. Wiener continued the interest in interpreting influence. He was critical of Hofstadter's severe comments on Fiske's racial destiny ideas. Fiske had written on the destiny of various races: Hofstadter saw it as approval of Anglo-Saxon expansionism and Aryan race superiority. Wiener said that this was unfair to Fiske's evolutionism, for it was really a cultural argument rather than a biological one.⁷⁰ He also said that Fiske's popularity stemmed more from his religious ideas than from his science.

⁷⁰ Wiener, *Founders of Pragmatism*, p. 143. Hofstadter rewrote his *Social Darwinism and American Thought* adding a new introduction and removing some strong phrases.

Fiske had a Unitarian's faith in the eventual brotherhood of man, good will and peace on earth, and transfigured Spencer's "Unknowable" by endowing it with Christian significance. . . . What made Fiske's version of Spencer so popular in the United States was due more to Fiske's New England Transcendentalist vision of the coming millenium than his allegedly scientific defense of evolution ("the cosmic vehicle for the second coming of Christ"), though there is no doubt that the increasing prestige of Darwinism aided considerably in giving Fiske a large sympathetic audience.⁷¹

In the early 1950's one of the best analyses of the Spencerian phenomenon after the Civil War saw Fiske contributing no important new ideas in philosophy. Morris Cohen, in *American Thought: A Critical Sketch*, criticizes Fiske's comprehension of biology and physics, and says that his works are based largely upon his forerunners and upon traditional views.

Spencer gave men a vista into infinite time and space. He really replaced the old religion because he told us where we come from, how we have developed, and what is the ultimate goal of civilization. . . . And John Fiske made the gospel of evolution respectable with his two heavy tomes on Cosmic Philosophy (1874) and his repeated exposition of that gospel.⁷²

Better than any other is Pannill's detailed examination of Fiske's philosophy. His conclusion is that Fiske was trying to bring together two intuitive faiths:

⁷¹Wiener, *Founders of Pragmatism*, p. 145.

⁷²Morris Cohen, *American Thought: A Critical Sketch* (Glencoe, Illinois: The Free Press, 1954), p. 60.

a faith in the ultimate perfection of man, and a faith in science. His system was erected to prove intuitions that were already present in the mind. He sees Fiske as a religious thinker who interpreted all that he saw according to his convictions. His science was determined by his faith. Fiske failed to have a lasting influence because "his philosophy failed ultimately to speak to the deepest needs of men. He brought superficial hope, sweeping aside reservations and skepticisms which men had with the brilliance of his confident optimism."⁷³

Lastly, Patrick Hazard writes that Fiske created the illusion of science in the minds of some of his readers, but his lack of science weakened true acceptance. He and other popularizers of science actually knew very little about the technical aspects of science, and when called upon to defend his theism, his defense was fragile at best. Not much can be said with strong conviction when a vague concept like the unknowable is his founding principle. And, says Hazard, "In his effort to be all things to all men, Fiske had probably alienated both the scientific and the religious."⁷⁴ His epistemological

⁷³ Harry Burnell Pannill, "John Fiske: Cosmic Theist," (unpublished Ph.D. Dissertation, Duke University, 1952), p. 387.

⁷⁴ Hazard, "Fiske as American Scholar," p. 198.

argument for the inconceivability of there not being an Absolute Power gave his explanation for the existence of God the aura of reality. But there was too much theology in Fiske's system for the scientist; there was not enough theology for the religionist.

Like other social and theistic evolutionists, Fiske attempted to validate his system by claiming the sanction of science. As science grew in stature and traditional beliefs fell into doubt, it became necessary to assume the robe of scientist. Such attempts were sure to fail because science had acquired the ability to treat the phenomena of nature without the *a priori* systems. As Greene puts it, "Science went on her way, a prolific but cruel mother, forever spawning scientisms and forever abandoning her illegitimate offspring."⁷⁵

It is easy to be critical of Fiske because he tried to unite all aspects of existence and thought under the universal law of development. We must not think him naive for attempting to reconcile the difficulties created by evolutionary theory. As Mandlebaum says, should a reader of Fiske's system be amused over his "failure to

⁷⁵John C. Greene, "Biology and Social Theory in the Nineteenth Century," p. 442.

forsee that philosophy itself might soon take a quite different turn, it would be because he has not yet understood the extent to which evolutionism seemed to demand that there be a law of directional change. . . . Progressive evolutionary development of society seemed to be demanded by the laws which had already brought about other forms of evolutionary change."⁷⁶ Fiske was responding to this demand by reconciling opposed philosophies. It was a way of thinking that followed naturally from conditions in society and from the kind of life he chose. His system met the immediate psychological needs of those whose religious beliefs had been threatened, but it failed because the ethical deductions he founded it on were not logically necessary from evolution. By examining and understanding the failures as well as the successes, we can hope to learn something about the nature of biology, about the method of science, and the relation of these to the rest of human endeavor.

⁷⁶Maurice Mandelbaum, *History, Man, & Reason: A Study in Nineteenth Century Thought* (Baltimore: Johns Hopkins Press, 1971), p. 92.

BIBLIOGRAPHY

- Adams, James Truslow. "John Fiske." *Dictionary of American Biography*. Vol. VI., 1931.
- Ahlstrom, Sidney E. *A Religious History of the American People*. New Haven: Yale University Press, 1972.
- American Historical Review*. VII (October, 1901), 178.
- Anderson, Paul Russell, and Fisch, Max Harold. *Philosophy in America: From the Puritans to James*. New York: D. Appleton-Century, 1939.
- Atlantic Monthly*. XIII (June, 1864), 775-777.
- Barlow, Nora. *The Autobiography of Charles Darwin: 1809-1882*. New York: W. W. Norton & Co., Inc., 1958.
- Barratt, Alfred. *Physical Ethics: Or the Science of Action*. London: Williams & Norgate, 1869.
- Berman, Milton. *John Fiske: The Evolution of a Popularizer*. Cambridge: Harvard University Press, 1961.
- Bibliophile Society. *The Personal Letters of John Fiske*. Grand Rapids: The Torch Press, 1939.
- Bowen, Francis. "Malthusianism, Darwinism, and Pessimism." *North American Review*, CXXIX (November, 1879), 447-472.
- Bowne, Borden Parker. *The Philosophy of Herbert Spencer*. New York: Phillips & Hunt, 1881.
- _____. *The Philosophy of Theism*. New York: Harper & Brothers, 1887.
- Buckham, John Wright. "American Theists," *The Harvard Theological Review*, XIV (1921), 274.
- Carneri, Bartolomäus von. *Morality and Darwinism*. Vienna: W. Bramüller, 1871.
- Carnerio, Robert L. *Herbert Spencer: The Evolution of Society*. Chicago: University of Chicago Press, 1967.

- Clark, John Spencer. *The Life and Letters of John Fiske*. New York: Houghton, Mifflin and Company, 1917.
- Cohen, Morris. *American Thought: A Critical Sketch*. Glencoe, Illinois: The Free Press, 1954.
- Comte, Auguste. *Cours de philosophie positive*. Paris: Borrani et Droz, 1835-1852.
- Darwin, Charles. *The Origin of Species*. London: John Murray, 1859.
- _____. *The Descent of Man*. London: John Murray, 1901.
- Diman, J. L. "Religion in America, 1776-1876." *The North American Review*, CXXII (January, 1876), 1-47.
- Draper, John William. *History of the Conflict Between Religion and Science*. New York: D. Appleton and Company, 1875.
- Duncan, David. *Life and Letters of Herbert Spencer*. 2 vols. New York: D. Appleton and Company, 1908.
- Ellegård, Alvar. *Darwin and the General Reader*. Göteborg: Elanders Boktryckeri Aktiebolag, 1958.
- Elliot, Hugh. *Herbert Spencer*. New York: Henry Holt and Company, 1917.
- Fiske, Ethel F. *The Letters of John Fiske*. New York: Macmillan Company, 1940.
- Fiske, John. "Fallacies of Buckle's Theory of Civilization," *National Quarterly Review*, VI (March, 1862), 30-63.
- _____. "Considerations on University Reform," *Atlantic Monthly*, XIX (April, 1867), 452.
- _____. "The Presidency of Harvard," *Nation*, VII (December, 1868), 548.
- _____. "The Progress From Brute to Man," *North American Review*, CXVII (October, 1873), 251-319.
- _____. "Agassiz and Darwinism," *Popular Science Monthly*, III (October, 1873), 692-693.

- Fiske, John. *Outlines of Cosmic Philosophy, Based on the Doctrine of Evolution, with Criticisms on the Positive Philosophy.* 2 vols. Boston: Houghton, Mifflin and Company, 1874.
- _____. *The Unseen World and Other Essays.* Boston: Houghton, Mifflin and Company, 1876.
- _____. *The Destiny of Man Viewed in the Light of His Origin.* Boston: Houghton, Mifflin and Company, 1884.
- _____. *The Idea of God as Affected by Modern Knowledge.* Boston: Houghton, Mifflin and Company, 1885.
- _____. *Darwinism and Other Essays.* Boston: Houghton, Mifflin and Company, 1893.
- _____. *A Century of Science and Other Essays.* Boston: Houghton, Mifflin and Company, 1899.
- _____. *Excursions of an Evolutionist.* Boston: Houghton, Mifflin and Company, 1899.
- _____. *Through Nature to God.* Boston: Houghton, Mifflin and Company, 1899.
- _____. *The Writings of John Fiske.* DeLuxe Edition, 24 vols. Cambridge, Mass.: Riverside Press, 1902.
- "Fiske's *Outlines of Cosmic Philosophy*," *North American Review*, CXX (January, 1875), 204.
- Frothingham, Paul Revere. *All These.* Cambridge, Mass.: Harvard University Press, 1927.
- Garraty, John A. *The American Nation.* New York: Harper & Row, 1971.
- Greene, John C. "Biology and Social Theory in the Nineteenth Century: Auguste Comte and Herbert Spencer," in Marshall Clagett (ed.) *Critical Problems in the History of Science.* Madison: University of Wisconsin Press, 1969.
- _____. *Darwin and the Modern World View.* New York: Mentor Books, 1963.

- Greene, Marjorie. "Darwin and Philosophy," *Boston Studies in the Philosophy of Science*, XXII (1974).
- _____. *The Understanding of Nature*, in *Boston Studies in the Philosophy of Science*, XXIII (1974).
- Hallowell, A. Irving. "Self, Society, and Culture in Phylogenetic Perspective." *The Evolution of Man*, Vol. II of *Evolution After Darwin*. Edited by Sol Tax. 3 vols. Chicago: University of Chicago Press, 1960.
- Handlin, Oscar F., ed. *This Was America*. Cambridge, Mass.: Harvard University Press, 1949.
- Hazard, Patrick D. "John Fiske as American Scholar: A Study in the Testing of a Native American Tradition." Unpublished Ph.D. dissertation, Western Reserve University, 1957.
- Hofstadter, Richard. *Social Darwinism and American Thought*. Boston: Beacon Press, 1955.
- Holt, Henry. *Garrulities of an Octogenarian Editor*. Boston: Houghton, Mifflin and Company, 1923.
- Houghton, Walter E. *The Victorian Frame of Mind: 1830-1870*. New Haven: Yale University Press, 1957.
- Hubbard, Elbert. "John Fiske." *Little Journeys to the Homes of Great Scientists*, XVII (December, 1905), 135-151.
- Henry E. Huntington Library. Archives, Fiske Letter File.
- Huxley, T. H. and Julian Huxley. *Evolution and Ethics: 1893-1943*. London: The Pilot Press, Ltd., 1947.
- Irvine, William. *Apes, Angels, & Victorians*. New York: Time Incorporated, 1963.
- James, William. "Great Men, Great Thoughts, and the Environment," *Atlantic Monthly*, XLIV (October, 1880), 441-459.
- Kennedy, Gail. (ed.). *Evolution and Religion: The Conflict Between Science and Theology in Modern America*. Boston: D. C. Heath & Co., 1957.

- Larkin, Oliver W. *Samuel F. B. Morse and American Democratic Art*. Boston: Little, Brown and Company, 1954.
- Leakey, Richard E. and Roger Lewin. "Origins of the Mind." *Psychology Today*, XII (July, 1978), 49-62.
- Lenzer, Gertrud. *Auguste Comte and Positivism: The Essential Writings*. New York: Harper and Row, 1975.
- Leverette, William Edward, Jr. "Science and Values: A Study of Edward L. Youmans' *Popular Science Monthly*, 1872-1887." Unpublished Ph.D. dissertation, Vanderbilt University, 1963.
- Locke, John. "An Essay Concerning the True Original Extent and End of Civil Government," in *Great Books of the Western World*, vol. 35, ed Robert Maynard Hutchins (Chicago: Encyclopedia Britannica, Inc., 1952), 42-43.
- Lovejoy, Arthur O. "The Length of Human Infancy in Eighteenth-Century Thought." *Journal of Philosophy*, XIX (July, 1922), 381-385.
- MacQueary, Howard. *The Evolution of Man and Christianity*. New York: D. Appleton and Company, 1890.
- Mandlebaum, Maurice. *History, Man, and Reason: A Study in Nineteenth Century Thought*. Baltimore: Johns Hopkins Press, 1971.
- Martineau, James. *A Study of Religion: Its Sources and Contents*. 2 vols. Oxford: Clarendon Press, 1900.
- McCrossin, G. Michael. "World Views in Conflict: Evolution, Progress, and Christian Tradition in the Thought of John Fiske, Minot Savage, and Lyman Abbott." Unpublished Ph.D. dissertation, University of Chicago, 1970.
- McElligott, John Francis. "Before Darwin: Religion and Science as Presented in American Magazines, 1830-1860." Unpublished Ph.D. dissertation, New York University, 1973.
- Montagu, M. F. Ashley. "Neoteny and the Evolution of the Human Mind." *Explorations*. VI (1956), 85-90.

- Nagel, Ernest. *The Structure of Science*. New York: Harcourt, Brace & World, Inc., 1961.
- Pannill, Harry Burnell. "John Fiske: Cosmic Theist." Unpublished Ph.D. dissertation, Duke University, 1952.
- _____. *The Religious Faith of John Fiske*. Durham, N. C.: Duke University Press, 1957.
- Peel, J. D. Y. *Herbert Spencer: The Evolution of a Sociologist*. New York: Basic Books, Inc., 1975.
- Pfeifer, Edward Justin. "The Reception of Darwinism in the United States, 1859-1880." Unpublished Ph.D. dissertation, Brown University, 1957.
- Phelps, M. Stuart. "Cosmism" *New Englander*. XXXIV (July, 1875), 554.
- "Review of the Outlines of Cosmic Philosophy." *Popular Science Monthly*, VI (January, 1875), 367.
- Riley, Woodbridge. *American Thought From Puritanism to Pragmatism and Beyond*. New York: Henry Holt & Company, 1923.
- Russell, Bertrand. *A History of Western Philosophy*. New York: Simon and Schuster, 1945.
- Russett, Cynthia. *Darwin in America: The Intellectual Response 1865-1912*. San Francisco: W. H. Freeman & Co., 1976.
- Schetterly, H. R. "Philosophy." *Scientific American*. VII (November, 1859), 72.
- Schurman, Jacob Gould. *The Ethical Import of Darwinism*. New York: Charles Scribner's Sons, 1893.
- Simpson, George Gaylord. *The Meaning of Evolution*. New Haven: Yale University Press, 1949.
- Smith, Goldwin. "The Prospect of a Moral Interregnum." *Atlantic Monthly*, XLIV (November, 1879), 629-642.
- Snow, C. P. *The Two Cultures: and A Second Look*. Cambridge: The University Press, 1965.

- Spalding, Douglas A. "Herbert Spencer's Psychology." *Nature*, VII (1873), 298-300.
- Spencer, Herbert. *An Autobiography*. 2 vols. New York: D. Appleton and Company, 1904.
- _____. *The Data of Ethics*. New York: Lovell, Coryell & Company, 1879.
- _____. *Essays: Scientific, Political, and Speculative*. New York: D. Appleton and Company, 1910.
- _____. *First Principles*. New York: The DeWitt Revolving Fund, 1958.
- _____. *Social Statics*. New York: Robert Schalkenbach Foundation, 1954. (A reprint of the first edition).
- Stephen, Leslie. *The Science of Ethics*. London: Smith, Elder & Co., 1882.
- "Study of Natural History." *North American Review*. XLI (October, 1835), 430.
- Townsend, Harvey Gates. *Philosophical Ideas in the United States*. New York: The American Book Company, 1934.
- Tracy, Thomas J. "The American Attitude Toward American Literature During the Years 1800-1812." Unpublished Ph.D. dissertation, St. John's University Brooklyn, 1941.
- "Turnbull's Life Pictures." *North American Review*, LXXXV (July, 1857), 246.
- Waddington, C. H. *Ethics and Science*. London: George Allen & Unwin, Ltd., 1942.
- Warner, J. B. "Recent Literature." *Atlantic Monthly*, XXXV (May, 1875), 616.
- Wells, Wesley Raymond. "An Historical Anticipation of John Fiske's Theory Regarding the Value of Infancy." *Journal of Philosophy*, XIX (April, 1922), 208-210.